

## ENR 3 ROUTES

### ENR 3.1 LOWER ATS ROUTES

| Route Designator/<br>(RNP/RNAV Type) |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |
|--------------------------------------|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name               |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)                      |                             | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|                                      |                             |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |   |
| L6<br>(RNP/RNAV)                     |                             |                               |         |     |                                |                                 |                   |                                   |   |   |
| △                                    | DOVER<br>VOR/DME<br>(DVR)   | 510945.44N 0012132.72E        |         |     |                                |                                 |                   |                                   | Extremity of L6.<br>Intersection with L9, L10 and M140. |   |
| (RNAV 5)                             |                             | 287°/<br>106°                 | 30.0 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90                                | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between DVR and 511557N<br>0004822E:<br>London Control (Swanwick)<br>Freq: 134.900 (All Levels).<br><br>Between 511557N 0004822E<br>and DET:<br>London Control (Swanwick)<br>Freq 134.900 (FL 175 and<br>above);<br>Freq 120.525 (Below FL 175). |
| △                                    | DETLING<br>VOR/DME<br>(DET) | 511814.41N 0003550.19E        |         |     |                                |                                 |                   |                                   | Extremity of L6.  |   |



| Route Designator/<br>(RNP/RNAV Type) |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--------------------------------------|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name               |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)                      |                             | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|                                      |                             |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |  |
| L8<br>(RNP/RNAV)                     |                             |                               |         |     |                                |                                 |                   |                                   |   |  |
| △                                    | HONILEY<br>VOR/DME<br>(HON) | 522124.04N 0013949.41W        |         |     |                                |                                 |                   |                                   | Eastbound route only btn<br>STAFA and HON.<br>Extremity of L8.<br>Intersection with L10, L15,<br>L612, N859 and P155. |  |
| (RNAV 5)                             |                             | -146°                         | 37.0 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.390 for traffic via<br>L612 and N859 (FL 195 and<br>above);<br>Freq: 129.205 for traffic via<br>L15 and P155 (FL 195 and<br>above);<br>Scottish Control (Prestwick)<br>Freq: 134.425 (Below FL 195). |
| △                                    | STAFA                       | 525141N 0021435W              |         |     |                                |                                 |                   |                                   | Intersection with P18.  |  |
| (RNAV 5)                             |                             | 326°/<br>146°                 | 20.3 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 134.425 (Below FL 195).   |
| △                                    | NANTI                       | 530815N 0023401W              |         |     |                                |                                 |                   |                                   | Westbound route only btn<br>NANTI and TADAL.<br>Intersection with Y53.  |  |
| (RNAV 5)                             |                             | 326°/-                        | 3.5 nm  |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |   | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.  |



# ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|                                      |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑ | Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 128.050 (Below FL 195).   |
| △                                    | UMKIL | 531106N 0023723W              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             |       | 332°/-                        | 8.1 nm  |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |   | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 128.050 (Below FL 195).  |
| △                                    | VABKA | 531808N 0024410W              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             |       | 332°/-                        | 12.2 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |   | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 128.050 (Below FL 195).  |
| △                                    | ASNIP | 532843N 0025426W              |         |     |                                |                                 |                   |                                   |   | Intersection with L28.  |
| (RNAV 5)                             |       | 329°/-                        | 7.8 nm  |     | FL 245 /<br>FL 185             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |   | FL 245/FL 195 Class C,<br>FL 195/FL 185 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 133.050 (Below FL 195). |
| △                                    | TADAL | 533514N 0030135W              |         |     |                                |                                 |                   |                                   |   | Extremity of L8.<br>Intersection with L70.  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                            | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |   |  |
|--------------------------------------|----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|---|--|
| Significant Point Name               |                            | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |   |  |
| (RNP/RNAV Type)                      |                            | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|                                      |                            |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |   |  |
|                                      |                            | ↓                             |         |     |                                |                                 |                   |                                   | ↑                        |   |  |
| L9<br>(RNP/RNAV)                     |                            |                               |         |     |                                |                                 |                   |                                   |                          |   |  |
| △                                    | KONAN                      | 510751N 0020000E              |         |     |                                |                                 |                   |                                   |                          | FIR Boundary.<br>Intersection with (U)L607 (see<br>AIP Belgium).  |  |
| (RNAV 5)                             |                            | 275°/<br>094°                 | 24.3 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 135 and<br>above);<br>Freq: 135.325 (Below FL 135). |  |
| △                                    | DOVER<br>VOR/DME<br>(DVR)  | 510945.44N 0012132.72E        |         |     |                                |                                 |                   |                                   |                          | Intersection with M140.   |  |
| (RNAV 5)                             |                            | 282°/<br>102°                 | 13.2 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 120.525 (Below FL 195). |  |
| △                                    | UMTUM                      | 511227N 0010103E              |         |     |                                |                                 |                   |                                   |                          |   |  |
| (RNAV 5)                             |                            | 282°/<br>102°                 | 11.9 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 120.525 (Below FL 195). |  |
| △                                    | EMKAD                      | 511450N 0004234E              |         |     |                                |                                 |                   |                                   |                          |   |  |
| (RNAV 5)                             |                            | 282°/<br>101°                 | 15.1 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 120.525 (Below FL 195). |  |
| △                                    | DIKVU                      | 511747N 0001902E              |         |     |                                |                                 |                   |                                   |                          |   |  |
| (RNAV 5)                             |                            | 281°/<br>101°                 | 10.8 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 120.525 (Below FL 195). |  |
| △                                    | BIGGIN<br>VOR/DME<br>(BIG) | 511951.15N 0000205.32E        |         |     |                                |                                 |                   |                                   |                          |   |  |
| (RNAV 5)                             |                            | 282°/<br>102°                 | 8.1 nm  |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (All Levels).   |  |
| △                                    | GOXUL                      | 512132N 0001033W              |         |     |                                |                                 |                   |                                   |                          |   |  |
| (RNAV 5)                             |                            | 282°/<br>102°                 | 36.3 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (All Levels).   |  |
| △                                    | NORRY                      | 512847N 0010724W              |         |     |                                |                                 |                   |                                   |                          |   |  |
| (RNAV 5)                             |                            | 282°/<br>102°                 | 3.7 nm  |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (All Levels).   |  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |   |
|--------------------------------------|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|---|
| Significant Point Name               |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |   |
| (RNP/RNAV Type)                      |                             | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |   |
| △                                    | COMPTON<br>VOR/DME<br>(CPT) | 512929.66N 0011310.89W        |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |                             | 282°/<br>102°                 | 9.0 nm  |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.750 (All Levels).   |
| △                                    | KENET                       | 513114N 0012718W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |                             | 282°/<br>102°                 | 9.1 nm  |     | FL 245 /<br>FL 65              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.750 (All Levels).   |
| △                                    | MIMBI                       | 513257N 0014136W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |                             | 282°/<br>102°                 | 6.9 nm  |     | FL 245 /<br>FL 65              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.750 (All Levels).   |
| △                                    | SIREN                       | 513415N 0015229W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |                             | 282°/<br>102°                 | 7.1 nm  |     | FL 245 /<br>FL 65              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.750 (All Levels).   |
| △                                    | MALBY                       | 513533N 0020342W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |                             | 282°/<br>102°                 | 10.4 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Between MALBY and 5 nm<br>east of WOTAN:<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels).<br><br>Between 5 nm east of<br>WOTAN and WOTAN:<br>London Control (Swanwick)<br>Freq: 134.750 (Above FL<br>105);<br>Bristol Radar<br>Freq: 136.075 (FL 105 and<br>below). |
| △                                    | WOTAN                       | 513726N 0022006W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |                             | 282°/<br>102°                 | 6.7 nm  |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.750 (Above FL<br>105);<br>Bristol Radar<br>Freq: 136.075 (FL 105 and<br>below).   |
| △                                    | BADIM                       | 513838N 0023040W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |                             | 282°/<br>102°                 | 6.3 nm  |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.750 (Above FL<br>105);<br>Bristol Radar<br>Freq: 136.075 (FL 105 and<br>below).   |
| △                                    | ALVIN                       | 513945N 0024042W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |                             | 282°/<br>101°                 | 10.1 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                            | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |  |
|--------------------------------------|----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|
| Significant Point Name               |                            | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |  |
| (RNP/RNAV Type)                      |                            | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                            |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |
|                                      |                            |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         | 0600 - 2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (Above FL 165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and below).<br><br>2300 - 0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels).  |
| △                                    | ERNOK                      | 514130N 0025644W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                            | 281°/<br>101°                 | 12.0 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>0600 - 2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (Above FL 165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and below).<br><br>2300 - 0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels). |
| △                                    | BRECON<br>VOR/DME<br>(BCN) | 514331.89N 0031546.92W        |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                            | 286°/<br>106°                 | 15.0 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>0600 - 2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (Above FL 165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and below).<br><br>2300 - 0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels). |
| △                                    | UGBUD                      | 514714N 0033910W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                            | 286°/<br>106°                 | 8.0 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>0600 - 2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (Above FL 165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and below).<br><br>2300 - 0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels). |
| △                                    | INRUB                      | 514910N 0035141W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                            | 286°/<br>106°                 | 5.3 nm  |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>0600 - 2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |   |
|---|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|
| Significant Point Name  |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |   |
| (RNP/RNAV Type)   |                              | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|   |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |
|   |                              |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         | Freq: 134.750 (Above FL 165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and below).<br><br>2300 - 0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels). |
| △   | AMMAN                        | 515026N 0035954W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)  |                              | 286°/<br>105°                 | 39.8 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.375 (All Levels).  |
| △   | STRUMBLE<br>VOR/DME<br>(STU) | 515940.88N 0050224.69W        |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)  |                              | 291°/<br>111°                 | 31.3 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.375 (All Levels).  |
| △   | SLANY                        | 520931N 0055032W              |         |     |                                |                                 |                   |                                   |                           | FIR Boundary.<br>For continuation see AIP<br>Ireland.   |
| Route Remarks:  |                              |                               |         |     |                                |                                 |                   |                                   |                           |   |
| <ul style="list-style-type: none"><li>The area of Class C controlled airspace, base FL 195, bounded by:<br/>520408N 0045658W - 515243N 0032310W -<br/>514954N 0032323W - 520401N 0045652W -<br/>520408N 0045658W, is part of L9.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                              |                               |         |     |                                |                                 |                   |                                   |                           |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                                    | Route Usage Notes             |         |                                |                                 |                   |                                   |                            |   |  |
|--------------------------------------|------------------------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------|-----------------------------------|----------------------------|---|--|
| Significant Point Name               |                                    | Significant Point Coordinates |         |                                |                                 |                   |                                   |                            |   |  |
| (RNP/RNAV Type)                      | Track<br>MAG<br>↓↑                 | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                            | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|                                      |                                    |                               |         |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                            |   |  |
|                                      |                                    |                               |         |                                |                                 |                   |                                   | ↓                          | ↑   |  |
| L10<br>(RNP/RNAV)                    |                                    |                               |         |                                |                                 |                   |                                   |                            |   |  |
| △                                    | RINTI                              | 510158N 0013656E              |         |                                |                                 |                   |                                   |                            | FIR Boundary.<br>Extremity of L10.<br>Intersection with B3 and UL10<br>(see AIP France).  |  |
| (RNAV 5)                             |                                    | 309°/<br>129°                 | 12.4 nm |                                | FL 245 /<br>FL 65               |                   | 10 nm                             | even<br>FL 240 /<br>FL 80  | odd<br>FL 230 /<br>FL 70  | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 135 and<br>above);<br>Freq: 135.325 (Below FL 135).  |
| △                                    | DOVER<br>VOR/DME<br>(DVR)          | 510945.44N 0012132.72E        |         |                                |                                 |                   |                                   |                            | Acft flying within the London<br>TMA, at or below FL 190 and<br>routing btn DVR and BPK,<br>whether eastbound or<br>westbound, are to route via<br>DET unless instructed by ATC<br>to route direct. |  |
| (RNAV 5)                             |                                    | 303°/<br>123°                 | 13.7 nm |                                | FL 245 /<br>FL 75               |                   | 10 nm                             | even<br>FL 240 /<br>FL 80  | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 120.525 (Below FL 195).  |
| △                                    | ITVIP                              | 511714N 0010312E              |         |                                |                                 |                   |                                   |                            | Intersection with Q70.  |  |
| (RNAV 5)                             |                                    | 303°/<br>123°                 | 40.1 nm |                                | FL 245 /<br>FL 75               |                   | 10 nm                             | even<br>FL 240 /<br>FL 100 | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 120.525 (Below FL 195).  |
| △                                    | LAMBOURNE<br>VOR/DME<br>(LAM)      | 513845.69N 0000906.13E        |         |                                |                                 |                   |                                   |                            |   |  |
| (RNAV 5)                             |                                    | 303°/<br>123°                 | 11.5 nm |                                | FL 245 /<br>FL 75               |                   | 10 nm                             | even<br>FL 240 /<br>FL 100 | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 127.955 (Below FL 215<br>to FL 155);<br>Freq: 129.280 (Below FL 155<br>to FL 115);<br>Freq: 118.825 (Below FL 115).  |
| △                                    | BROOKMANS PARK<br>VOR/DME<br>(BPK) | 514459.05N 0000624.25W        |         |                                |                                 |                   |                                   |                            |   |  |
| (RNAV 5)                             |                                    | 306°/<br>125°                 | 20.2 nm |                                | FL 245 /<br>FL 75               |                   | 10 nm                             | even<br>FL 240 /<br>FL 100 | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Between BPK and 10 nm NW<br>of BPK:<br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 127.955 (Below FL 215<br>to FL 155);<br>Freq: 129.280 (Below FL 155<br>to FL 115);<br>Freq: 118.825 (Below FL 115).<br><br>Between 10 nm NW of BPK<br>and BUZAD:<br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above); |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |  |                          |  |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|--------------------------|--|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |  |                          |  |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |                          | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                              |                               |         |     |                                |                                 |                   | ↓  | ↑                        |  |
|                                      |                              |                               |         |     |                                |                                 |                   |  |                          | Freq: 130.925 (Below FL 215 to FL 155);<br>Freq: 131.130 (Below FL 155 to FL 115);<br>Freq: 119.775 (Below FL 115).  |
| △                                    | BUZAD                        | 515632N 0003308W              |         |     |                                |                                 |                   |  |                          |  |
| (RNAV 5)                             |                              | 305°/<br>125°                 | 8.2 nm  |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100                     | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and above);<br>Freq: 130.925 (Below FL 215 to FL 155);<br>Freq: 131.130 (Below FL 155 to FL 115);<br>Freq: 119.775 (Below FL 115).   |
| △                                    | WOBUN                        | 520110N 0004400W              |         |     |                                |                                 |                   |  |                          |  |
| (RNAV 5)                             |                              | 305°/<br>125°                 | 17.1 nm |     | FL 245 /<br>FL 65              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80                      | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and above);<br>Freq: 130.925 (Below FL 215).   |
| △                                    | DAVENTRY<br>VOR/DME<br>(DTY) | 521048.51N 0010649.64W        |         |     |                                |                                 |                   |  |                          | Base level change is not at the usual right angle to the AWY CL but is contiguous with the base level change of the northern edge of the Daventry CTA Area 4.  |
| (RNAV 5)                             |                              | 299°/<br>119°                 | 22.9 nm |     | FL 245 /<br>5500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>6000 ft<br>ALT             | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/Alt 5500 ft Class A.<br><br>London Control (Swanwick)<br>Freq: 134.390 (Above FL 195);<br>Freq: 130.925 (FL 195 and below).   |
| △                                    | HONILEY<br>VOR/DME<br>(HON)  | 522124.04N 0013949.41W        |         |     |                                |                                 |                   |  |                          | <b>Eastbound route only btm WAL and HON.</b><br>Intersection with L15, L612, N859 and P155.  |
| (RNAV 5)                             |                              | -141°                         | 82.0 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between WAL and abm Crewe:<br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and above);<br>Freq: 128.050 (Below FL 195).<br><br>Between abm Crewe and abm Birmingham:<br>London Control (Swanwick)<br>Freq: 134.390 for traffic via L612 and N859 (FL 195 and above);<br>Freq: 129.205 for traffic via L15 and P155 (FL 195 and above);<br>Scottish Control (Prestwick)<br>Freq: 134.425 (Below FL 195).<br><br>Between abm Birmingham and HON:<br>London Control (Swanwick)<br>Freq: 134.390 for traffic via L612 and N859 (FL 195 and above); |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                                 | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |  |
|--------------------------------------|---------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|--|
| Significant Point Name               |                                 | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |  |
| (RNP/RNAV Type)                      |                                 | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                                 |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |  |
|                                      |                                 |                               |         |     |                                |                                 |                   | ↓                                 | ↑                        | Freq: 129.205 for traffic via<br>L15 and P155 (FL 195 and<br>above);<br>Freq: 130.925 (Below FL 195).  |
| △                                    | WALLASEY<br>VOR/DME<br>(WAL)    | 532330.97N 0030804.06W        |         |     |                                |                                 |                   |                                   |                          | Intersection with L151, L975,<br>N862 and Y53.   |
| (RNAV 5)                             |                                 | 307°/<br>127°                 | 8.0 nm  |     | FL 245 /<br>3500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 230 /<br>FL 50 | FL 245/FL 195 Class C,<br>FL 195/Alt 3500 ft Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 128.050 (Below FL 195).                                       |
| △                                    | RIGVA                           | 532809N 0031858W              |         |     |                                |                                 |                   |                                   |                          | The base level change point is<br>not at the usual right angles to<br>the Airway CL and is defined<br>as straight lines joining points:<br>531909N 0032201W -<br>532621N 0032107W -<br>533213N 0031406W. |
| (RNAV 5)                             |                                 | 307°/<br>127°                 | 13.0 nm |     | FL 245 /<br>FL 45              |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 230 /<br>FL 50 | FL 245/FL 195 Class C,<br>FL 195/FL 45 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).   |
| △                                    | TUVDO                           | 533540N 0033644W              |         |     |                                |                                 |                   |                                   |                          |  |
| (RNAV 5)                             |                                 | 307°/<br>127°                 | 2.2 nm  |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).   |
| △                                    | PENIL                           | 533657N 0033949W              |         |     |                                |                                 |                   |                                   |                          | Intersection with L70.   |
| (RNAV 5)                             |                                 | 307°/<br>127°                 | 17.5 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).   |
| △                                    | LAMVI                           | 534700N 0040358W              |         |     |                                |                                 |                   |                                   |                          |  |
| (RNAV 5)                             |                                 | 307°/<br>127°                 | 5.0 nm  |     | FL 245 /<br>FL 45              |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 230 /<br>FL 50 | FL 245/FL 195 Class C,<br>FL 195/FL 45 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).   |
| △                                    | CASEL                           | 534952N 0041057W              |         |     |                                |                                 |                   |                                   |                          |  |
| (RNAV 5)                             |                                 | 307°/<br>127°                 | 7.8 nm  |     | FL 245 /<br>FL 45              |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 230 /<br>FL 50 | FL 245/FL 195 Class C,<br>FL 195/FL 45 Class A.<br>(Variable lower limit)<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).   |
| △                                    | KELLY                           | 535419N 0042151W              |         |     |                                |                                 |                   |                                   |                          | DRA Entry and Exit Fix.<br>Intersection with UL10.   |
| (RNAV 5)                             |                                 | 307°/<br>127°                 | 17.2 nm |     | FL 255 /<br>FL 45              |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 250 /<br>FL 50 | FL 255/FL 195 Class C,<br>FL 195/FL 45 Class A.<br>(Variable lower limit)<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).   |
| △                                    | ISLE OF MAN<br>VOR/DME<br>(IOM) | 540400.72N 0044548.51W        |         |     |                                |                                 |                   |                                   |                          |  |
| (RNAV 5)                             |                                 | 308°/<br>128°                 | 14.0 nm |     | FL 255 /<br>FL 45              |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 250 /<br>FL 50 | FL 255/FL 195 Class C,<br>FL 195/FL 45 Class D.<br>(Variable lower limit)  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |  |
|--|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|--|
| Significant Point Name   |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |  |
| (RNP/RNAV Type)  |                             | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|  |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |  |
|  |                             |                               |         |     |                                |                                 |                   | ↓                                 | ↑                        | Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels).  |
| △  | SLYDA                       | 541204N 0050515W              |         |     |                                |                                 |                   |                                   |                          |  |
| (RNAV 5)   |                             | 308°/<br>128°                 | 20.7 nm |     | FL 255 /<br>FL 45              |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 250 /<br>FL 50 | FL 255/FL 195 Class C,<br>FL 195/FL 45 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels).   |
| △  | RINGA                       | 542354N 0053416W              |         |     |                                |                                 |                   |                                   |                          |  |
| (RNAV 5)   |                             | 308°/<br>128°                 | 12.3 nm |     | FL 255 /<br>FL 45              |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 250 /<br>FL 50 | FL 255/FL 195 Class C,<br>FL 195/FL 45 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (FL 105 and<br>above);<br>Aldergrove Radar<br>Freq: 128.500 (Below FL 105). |
| △  | DUFFY                       | 543053N 0055139W              |         |     |                                |                                 |                   |                                   |                          | Intersection with L15.   |
| (RNAV 5)   |                             | 308°/<br>127°                 | 15.6 nm |     | FL 255 /<br>FL 45              |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 250 /<br>FL 50 | FL 255/FL 195 Class C,<br>FL 195/FL 45 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (FL 105 and<br>above);<br>Aldergrove Radar<br>Freq: 128.500 (Below FL 105). |
| △  | BELFAST<br>VOR/DME<br>(BEL) | 543940.12N 0061347.67W        |         |     |                                |                                 |                   |                                   |                          | Extremity of L10.  |
| Route Remarks:   |                             |                               |         |     |                                |                                 |                   |                                   |                          |  |
| <ul style="list-style-type: none"><li>RINTI - DVR only available for EGKK departures with a FPL at FL 350 and above.<br/><b>CDR Category Two (CDR 2)</b> after RINTI (FIR Boundary).<br/>Availability subject to LF-CBA1 activity.</li><li>The airspace bounded by the western edge of AWY L10, RINTI (FIR Boundary), the eastern edge of AWY N57 and the southern edge of AWY Y803 is deemed to form part of AWY L10.</li><li>During the notified hours of operation of the Isle of Man CTR/CTA the lower limit of the section of this AWY btn CASEL and SLYDA will be FL 65.</li><li>Between IOM and BEL below FL 245, L10 lies within the Strangford CTA. Within the confines of the Belfast TMA, L10 assumes the classification of the Belfast TMA.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                             |                               |         |     |                                |                                 |                   |                                   |                          |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                            | Route Usage Notes             |         |                                |                                 |                   |                                   |                           |   |
|--------------------------------------|----------------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|
| Significant Point Name               |                            | Significant Point Coordinates |         |                                |                                 |                   |                                   |                           |   |
| (RNP/RNAV Type)                      | Track<br>MAG<br>↓↑         | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                            |                               |         |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |
|                                      |                            |                               |         |                                |                                 |                   |                                   | ↓                         | ↑   |
| L15<br>(RNP/RNAV)                    |                            |                               |         |                                |                                 |                   |                                   |                           |   |
| △                                    | IRKUN                      | 505516N 0012800E              |         |                                |                                 |                   |                                   |                           | Westbound route only btn<br>IRKUN and LYD.<br>Extremity of L15.   |
| (RNAV 5)                             |                            | 282°/-                        | 22.8 nm |                                | FL 245 /<br>FL 75               |                   | 10 nm                             | even<br>FL 240 /<br>FL 80 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 135.325 (Below FL 195).   |
| △                                    | LYDD<br>VOR/DME<br>(LYD)   | 505958.87N 0005243.18E        |         |                                |                                 |                   |                                   |                           | Extremity of Partition of L15.  |
|                                      |                            |                               |         |                                | - / -                           |                   |                                   |                           | ROUTE BREAK - THIS AIR-<br>WAY IS NOT CONTINUOUS.   |
| △                                    | BIGGIN<br>VOR/DME<br>(BIG) | 511951.15N 0000205.32E        |         |                                |                                 |                   |                                   |                           | Eastbound route only btn<br>DUFFY and BIG (exception-<br>ally ATC may allocate<br>westbound levels).<br>Intersection with L9.<br>Extremity of Partition of L15.   |
| (RNAV 5)                             |                            | -/135°                        | 40.0 nm |                                | FL 245 /<br>FL 155              |                   | 10 nm                             | odd<br>FL 230 /<br>FL 170 | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>Between 20 nm before BIG<br>and BIG:<br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 127.955 (Below FL 215).<br><br>Between 35 nm before BIG<br>and 20 nm before BIG:<br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215).<br><br>Between BETPO and 35 nm<br>before BIG:<br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 121.025 (Below FL 215). |
| △                                    | BETPO                      | 514754N 0004328W              |         |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |                            | -/135°                        | 17.1 nm |                                | FL 245 /<br>FL 115              |                   | 10 nm                             | odd<br>FL 230 /<br>FL 130 | FL 245/FL 195 Class C,<br>FL 195/FL 115 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 121.025 (Below FL 215).  |
| △                                    | FINMA                      | 515947N 0010313W              |         |                                |                                 |                   |                                   |                           | Intersection with M605.   |
| (RNAV 5)                             |                            | -/135°                        | 3.0 nm  |                                | FL 245 /<br>FL 115              |                   | 10 nm                             | odd<br>FL 230 /<br>FL 130 | FL 245/FL 195 Class C,<br>FL 195/FL 115 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 121.025 (Below FL 215).  |
| △                                    | PIXUP                      | 520151N 0010640W              |         |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |                            | -/135°                        | 28.3 nm |                                | FL 245 /<br>FL 115              |                   | 10 nm                             | odd<br>FL 230 /<br>FL 130 | FL 245/FL 195 Class C,<br>FL 195/FL 115 Class A.<br><br>London Control (Swanwick)   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |  |
|--------------------------------------|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|
| Significant Point Name               |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |  |
| (RNP/RNAV Type)                      |                             | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |
|                                      |                             |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         | Freq: 129.205 (FL 215 and<br>above);<br>Freq: 121.025 (Below FL 215).  |
| △                                    | HONILEY<br>VOR/DME<br>(HON) | 522124.04N 0013949.41W        |         |     |                                |                                 |                   |                                   |                           | Intersection with L10, L612,<br>N859 and P155.   |
| (RNAV 5)                             |                             | -/134°                        | 40.4 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.390 (Above FL<br>195);<br>Scottish Control (Prestwick)<br>Freq: 134.425 (Below FL 195). |
| △                                    | KEPAD                       | 524835N 0022844W              |         |     |                                |                                 |                   |                                   |                           | Intersection with L151.  |
| (RNAV 5)                             |                             | -/133°                        | 19.9 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.390 (Above FL<br>195);<br>Scottish Control (Prestwick)<br>Freq: 134.425 (Below FL 195). |
| △                                    | RISLA                       | 530151N 0025312W              |         |     |                                |                                 |                   |                                   |                           | Intersection with N862.  |
| (RNAV 5)                             |                             | -/133°                        | 14.8 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (Above FL<br>195);<br>Freq: 128.050 (Below FL 195).                              |
| △                                    | AMPIT                       | 531139N 0031133W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                             | -/133°                        | 19.9 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (Above FL<br>195);<br>Freq: 128.050 (Below FL 195).                              |
| △                                    | MALUD                       | 532448N 0033630W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                             | -/129°                        | 22.0 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).  |
| △                                    | GIGTO                       | 533801N 0040551W              |         |     |                                |                                 |                   |                                   |                           | Intersection with Q4.  |
| (RNAV 5)                             |                             | -/129°                        | 18.3 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).  |
| △                                    | SOSIM                       | 534856N 0043030W              |         |     |                                |                                 |                   |                                   |                           | Intersection with L28 and<br>UL15.   |
| (RNAV 5)                             |                             | -/129°                        | 16.1 nm |     | FL 255 /<br>FL 145             |                                 | 10 nm             |                                   | odd<br>FL 250 /<br>FL 150 | FL 255/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels).  |
| △                                    | MAKUX                       | 535830N 0045228W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                             | -/129°                        | 30.3 nm |     | FL 255 /<br>FL 145             |                                 | 10 nm             |                                   | odd<br>FL 250 /<br>FL 150 | FL 255/FL 195 Class C,<br>FL 195/FL 145 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels).  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |  |  |
|--|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|--|--|
| Significant Point Name   |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |  |  |
| (RNP/RNAV Type)  |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks  |  |
|  |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |  |  |
| △  | PEPOD | 541616N 0053409W              |         |     |                                |                                 |                   |                                   | ↓                        | ↑  | DRA Departure Transition Fix. Exceptionally ATC may route traffic FL 80 eastbound via L15. Intersection with L603. |
| (RNAV 5)   |       | -148°                         | 17.9 nm |     | FL 255 /<br>FL 75              |                                 | 10 nm             |                                   | odd<br>FL 250 /<br>FL 90 | FL 255/FL 195 Class C,<br>FL 195/FL 75 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels). |  |
| △  | DUFFY | 543053N 0055139W              |         |     |                                |                                 |                   |                                   |                          |  | Extremity of L15.  |
| Route Remarks:   |       |                               |         |     |                                |                                 |                   |                                   |                          |  |  |
| <ul style="list-style-type: none"><li>Between MAKUX and DUFFY below FL 245, L15 lies within the Strangford CTA.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |       |                               |         |     |                                |                                 |                   |                                   |                          |  |  |

| Route Designator/<br>(RNP/RNAV Type)   |       | Route Usage Notes             |       |     |                                |                                 |                   |                                   |   |   |
|--|-------|-------------------------------|-------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name   |       | Significant Point Coordinates |       |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)  |       | Track<br>MAG<br>↓↑            | Dist  | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks                             |
|  |       |                               |       |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|  |       |                               |       |     |                                |                                 |                   | ↓                                 | ↑   |   |
| L18<br>(RNP/RNAV)  |       |                               |       |     |                                |                                 |                   |                                   |   |   |
| △  | LANON | 522552N 0042221W              |       |     |                                |                                 |                   |                                   | Westbound route only.<br>Extremity of L18.            |   |
| (RNAV 5)   |       | 315°/-                        | 20 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |   | Class C.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 133.600. |
| △  | BADSI | 523930N 0044617W              |       |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)   |       | 315°/-                        | 11 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        |   | Class C.<br><br>ATS delegated to Dublin ATC.                                |
| △  | ABLIN | 524658N 0045933W              |       |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)   |       | 315°/-                        | 19 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |   | Class C.<br><br>ATS delegated to Dublin ATC.                                |
| △  | IRKUM | 525948N 0052239W              |       |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)   |       | 315°/-                        | 6 nm  |     | FL 245 /<br>FL 55              |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         |   | Class C.<br><br>ATS delegated to Dublin ATC.                                |
| △  | LIPGO | 530350N 0053000W              |       |     |                                |                                 |                   |                                   | FIR Boundary.<br>For continuation see AIP<br>Ireland. |   |
| Route Remarks:   |       |                               |       |     |                                |                                 |                   |                                   |   |   |
| <ul style="list-style-type: none"><li>CDR Category One and Three (CDR 1 and 3) (ENR 1.1, paragraph 1.1.7 refers).<br/>CDR 1 Mon-Thu 1800-0900 Winter (Summer 1 hr earlier) and from 1700 (Winter and Summer) on Friday or the day preceding a PH to 0900 (Winter), 0800 (Summer) on Monday or the day following a PH.<br/>CDR 3 at all other times.</li><li>Activation of the North Wales MTA Southern Area beyond the published hours is permitted on weekdays, weekends and PHs (See ENR 5.2-1). During these periods of activity L18 west of LANON will not be avbl. Non availability of L18 will be notified to GAT by London Control (Swanwick) and t/c will be re-routed via AWYs L9 and M17.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |       |                               |       |     |                                |                                 |                   |                                   |   |   |

# ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                                | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |   |
|--------------------------------------|--------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|
| Significant Point Name               |                                | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |   |
| (RNP/RNAV Type)                      |                                | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                                |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |
|                                      |                                |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         |   |
| L28<br>(RNP/RNAV)                    |                                |                               |         |     |                                |                                 |                   |                                   |                           |   |
| △                                    | TRENT<br>VOR/DME<br>(TNT)      | 530314.23N 0014011.89W        |         |     |                                |                                 |                   |                                   |                           | Westbound route only btn<br>TNT and PENIL.<br>ATC may allocate FL 190 on a<br>tactical basis.<br>Extremity of L28.<br>Intersection with N57 and Q4. |
| (RNAV 5)                             |                                | 329°/-                        | 13.1 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |                           | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (All Levels).   |
| △                                    | RODOL                          | 531417N 0015143W              |         |     |                                |                                 |                   |                                   |                           | Intersection with P6.   |
| (RNAV 5)                             |                                | 298°/-                        | 16.1 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |                           | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (All Levels).   |
| △                                    | MANCHESTER<br>VOR/DME<br>(MCT) | 532125.29N 0021544.24W        |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |                                | 289°/-                        | 24.3 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |                           | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (All Levels).   |
| △                                    | ASNIP                          | 532843N 0025426W              |         |     |                                |                                 |                   |                                   |                           | Intersection with L8.   |
| (RNAV 5)                             |                                | 289°/-                        | 28.3 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |                           | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (All Levels).   |
| △                                    | PENIL                          | 533657N 0033949W              |         |     |                                |                                 |                   |                                   |                           | Eastbound route only btn<br>SOSIM and PENIL.  |
| (RNAV 5)                             |                                | -/114°                        | 32.4 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).                                 |
| △                                    | SOSIM                          | 534856N 0043030W              |         |     |                                |                                 |                   |                                   |                           | Extremity of L28.   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |   |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |   |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |
|                                      |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         |   |
| L60<br>(RNP/RNAV)                    |       |                               |         |     |                                |                                 |                   |                                   |                           |   |
| △                                    | KOLAG | 530237N 0031518E              |         |     |                                |                                 |                   |                                   |                           | Westbound route only btn<br>KOLAG and SOPEK.<br>FIR Boundary.<br>For continuation see AIP<br>Netherlands.   |
| (RNAV 5)                             |       | 278°/-                        | 27.6 nm |     | FL 245 /<br>FL 175             |                                 | 10 nm             | even<br>FL 240 /<br>FL 180        |                           | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>ATS delegated to Amsterdam<br>ACC.  |
| △                                    | SOPEK | 530632N 0023000E              |         |     |                                |                                 |                   |                                   |                           | Extremity of partition of L60.<br>Intersection with L989.   |
|                                      |       |                               |         |     | - / -                          |                                 |                   |                                   |                           | ROUTE BREAK - THIS AIR-<br>WAY IS NOT CONTINUOUS.   |
| △                                    | OTBED | 531717N 0000155E              |         |     |                                |                                 |                   |                                   |                           | Eastbound route only btn<br>ADELU and OTBED.<br>Extremity of partition of L60.<br>Intersection with Y70.  |
| (RNAV 5)                             |       | -/100°                        | 25.1 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 190 | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).   |
| △                                    | NISBI | 532129N 0003921W              |         |     |                                |                                 |                   |                                   |                           | Base level change point is not<br>at right angles to the CL of L60<br>and follows a perpendicular<br>line to the CL of L603 until it<br>reaches the southern bdry of<br>Y70, where it then follows a<br>perpendicular line to the CL of<br>Y70. |
| (RNAV 5)                             |       | -/100°                        | 9.8 nm  |     | FL 245 /<br>FL 105             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 190 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).   |
| △                                    | DOPEK | 532304N 0005532W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |       | -/100°                        | 4.0 nm  |     | FL 245 /<br>FL 105             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 190 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).   |
| △                                    | ARTIX | 532342N 0010209W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |       | -/100°                        | 6.5 nm  |     | FL 245 /<br>FL 105             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 190 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All levels).   |
| △                                    | MOGMO | 532443N 0011251W              |         |     |                                |                                 |                   |                                   |                           | Base level change point is not<br>at right angles to the CL of L60<br>and extends between<br>532932N 0011019W and<br>531954N 0011523W.  |
| (RNAV 5)                             |       | -/100°                        | 2.4 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 190 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |       | Route Usage Notes             |        |     |                                |                                 |                   |                                   |                           |  |                         |
|---|-------|-------------------------------|--------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|-------------------------|
| Significant Point Name  |       | Significant Point Coordinates |        |     |                                |                                 |                   |                                   |                           |  |                         |
| (RNP/RNAV Type)   |       | Track<br>MAG<br>↓↑            | Dist   | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |                         |
|   |       |                               |        |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |                         |
| △   | MAMUL | 532505N 0011648W              |        |     |                                |                                 |                   |                                   | ↓                         | ↑  | Intersection with L603. |
| (RNAV 5)  |       | -/100°                        | 9.3 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 190 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels). |                         |
| △   | ADELU | 532630N 0013213W              |        |     |                                |                                 |                   |                                   |                           |  | Extremity of L60.       |
| Route Remarks:  |       |                               |        |     |                                |                                 |                   |                                   |                           |  |                         |
| <ul style="list-style-type: none"><li>See also ENR 1.1, paragraph 1.1.3.</li><li>The area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 85, bounded by straight lines joining:<br/>533059N 0010932W - 532932N 0011019W -<br/>532958N 0011456W - 533017N 0011643W -<br/>533059N 0010932W, is part of L60.</li><li>The area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 105, bounded by straight lines joining:<br/>533119N 0010614W - 532802N 0005436W -<br/>532932N 0011019W - 533059N 0010932W -<br/>533119N 0010614W, is part of L60.</li><li>The portion of airspace formed by joining positions:<ul style="list-style-type: none"><li>(i) <b>Camphill Box</b><br/>532719N 0014617W - 533017N 0011641W -<br/>531938N 0011532W - 532012N 0011840W -<br/>532110N 0012901W - 532002.91N 0013042.10W -<br/>531418.31N 0012448.84W - 531137N 0013631W -<br/>532719N 0014617W,<br/>from AWY base level to an upper limit of FL 100, occasionally to FL 190 on request;</li><li>(ii) <b>L975 Crossing Area</b><br/>533835N 0013503W - 534007N 0011937W -<br/>534626.98N 0011937.00W - 534308.41N 0011615.09W -<br/>534127.82N 0010357.97W - 533059N 0010932W -<br/>532845N 0013215W - 533835N 0013503W,<br/>from AWY base level to an upper limit of FL 120, occasionally to FL 190 on request;</li></ul></li></ul> |       |                               |        |     |                                |                                 |                   |                                   |                           |  |                         |
| is notified for the purposes of SERA.6001(a) Classification of Airspaces in accordance with the conditions established in the Letter of Agreement (LOA) btm the Derbyshire and Lancashire (Camphill) Gliding Club, British Gliding Association (BGA), Leeds Bradford International Airport, and Scottish Control (Prestwick).   |       |                               |        |     |                                |                                 |                   |                                   |                           |  |                         |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |  |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|--|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |  |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks  |  |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |  |  |
|                                      |       | ↓                             |         |     |                                |                                 |                   |                                   | ↑                        |  |  |
| L70<br>(RNP/RNAV)                    |       |                               |         |     |                                |                                 |                   |                                   |                          |  |  |
| △                                    | DESIG | 533138N 0015334W              |         |     |                                |                                 |                   |                                   |                          | Intersection with L603 and L975.<br>Extremity of L70.  |  |
| (RNAV 5)                             |       | 277°/<br>097°                 | 31.0 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195). |  |
| △                                    | KOLID | 533426N 0024521W              |         |     |                                |                                 |                   |                                   |                          |  |  |
| (RNAV 5)                             |       | 277°/<br>096°                 | 9.7 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 85 Class C<br>(see Route Remarks).<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 128.050 (Below FL 195).    |  |
| △                                    | TADAL | 533514N 0030135W              |         |     |                                |                                 |                   |                                   |                          |  |  |
| (RNAV 5)                             |       | 276°/<br>096°                 | 5.0 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 128.050 (All Levels).  |  |
| △                                    | GUNTU | 533537N 0030954W              |         |     |                                |                                 |                   |                                   |                          |  |  |
| (RNAV 5)                             |       | 276°/<br>096°                 | 17.9 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).  |  |
| △                                    | PENIL | 533657N 0033949W              |         |     |                                |                                 |                   |                                   |                          | <b>Westbound route only btn<br/>PENIL and BAGSO.</b><br>Intersection with L10.   |  |
| (RNAV 5)                             |       | 276°/-                        | 10.1 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         |                          | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).   |  |
| △                                    | BABRA | 533739N 0035643W              |         |     |                                |                                 |                   |                                   |                          |  |  |
| (RNAV 5)                             |       | 276°/-                        | 5.4 nm  |     | FL 245 /<br>FL 115             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |                          | FL 245/FL 195 Class C,<br>FL 195/FL 115 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).  |  |
| △                                    | GIGTO | 533801N 0040551W              |         |     |                                |                                 |                   |                                   |                          |  |  |
| (RNAV 5)                             |       | 276°/-                        | 7.6 nm  |     | FL 245 /<br>FL 115             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |                          | FL 245/FL 195 Class C,<br>FL 195/FL 115 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).  |  |
| △                                    | UNDUX | 533830N 0041839W              |         |     |                                |                                 |                   |                                   |                          |  |  |
| (RNAV 5)                             |       | 276°/-                        | 5.1 nm  |     | FL 245 /<br>FL 145             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        |                          | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).  |  |
| △                                    | SOPAX | 533849N 0042708W              |         |     |                                |                                 |                   |                                   |                          |  |  |
| (RNAV 5)                             |       | 276°/-                        | 13.9 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        |                          | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).  |  |
| △                                    | RAMOX | 533937N 0045022W              |         |     |                                |                                 |                   |                                   |                          |  |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name   |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)  |       | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|  |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
| (RNAV 5)   |       | 276°/-                        | 11.0 nm |     | FL 245 /<br>FL 115             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        | ↑ | Class C.<br><br>ATS delegated to Dublin ATC<br>Freq: 129.175.                                  |
| △  | OGTUG | 534012N 0050850W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)   |       | 276°/-                        | 12.6 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         |   | Class C.<br><br>ATS delegated to Dublin ATC<br>Freq: 129.175.<br>Dublin ATIS<br>Freq: 124.525. |
| △  | BAGSO | 534048N 0053000W              |         |     |                                |                                 |                   |                                   |   | FIR Boundary.<br>Extremity of L70.<br>Intersection with V14 (see AIP<br>Ireland).              |
| Route Remarks:   |       |                               |         |     |                                |                                 |                   |                                   |   |  |
| <ul style="list-style-type: none"><li>Between KOLID and PENIL below FL 195 ATS Route subject to short notice closure to accommodate Warton operational requirements. Aircraft will be tactically vectored by ATC.</li><li>The area bounded by<br/>533630N 0030135W - 534016N 0030209W -<br/>533917N 0023900W - 533630N 0030135W<br/>FL 195/FL 85 Class C.<br/>The area bounded by<br/>533918N 0023900W - 533630N 0030136W - 533222N 0030059W -<br/>533223N 0025907W - 533918N 0023900W<br/>FL 195/FL 145 Class C,<br/>FL 145/FL 55 Class A.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |       |                               |         |     |                                |                                 |                   |                                   |   |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |   |  |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|--|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |   |  |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|                                      |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |  |
|                                      |                              |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         |   |  |
| L151<br>(RNP/RNAV)                   |                              |                               |         |     |                                |                                 |                   |                                   |                           |   |  |
| △                                    | SITET                        | 500600N 0000000E              |         |     |                                |                                 |                   |                                   |                           | FIR Boundary.<br>Extremity of L151.<br>Intersection with A34 and<br>UN859 (See AIP France).   |  |
| (RNAV 5)                             |                              | 336°/<br>156°                 | 7.2 nm  |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Dual designation with N859<br>btn SITET and DRAKE.<br><br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).   |  |
| △                                    | DRAKE                        | 501234N 0000434W              |         |     |                                |                                 |                   |                                   |                           |   |  |
| (RNAV 5)                             |                              | 338°/<br>158°                 | 54.9 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between DRAKE and abm<br>BENBO:<br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).<br><br>Between abm BENBO and<br>MID:<br>London Control (Swanwick)<br>Freq: 135.050 (FL 175 and<br>above);<br>Freq: 133.175 (Below FL 175).   |  |
| △                                    | MIDHURST<br>VOR/DME<br>(MID) | 510314.23N 0003730.01W        |         |     |                                |                                 |                   |                                   |                           | Eastbound (southbound)<br>route only btn WAL and<br>MID.  |  |
| (RNAV 5)                             |                              | -148°                         | 29.7 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Between LINDY and abm<br>TEVSI:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 155);<br>Freq: 129.080 (Below FL 155<br>to FL 135);<br>Freq: 134.125 (Below FL 135).<br><br>Between abm TEVSI and 5<br>nm before MID:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.050 (Below FL 215<br>to FL 175);<br>Freq: 129.080 (Below FL 175).<br><br>Between 5 nm before MID and<br>MID:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.050 (Below FL 215<br>to FL 175);<br>Freq: 133.175 (Below FL 175). |  |
| △                                    | LINDY                        | 512814N 0010257W              |         |     |                                |                                 |                   |                                   |                           |   |  |
| (RNAV 5)                             |                              | -148°                         | 21.5 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Between KIDLI and 5 nm<br>south of KIDLI:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);  |  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                     | Route Usage Notes             |     |                                |                                 |                   |  |                           |   |
|--------------------------------------|---------------------|-------------------------------|-----|--------------------------------|---------------------------------|-------------------|--|---------------------------|---|
| Significant Point Name               |                     | Significant Point Coordinates |     |                                |                                 |                   |  |                           |   |
| (RNP/RNAV Type)                      | Track<br>MAG<br>↓/↑ | Dist                          | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                     |                               |     |                                |                                 |                   | ↓  | ↑                         |   |
|                                      |                     |                               |     |                                |                                 |                   |  |                           | Freq: 121.025 (Below FL 215).<br><br>Between 5 nm south of KIDLI and abm COWLY:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and above);<br>Freq: 135.800 (Below FL 215 to FL 155);<br>Freq: 131.130 (Below FL 155 to FL 125);<br>Freq: 119.775 (Below FL 125).<br><br>Between abm COWLY and LINDY:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and above);<br>Freq: 135.800 (Below FL 215 to FL 155);<br>Freq: 129.080 (Below FL 155 to FL 135);<br>Freq: 134.125 (Below FL 135). |
| △                                    | KIDLI               | 514617N 0012141W              |     |                                |                                 |                   |  |                           | Intersection with N859.   |
| (RNAV 5)                             | ~148°               | 7.6 nm                        |     | FL 245 /<br>FL 105             |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and above);<br>Freq: 121.025 (Below FL 215).   |
| △                                    | NEDEX               | 515237N 0012820W              |     |                                |                                 |                   |  |                           |   |
| (RNAV 5)                             | ~148°               | 10.7 nm                       |     | FL 245 /<br>FL 105             |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.390 (FL 215 and above);<br>Freq: 121.025 (Below FL 215).   |
| △                                    | NANUM               | 520135N 0013747W              |     |                                |                                 |                   |  |                           |   |
| (RNAV 5)                             | ~148°               | 3.0 nm                        |     | FL 245 /<br>FL 105             |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.390 (FL 215 and above);<br>Freq: 121.025 (Below FL 215).   |
| △                                    | TUBSU               | 520406N 0014028W              |     |                                |                                 |                   |  |                           |   |
| (RNAV 5)                             | ~148°               | 2.5 nm                        |     | FL 245 /<br>FL 145             |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.390 (FL 215 and above);<br>Freq: 121.025 (Below FL 215).   |
| △                                    | DISIT               | 520611N 0014241W              |     |                                |                                 |                   |  |                           |   |
| (RNAV 5)                             | ~148°               | 11.8 nm                       |     | FL 245 /<br>FL 145             |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.390 (FL 215 and above);<br>Freq: 121.025 (Below FL 215).   |
| △                                    | PEPUL               | 521603N 0015314W              |     |                                |                                 |                   |  |                           |   |
| (RNAV 5)                             | ~148°               | 10.3 nm                       |     | FL 245 /<br>FL 145             |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |  |
|---|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|
| Significant Point Name  |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |  |
| (RNP/RNAV Type)   |                              | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|   |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |
|   |                              |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         | Freq: 134.390 (FL 215 and<br>above);<br>Freq: 121.025 (Below FL 215).  |
| △   | VIDOK                        | 522439N 0020231W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)  |                              | -148°                         | 18.3 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.390 (FL 195 and<br>above);<br>Scottish Control (Prestwick)<br>Freq: 134.425 (Below FL 195).   |
| △   | TELBA                        | 523952N 0021907W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)  |                              | -148°                         | 10.5 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.390 (FL 195 and<br>above);<br>Scottish Control (Prestwick)<br>Freq: 134.425 (Below FL 195).   |
| △   | KEPAD                        | 524835N 0022844W              |         |     |                                |                                 |                   |                                   |                           | Intersection with L15.   |
| (RNAV 5)  |                              | -147°                         | 42.3 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Between WAL and 20 nm be-<br>fore KEPAD:<br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 128.050 (Below FL 195).<br><br>Between 20 nm before<br>KEPAD and KEPAD:<br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 134.425 (Below FL 195). |
| △   | WALLASEY<br>VOR/DME<br>(WAL) | 532330.97N 0030804.06W        |         |     |                                |                                 |                   |                                   |                           | Extremity of L151.   |
| Route Remarks:  |                              |                               |         |     |                                |                                 |                   |                                   |                           |  |
| <ul style="list-style-type: none"><li>Four areas of controlled airspace, Class C above FL 195 and Class A below FL 195, are part of L151:<br/>Area 1: FL 145 - FL 245, bounded by:<br/>523853N 0022755W - 520122N 0014714W - 515949N 0015102W -<br/>520917N 0020429W - 523253N 0023011W - 523853N 0022755W.<br/>Area 2: FL 145 - FL 195, bounded by:<br/>520917N 0020429W - 515949N 0015102W -<br/>515853N 0015319W - 520917N 0020429W.<br/>Area 3: FL 105 - FL 245, bounded by:<br/>520122N 0014714W - 514408N 0012901W -<br/>515949N 0015102W - 520122N 0014714W.<br/>Area 4: FL 105 - FL 195, bounded by:<br/>515949N 0015102W - 514408N 0012901W - 513943N 0012646W -<br/>514055N 0013458W - 514211N 0013537W - 515853N 0015319W -<br/>515949N 0015102W.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                              |                               |         |     |                                |                                 |                   |                                   |                           |  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |   |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|---|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |   |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |   |  |
|                                      |       | ↓                             |         |     |                                |                                 |                   |                                   | ↑  |   |  |
| L179<br>(RNP/RNAV)                   |       |                               |         |     |                                |                                 |                   |                                   |  |   |  |
| △                                    | GILTI | 513413N 0020318E              |         |     |                                |                                 |                   |                                   | Westbound route only.<br>FIR Boundary.<br>For continuation see AIP<br>Netherlands. |   |  |
| (RNAV 5)                             |       | 274°/-                        | 16.6 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215). |  |
| △                                    | ERING | 513526N 0013643E              |         |     |                                |                                 |                   |                                   |  |   |  |
| (RNAV 5)                             |       | 274°/-                        | 12.4 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.605 (FL 125 and<br>above);<br>Freq: 135.425 (Below FL 125). |  |
| △                                    | TOBIX | 513617N 0011651E              |         |     |                                |                                 |                   |                                   |  |   |  |
| (RNAV 5)                             |       | 274°/-                        | 13.7 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.605 (FL 125 and<br>above);<br>Freq: 135.425 (Below FL 125). |  |
| △                                    | TUGPO | 513710N 0005452E              |         |     |                                |                                 |                   |                                   |  |   |  |
| (RNAV 5)                             |       | 274°/-                        | 6.3 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.605 (FL 175 and<br>above);<br>Freq: 118.825 (Below FL 175). |  |
| △                                    | TERKO | 513732N 0004448E              |         |     |                                |                                 |                   |                                   |  |   |  |
| (RNAV 5)                             |       | 274°/-                        | 3.8 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.605 (FL 175 and<br>above);<br>Freq: 118.825 (Below FL 175). |  |
| △                                    | SIRGO | 513746N 0003847E              |         |     |                                |                                 |                   |                                   |  |   |  |
| (RNAV 5)                             |       | 274°/-                        | 4.0 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.605 (FL 175 and<br>above);<br>Freq: 118.825 (Below FL 175). |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                               | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |   |
|--|-------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|---|
| Significant Point Name   |                               | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |   |
| (RNP/RNAV Type)  |                               | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|  |                               |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |   |
| △  | FERIT                         | 513759N 0003221E              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)   |                               | 274°/-                        | 14.5 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Between FERIT and 10 nm<br>before LAM:<br>London Control (Swanwick)<br>Freq: 129.605 (FL 175 and<br>above);<br>Freq: 118.825 (Below FL 175).<br><br>Between 10 nm before LAM<br>and LAM:<br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 127.955 (Below FL 215<br>to FL 175);<br>Freq: 118.825 (Below FL 175). |
| △  | LAMBOURNE<br>VOR/DME<br>(LAM) | 513845.69N 0000906.13E        |         |     |                                |                                 |                   |                                   |  | Extremity of L179.  |
| Route Remarks:   |                               |                               |         |     |                                |                                 |                   |                                   |  |   |
| <ul style="list-style-type: none"><li>• <b>CDR Category One (CDR 1) between GILTI and LAM</b> (ENR 1.1, paragraph 1.1.7 refers).<br/><b>CDR 1 H24.</b></li><li>• The use of this route may be interrupted when MoD (Shoeburyness) requires the activation of Danger Areas EG D138 and D138A above ALT 13000 ft through which the route passes. These Danger Areas are activated by NOTAM.<br/>Non-availability of (U)L179 will be notified by means of the daily UK CDR Closure NOTAM and the Eurocontrol CRAM.</li><li>• See also ENR 1.1, paragraph 1.1.3.</li></ul> |                               |                               |         |     |                                |                                 |                   |                                   |  |   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|                                      |       | ↓                             |         |     |                                |                                 |                   |                                   | ↑   |  |
| L180<br>(RNP/RNAV)                   |       |                               |         |     |                                |                                 |                   |                                   |   |  |
| △                                    | DIKAS | 514637N 0031533W              |         |     |                                |                                 |                   |                                   | Southbound route only.<br>Minimum flight level will be determined by EG D147 activity.<br>ATC may allocate Odd levels on a tactical basis.<br>Extremity of L180.<br>Intersection with N864. |  |
| (RNAV 5)                             |       | -/232°                        | 16.2 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 160  | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>0600 - 2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (Above FL 165);<br>Cardiff ATC<br>Freq: 125.850 (FL 165 and below).<br>2300 - 0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels). |
| △                                    | RILES | 515655N 0025522W              |         |     |                                |                                 |                   |                                   | Extremity of L180.  |  |

| Route Designator/<br>(RNP/RNAV Type) |                               | Route Usage Notes             |       |     |                                |                                 |                   |                                   |   |  |
|--------------------------------------|-------------------------------|-------------------------------|-------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name               |                               | Significant Point Coordinates |       |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)                      |                               | Track<br>MAG<br>↓↑            | Dist  | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                               |                               |       |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|                                      |                               | ↓                             |       |     |                                |                                 |                   |                                   | ↑   |  |
| L186<br>(RNP/RNAV)                   |                               |                               |       |     |                                |                                 |                   |                                   |   |  |
| △                                    | TURNBERRY<br>VOR/DME<br>(TRN) | 551848.28N 0044701.89W        |       |     |                                |                                 |                   |                                   | Westbound route only.<br>Extremity of L186.<br>Intersection with N562 and P600. |  |
| (RNAV 5)                             |                               | -/185°                        | 17 nm |     | FL 245 /<br>6000 ft<br>ALT     |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 80   | FL 245/FL 195 Class C,<br>FL 195/Alt 6000 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels). |
| △                                    | NORBO                         | 553545N 0044543W              |       |     |                                |                                 |                   |                                   | Extremity of L186.  |  |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|                                      |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |   |
| L602<br>(RNP/RNAV)                   |       |                               |         |     |                                |                                 |                   |                                   |   |   |
| △                                    | MIMVA | 530603N 0031813E              |         |     |                                |                                 |                   |                                   | Westbound route only btn<br>MIMVA and EMLON.<br>FIR Boundary.<br>For continuation see AIP<br>Netherlands.   |   |
| (RNAV 5)                             |       | 282°/-                        | 7.2 nm  |     | FL 245 /<br>FL 175             |                                 | 10 nm             | even<br>FL 240 /<br>FL 180        |   | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>ATS delegated to Amsterdam<br>ACC.  |
| △                                    | TOLSA | 530737N 0030629E              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             |       | 282°/-                        | 12.4 nm |     | FL 245 /<br>FL 175             |                                 | 10 nm             | even<br>FL 240 /<br>FL 180        |   | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>ATS delegated to Amsterdam<br>ACC.  |
| △                                    | OKAMA | 531015N 0024622E              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             |       | 282°/-                        | 10.1 nm |     | FL 245 /<br>FL 175             |                                 | 10 nm             | even<br>FL 240 /<br>FL 180        |   | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>Acft must be able to reach FL<br>250 by EMLON as there is no<br>coincident AWY beneath<br>UL602 after this psn.<br><br>ATS delegated to Amsterdam<br>ACC. |
| △                                    | EMLON | 531220N 0023000E              |         |     |                                |                                 |                   |                                   | Extremity of partition of L602.<br>The extremity of L602 at<br>EMLON is bounded by part of<br>a straight line btn:<br>524010N 0023000E -<br>532000N 0023000E. |   |
|                                      |       |                               |         |     | - / -                          |                                 |                   |                                   |   | ROUTE BREAK - THIS AIR-<br>WAY IS NOT CONTINUOUS.   |
| △                                    | NATEB | 550218N 0014154W              |         |     |                                |                                 |                   |                                   | Extremity of partition of L602.<br>Intersection with P18.   |   |
| (RNAV 5)                             |       | 302°/<br>122°                 | 10 nm   |     | FL 245 /<br>FL 205             |                                 | 10 nm             | even<br>FL 240 /<br>FL 220        | odd<br>FL 230 /<br>FL 210   | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).   |
| △                                    | AGPED | 550719N 0015657W              |         |     |                                |                                 |                   |                                   | AGPED - IPSAD may not be<br>avbl due to activity within<br>either EG D512 or EG D512A<br>(Otterburn Danger Areas).  |   |
| (RNAV 5)                             |       | 302°/<br>121°                 | 19.2 nm |     | FL 245 /<br>FL 205             |                                 | 10 nm             | even<br>FL 240 /<br>FL 220        | odd<br>FL 230 /<br>FL 210   | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).   |
| △                                    | OTBUN | 551650N 0022600W              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             |       | 301°/<br>121°                 | 10.0 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 170   | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).   |
| △                                    | IPSAD | 552145N 0024114W              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             |       | 301°/<br>121°                 | 12.1 nm |     | FL 245 /<br>FL 115             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        | odd<br>FL 230 /<br>FL 130   | FL 245/FL 195 Class C,<br>FL 195/FL 115 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).   |



4 Feb 2016

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                           | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |  |   |
|---|---------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|---|
| Significant Point Name  |                           | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |  |   |
| (RNP/RNAV Type)   |                           | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |   |
|   |                           |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |   |
| Δ   | HAVEN                     | 552740N 0025947W              |         |     |                                |                                 |                   |                                   | ↓                         | ↑  |   |
| (RNAV 5)  |                           | 283°/<br>103°                 | 12.4 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels). |   |
| Δ   | TALLA<br>VOR/DME<br>(TLA) | 552956.92N 0032110.20W        |         |     |                                |                                 |                   |                                   |                           |  | Extremity of L602.<br>Intersection with N601 and<br>N864. |
| Route Remarks:  |                           |                               |         |     |                                |                                 |                   |                                   |                           |  |   |
| <ul style="list-style-type: none"><li>To maintain separation btn AWY L602 and EG D510 (Spadeadam) the AWY is not directly aligned NATEB - TLA VOR. Attention should be paid to the change in MAG TR at HAVEN.</li><li>Two areas of controlled airspace, Class C above FL 195 and Class A below FL 195, base level FL 115, are part of L602:<br/>Area 1, north of L602, bounded by great circle lines joining:<br/>553805N 0025111W - 552606N 0023655W -<br/>553056N 0025204W - 553100N 0025156W -<br/>553805N 0025111W;<br/>Area 2, south of L602, bounded by great circle lines joining:<br/>552201N 0030000W - 551724N 0024532W -<br/>551742N 0030000W - 552201N 0030000W.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                           |                               |         |     |                                |                                 |                   |                                   |                           |  |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                     | Route Usage Notes             |         |                                |                                 |                   |                                   |   |  |   |
|--------------------------------------|---------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|---|
| Significant Point Name               |                     | Significant Point Coordinates |         |                                |                                 |                   |                                   |   |  |   |
| (RNP/RNAV Type)                      | Track<br>MAG<br>↓/↑ | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks              |   |
|                                      |                     |                               |         |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |   |
|                                      |                     |                               |         |                                |                                 |                   | ↓                                 | ↑ |  |   |
| L603<br>(RNP/RNAV)                   |                     |                               |         |                                |                                 |                   |                                   |   |  |   |
| △                                    | LAMSO               | 524358N 0025940E              |         |                                |                                 |                   |                                   |   | Eastbound route only.<br>FIR Boundary.<br>Extremity of L603. |   |
| (RNAV 5)                             |                     | -/102°                        | 7.2 nm  |                                | FL 245 /<br>FL 175              |                   | 12.5 nm                           |   | odd<br>FL 230 /<br>FL 190                                    | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>ATS delegated to Amsterdam<br>ACC.  |
| △                                    | BUKUT               | 524530N 0024802E              |         |                                |                                 |                   |                                   |   |  |   |
| (RNAV 5)                             |                     | -/102°                        | 11.2 nm |                                | FL 245 /<br>FL 175              |                   | 12.5 nm                           |   | odd<br>FL 230 /<br>FL 190                                    | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>ATS delegated to Amsterdam<br>ACC.  |
| △                                    | DIBAL               | 524750N 0023000E              |         |                                |                                 |                   |                                   |   |  | Extremity of partition of L603.<br>The extremity of L603 at<br>DIBAL is bounded by part of a<br>straight line btn:<br>524010N 0023000E -<br>532000N 0023000E. |
|                                      |                     |                               |         |                                | - / -                           |                   |                                   |   |  | ROUTE BREAK - THIS AIR-<br>WAY IS NOT CONTINUOUS.   |
| △                                    | AMVEL               | 531103N 0000155W              |         |                                |                                 |                   |                                   |   |  | Extremity of partition of L603.   |
| (RNAV 5)                             |                     | -/108°                        | 10 nm   |                                | FL 245 /<br>FL 155              |                   | 10 nm                             |   | odd<br>FL 230 /<br>FL 170                                    | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).   |
| △                                    | ROGAG               | 531406N 0001745W              |         |                                |                                 |                   |                                   |   |  |   |
| (RNAV 5)                             |                     | -/108°                        | 14.6 nm |                                | FL 245 /<br>FL 155              |                   | 10 nm                             |   | odd<br>FL 230 /<br>FL 170                                    | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).   |
| △                                    | LAMIX               | 531829N 0004056W              |         |                                |                                 |                   |                                   |   |  |   |
| (RNAV 5)                             |                     | -/108°                        | 20.1 nm |                                | FL 245 /<br>FL 105              |                   | 10 nm                             |   | odd<br>FL 230 /<br>FL 110                                    | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).   |
|                                      | EDUXO               | 532424N 0011301W              |         |                                |                                 |                   |                                   |   |  | Base level change point is not<br>at right angles to the CL of<br>L603 and extends between:<br>531938N 0011532W and<br>532910N 0011030W.                      |
| (RNAV 5)                             |                     | -/108°                        | 2.4 nm  |                                | FL 245 /<br>FL 85               |                   | 10 nm                             |   | odd<br>FL 230 /<br>FL 90                                     | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).  |
| △                                    | MAMUL               | 532505N 0011648W              |         |                                |                                 |                   |                                   |   |  | Intersection with L60.  |
| (RNAV 5)                             |                     | -/108°                        | 11.6 nm |                                | FL 245 /<br>FL 85               |                   | 10 nm                             |   | odd<br>FL 230 /<br>FL 90                                     | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).  |
| △                                    | ELNOD               | 532826N 0013524W              |         |                                |                                 |                   |                                   |   |  | The change in the lower limit<br>occurs along the southern limit<br>of L975 and is not at the usual<br>right angle to CL of the AWY.                          |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                                 | Route Usage Notes             |         |     |                                |                                 |                   |  |                          |  |
|--|---------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|--------------------------|--|
| Significant Point Name   |                                 | Significant Point Coordinates |         |     |                                |                                 |                   |  |                          |  |
| (RNP/RNAV Type)  |                                 | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |                          | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|  |                                 |                               |         |     |                                |                                 |                   | ↓  | ↑                        |  |
| (RNAV 5)   |                                 | -108°                         | 11.3 nm |     | FL 245 /<br>5000 ft<br>ALT     |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/Alt 5000 ft Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels). |
| △  | DESIG                           | 533138N 0015334W              |         |     |                                |                                 |                   |  |                          | Extremity of partition of L603.  |
|  |                                 |                               |         |     | - / -                          |                                 |                   |  |                          | <b>ROUTE BREAK - THIS AIR-<br/>WAY IS NOT CONTINUOUS.</b>  |
| △  | ISLE OF MAN<br>VOR/DME<br>(IOM) | 540400.72N 0044548.51W        |         |     |                                |                                 |                   |  |                          | Extremity of partition of L603.<br>Intersection with L10.  |
| (RNAV 5)   |                                 | -116°                         | 31.0 nm |     | FL 255 /<br>FL 75              |                                 | 10 nm             |  | odd<br>FL 250 /<br>FL 90 | FL 255/FL 195 Class C,<br>FL 195/FL 75 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels).       |
| △  | PEPOD                           | 541616N 0053409W              |         |     |                                |                                 |                   |  |                          | DRA Departure Transition Fix.<br>Intersection with L15.  |
| (RNAV 5)   |                                 | -133°                         | 23.8 nm |     | FL 255 /<br>FL 75              |                                 | 10 nm             |  | odd<br>FL 250 /<br>FL 90 | FL 255/FL 195 Class C,<br>FL 195/FL 75 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels).       |
| △  | LISBO                           | 543130N 0060524W              |         |     |                                |                                 |                   |  |                          | Extremity of L603.   |
| Route Remarks:   |                                 |                               |         |     |                                |                                 |                   |  |                          |  |
| <ul style="list-style-type: none"><li>Within the confines of the Belfast TMA, L603 assumes the classification of the Belfast TMA. Between IOM and LISBO below FL 245, L603 lies within the Strangford CTA.</li><li>The portion of airspace formed by joining positions:<ul style="list-style-type: none"><li>(i) <b>Camphill Box</b><br/>532719N 0014617W - 533017N 0011641W -<br/>531938N 0011532W - 532012N 0011840W -<br/>532110N 0012901W - 532002.91N 0013042.10W -<br/>531418.31N 0012448.84W - 531137N 0013631W -<br/>532719N 0014617W,<br/>from AWY base level to an upper limit of FL 100, occasionally to FL 190 on request;</li><li>(ii) <b>L975 Crossing Area</b><br/>533835N 0013503W - 534007N 0011937W -<br/>534626.98N 0011937.00W - 534308.41N 0011615.09W -<br/>534127.82N 0010357.97W - 533059N 0010932W -<br/>532845N 0013215W - 533835N 0013503W,<br/>from AWY base level to an upper limit of FL 120, occasionally to FL 190 on request;</li></ul></li></ul> <p>is notified for the purposes of SERA.6001(a) Classification of Airspaces in accordance with the conditions established in the Letter of Agreement (LOA) b/n the Derbyshire and Lancashire (Camphill) Gliding Club, British Gliding Association (BGA), Leeds Bradford International Airport, and Scottish Control (Prestwick).</p> <ul style="list-style-type: none"><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                                 |                               |         |     |                                |                                 |                   |  |                          |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |   |  |
|---|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|---|--|
| Significant Point Name  |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |   |  |
| (RNP/RNAV Type)   |                             | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|   |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |   |  |
|   |                             |                               |         |     |                                |                                 |                   | ↓                                 | ↑                        |   |  |
| L608<br>(RNP/RNAV)  |                             |                               |         |     |                                |                                 |                   |                                   |                          |   |  |
| △   | SUMUM                       | 513814N 0020628E              |         |     |                                |                                 |                   |                                   |                          | FIR Boundary.<br>For continuation see AIP<br>Netherlands.<br>Intersection with Y6.  |  |
| (RNAV 5)  |                             | 290°/<br>109°                 | 19.7 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215). |  |
| △   | LOGAN                       | 514451N 0013643E              |         |     |                                |                                 |                   |                                   |                          |   |  |
| (RNAV 5)  |                             | 289°/<br>109°                 | 18.3 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215). |  |
| △   | CLACTON<br>VOR/DME<br>(CLN) | 515054.50N 0010851.32E        |         |     |                                |                                 |                   |                                   |                          | Extremity of L608.  |  |
| Route Remarks:  |                             |                               |         |     |                                |                                 |                   |                                   |                          |   |  |
| <ul style="list-style-type: none"><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 85, bounded by:<br/>515220N 0021738E - 513344N 0020255E - 513947N 0013541E -<br/>513906N 0012500E - 515222N 0012635E - 515220N 0021738E,<br/>is part of L608.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                             |                               |         |     |                                |                                 |                   |                                   |                          |   |  |



ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |  |
|                                      |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑  |  |
| L610<br>(RNP/RNAV)                   |       |                               |         |     |                                |                                 |                   |                                   |  |  |
| △                                    | RAPIX | 512638N 0020000E              |         |     |                                |                                 |                   |                                   | Westbound route only.<br>FIR Boundary.<br>For continuation see AIP<br>Belgium. |  |
| (RNAV 5)                             |       | 280°/-                        | 4.8 nm  |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215).   |
| △                                    | SUNUP | 512731N 0015227E              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |       | 280°/-                        | 10 nm   |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215).   |
| △                                    | TEBRA | 512920N 0013643E              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |       | 280°/-                        | 18.1 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.605 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215).   |
| △                                    | KOPUL | 513232N 0010814E              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |       | 280°/-                        | 6.6 nm  |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.605 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215).   |
| △                                    | UNSD  | 513340N 0005746E              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |       | 280°/-                        | 12.5 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Between UNSAD and 10 nm<br>before NILON:<br>London Control (Swanwick)<br>Freq: 129.605 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 125).<br><br>Between 10 nm before NILON<br>and NILON:<br>London Control (Swanwick)<br>Freq: 129.605 (FL 175 and<br>above);<br>Freq: 118.825 (Below FL 175). |
| △                                    | NILON | 513546N 0003804E              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |       | 280°/-                        | 1.9 nm  |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.605 (FL 175 and<br>above);<br>Freq: 118.825 (Below FL 175).   |
| △                                    | GILDA | 513606N 0003501E              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |       | 280°/-                        | 16.4 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                               | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--|-------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name   |                               | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)  |                               | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|  |                               |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|  |                               |                               |         |     |                                |                                 |                   | ↓                                 | ↑ | Freq: 129.605 (FL 175 and<br>above);<br>Freq: 118.825 (Below FL 175).  |
| △  | LAMBOURNE<br>VOR/DME<br>(LAM) | 513845.69N 0000906.13E        |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)   |                               | 295°/-                        | 23.4 nm |     | FL 245 /<br>FL 175             |                                 | 10 nm             | even<br>FL 240 /<br>FL 180        |   | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 127.955 (Below FL 215). |
| △  | HEMEL                         | 514820N 0002510W              |         |     |                                |                                 |                   |                                   |   | Extremity of L610.<br>Intersection with T420.  |
| Route Remarks:   |                               |                               |         |     |                                |                                 |                   |                                   |   |  |
| <ul style="list-style-type: none"><li>• <b>CDR Category One (CDR 1) between RAPIX and LAM</b> (ENR 1.1, paragraph 1.1.7 refers).<br/><b>CDR 1 H24.</b></li><li>• The use of this route may be interrupted when MoD (Shoeburyness) requires the activation of Danger Areas EG D138 and D138A above ALT 13000 ft through which the route passes. These Danger Areas are activated by NOTAM.<br/>Non-availability of (U)L610 will be notified by means of the daily UK CDR Closure NOTAM and the Eurocontrol CRAM.</li><li>• An area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 105, bounded by great circle lines joining:<br/>512453N 0013119E - 512133N 0020000E - 511948N 0020000E -<br/>512106N 0013052E - 512453N 0013119E,<br/>is part of L610.</li><li>• See also ENR 1.1, paragraph 1.1.3.</li></ul> |                               |                               |         |     |                                |                                 |                   |                                   |   |  |

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |  |
|                                      |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑  |  |
| L612<br>(RNP/RNAV)                   |       |                               |         |     |                                |                                 |                   |                                   |  |  |
| △                                    | XAMAB | 501216N 0001553E              |         |     |                                |                                 |                   |                                   | Southbound route only btm<br>MID and XAMAB.<br>FIR Boundary.<br>Extremity of L612. |  |
| (RNAV 5)                             |       | -147°                         | 12.2 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 210  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).   |
| △                                    | HAWKE | 502227N 0000525E              |         |     |                                |                                 |                   |                                   | Intersection with M189.  |  |
| (RNAV 5)                             |       | -147°                         | 5.6 nm  |     | FL 245 /<br>FL 105             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 210  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).   |
| △                                    | BENBO | 502705N 0000037E              |         |     |                                |                                 |                   |                                   | Intersection with Y47.   |  |
| (RNAV 5)                             |       | -147°                         | 18.1 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 210  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (FL 175 and<br>above);<br>Freq: 133.175 (Below FL 175). |
| △                                    | BOGNA | 504207N 0001506W              |         |     |                                |                                 |                   |                                   |  |  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |  |                          |   |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|--------------------------|---|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |  |                          |   |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                              |                               |         |     |                                |                                 |                   | ↓  | ↑                        |   |
| (RNAV 5)                             |                              | -147°                         | 25.5 nm |     | FL 245 /<br>FL 65              |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (FL 175 and<br>above);<br>Freq: 133.175 (Below FL 175).   |
| △                                    | MIDHURST<br>VOR/DME<br>(MID) | 510314.23N 0003730.01W        |         |     |                                |                                 |                   |  |                          |   |
| (RNAV 5)                             |                              | 339°/<br>159°                 | 25.8 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100                     | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between 5 nm before MID and<br>MID:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 175);<br>Freq: 133.175 (Below FL 175).<br><br>Between WOD and 5 nm be-<br>fore MID:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 175);<br>Freq: 129.080 (Below FL 175<br>to FL 105);<br>Freq: 134.125 (Below FL 105).   |
| △                                    | WOODLEY<br>NDB<br>(WOD)      | 512710.02N 0005243.68W        |         |     |                                |                                 |                   |  |                          | <b>Eastbound (southbound)<br/>route only btn GOW and<br/>WOD.</b><br>Intersection with M605.  |
| (RNAV 5)                             |                              | -145°                         | 12.0 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between 10 nm before WOD<br>and WOD:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 155);<br>Freq: 129.080 (Below FL 155<br>to FL 135);<br>Freq: 134.125 (Below FL 135).<br><br>Between COWLY and 10 nm<br>before WOD:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 155);<br>Freq: 119.775 (Below FL 155). |
| △                                    | COWLY                        | 513658N 0010354W              |         |     |                                |                                 |                   |  |                          | Intersection with Q41.  |
| (RNAV 5)                             |                              | -154°                         | 24.2 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between COWLY and abm<br>WCO:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215).<br><br>Between abm WCO and<br>EMKUK:<br>London Control (Swanwick)<br>Freq: 134.390 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215).   |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |   |
|--------------------------------------|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|---|
| Significant Point Name               |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |   |
| (RNP/RNAV Type)                      |                             | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |   |
| △                                    | EMKUK                       | 515837N 0012115W              |         |     |                                |                                 |                   |                                   |                          | Intersection with Y321.   |
| (RNAV 5)                             |                             | -154°                         | 6.1 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.390 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215).   |
| △                                    | IXURA                       | 520405N 0012540W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |                             | -154°                         | 19.4 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.390 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215).   |
| △                                    | HONILEY<br>VOR/DME<br>(HON) | 522124.04N 0013949.41W        |         |     |                                |                                 |                   |                                   |                          | Intersection with L15.  |
| (RNAV 5)                             |                             | -159°                         | 51.1 nm |     | FL 245 /<br>FL 85              |                                 | 8 nm              |                                   | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between HON and abm<br>Birmingham:<br>London Control (Swanwick)<br>Freq: 134.390 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215).<br><br>Between abm Birmingham<br>and abm STAFA:<br>London Control (Swanwick)<br>Freq: 134.390 (FL 195 and<br>above);<br>Scottish Control (Prestwick)<br>Freq: 134.425 (Below FL 195).<br><br>Between abm STAFA and<br>LISTO:<br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 134.425 (Below FL 195). |
| △                                    | LISTO                       | 530836N 0021157W              |         |     |                                |                                 |                   |                                   |                          | Intersection with P18.  |
| (RNAV 5)                             |                             | -159°                         | 7.1 nm  |     | FL 245 /<br>FL 85              |                                 | 8 nm              |                                   | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 134.425 (Below FL 195).  |
| △                                    | LOVEL                       | 531506N 0021628W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |                             | -159°                         | 14.3 nm |     | FL 245 /<br>FL 85              |                                 | 8 nm              |                                   | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between LOVEL and abm<br>MCT:<br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 134.425 (Below FL 195).<br><br>Between abm MCT and<br>BARTN:<br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).   |
| △                                    | BARTN                       | 532814N 0022541W              |         |     |                                |                                 |                   |                                   |                          |   |

# ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                            | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |  |
|--------------------------------------|----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|
| Significant Point Name               |                            | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |  |
| (RNP/RNAV Type)                      |                            | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                            |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |
|                                      |                            |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         |  |
| (RNAV 5)                             |                            | -/159°                        | 10.2 nm |     | FL 245 /<br>FL 65              |                                 | 8 nm              |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).       |
| △                                    | CROFT                      | 533737N 0023220W              |         |     |                                |                                 |                   |                                   |                           | Intersection with P16.   |
| (RNAV 5)                             |                            | -/159°                        | 9.6 nm  |     | FL 245 /<br>FL 65              |                                 | 8 nm              |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).       |
| △                                    | CALDA                      | 534627N 0023838W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                            | -/159°                        | 8.9 nm  |     | FL 245 /<br>FL 65              |                                 | 8 nm              |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).       |
| △                                    | OBUNI                      | 535440N 0024433W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                            | -/159°                        | 6.0 nm  |     | FL 245 /<br>FL 95              |                                 | 8 nm              |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).       |
| △                                    | VAMEB                      | 540010N 0024832W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                            | -/159°                        | 15.4 nm |     | FL 245 /<br>FL 145             |                                 | 8 nm              |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).      |
| △                                    | LAKEY                      | 541420N 0025852W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                            | -/159°                        | 31.6 nm |     | FL 245 /<br>FL 145             |                                 | 8 nm              |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels).  |
| △                                    | DEAN CROSS<br>DME<br>(DCS) | 544318.88N 0032026.30W        |         |     |                                |                                 |                   |                                   |                           | Intersection with N57 and<br>N864.   |
| (RNAV 5)                             |                            | -/154°                        | 18.0 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br>(Variable lower limit; see<br>Route Remarks)<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels). |
| △                                    | BEBNI                      | 545906N 0033514W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                            | -/154°                        | 16.3 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels).   |
| △                                    | NAVSO                      | 551322N 0034849W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                            | -/154°                        | 30.5 nm |     | FL 245 /<br>6000 ft<br>ALT     |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 70  | FL 245/FL 195 Class C,<br>FL 195/Alt 6000 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels).   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |  |                    |
|---|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|--|--------------------|
| Significant Point Name  |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |  |                    |
| (RNP/RNAV Type)   |                             | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks  |                    |
|   |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |  |                    |
| Δ   | LUSIV                       | 554002N 0041441W              |         |     |                                |                                 |                   |                                   | ↓                        | ↑  |                    |
| (RNAV 5)  |                             | -/154°                        | 3.3 nm  |     | FL 245 /<br>6000 ft<br>ALT     |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/Alt 6000 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels). |                    |
| Δ   | FENIK                       | 554255N 0041731W              |         |     |                                |                                 |                   |                                   |                          |  |                    |
| (RNAV 5)  |                             | -/154°                        | 10.7 nm |     | FL 245 /<br>6000 ft<br>ALT     |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/Alt 6000 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels). |                    |
| Δ   | GLASGOW<br>VOR/DME<br>(GOW) | 555213.81N 0042644.61W        |         |     |                                |                                 |                   |                                   |                          |  | Extremity of L612. |
| Route Remarks:  |                             |                               |         |     |                                |                                 |                   |                                   |                          |  |                    |
| <ul style="list-style-type: none"><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, lower limit FL 65, bounded by great circle lines joining:<br/>535734N 0023258W - 535109N 0023251W -<br/>535637N 0023646W - 535734N 0023258W,<br/>is part of L612.</li><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, lower limit FL 95, bounded by great circle lines joining:<br/>540234N 0023858W - 535747N 0023258W -<br/>535734N 0023258W - 535637N 0023646W -<br/>540207N 0024044W - 540234N 0023858W,<br/>is part of L612.</li><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, lower limit FL 145, bounded by great circle lines joining:<br/>540629N 0024353W - 540234N 0023858W -<br/>540207N 0024044W - 540629N 0024353W,<br/>is part of L612.</li><li>An area of Class C controlled airspace, base level FL 195, bounded by great circle lines joining:<br/>543637N 0032230W - 543356N 0031901W -<br/>541053N 0030154W - 543306N 0033033W -<br/>543637N 0032230W, is part of L612.<br/>ATS within this airspace may be delegated to BAe Warton for test flying.</li><li><b>Variable lower limit:</b> Daily from 0700 to 2000 (1hr earlier in summer) between BEBNI and DCS the lower limit is FL 125 making the Mnm FL (Eastbound) FL 130.</li><li>Between DCS and HON the airway is 8 nm wide with western edge 3 nm west of the centre-line.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                             |                               |         |     |                                |                                 |                   |                                   |                          |  |                    |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |  |  |   |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|--|---|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |  |  |   |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |       |                               |         |     |                                |                                 |                   | ↓  | ↑  |   |
| L613<br>(RNP/RNAV)                   |       |                               |         |     |                                |                                 |                   |  |  |   |
| △                                    | SOVAT | 504646N 0012800E              |         |     |                                |                                 |                   |  | Westbound (northbound)<br>route only.<br>FIR Boundary.<br>Extremity of L613. |   |
| (RNAV 5)                             |       | 319°/-                        | 22.9 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100                         |  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 135.325 (Below FL 195). |
| △                                    | SANDY | 510351N 0010403E              |         |     |                                |                                 |                   |  | Extremity of L613.   |   |
| Route Remarks:                       |       |                               |         |     |                                |                                 |                   |  |  |   |
| • See also ENR 1.1, paragraph 1.1.3. |       |                               |         |     |                                |                                 |                   |  |  |   |

| Route Designator/<br>(RNP/RNAV Type) |                     | Route Usage Notes             |         |                                |                                 |                   |  |                           |   |  |
|--------------------------------------|---------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------|--|---------------------------|---|--|
| Significant Point Name               |                     | Significant Point Coordinates |         |                                |                                 |                   |  |                           |   |  |
| (RNP/RNAV Type)                      | Track<br>MAG<br>↓/↑ | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |                           | Controlling Unit/<br>Airspace Class/<br>Remarks |  |
|                                      |                     |                               |         |                                |                                 |                   | ↓  | ↑                         |   |  |
| L620<br>(RNP/RNAV)                   |                     |                               |         |                                |                                 |                   |  |                           |   |  |
| △                                    | DAWLY               | 503427N 0032750W              |         |                                |                                 |                   |  |                           | Extremity of L620.<br>Intersection with N864.   |  |
| (RNAV 5)                             |                     | 075°/<br>255°                 | 28.4 nm |                                | FL 245 /<br>FL 195              |                   | 10 nm  | odd<br>FL 230 /<br>FL 210 | even<br>FL 240 /<br>FL 200                      | Class C.<br><br>London Control (Swanwick)<br>Freq: 126.075 (All Levels).   |
| △                                    | BRIPO               | 504227N 0024500W              |         |                                |                                 |                   |  |                           |   |  |
| (RNAV 5)                             |                     | 075°/<br>255°                 | 9.2 nm  |                                | FL 245 /<br>FL 195              |                   | 10 nm  | odd<br>FL 230 /<br>FL 210 | even<br>FL 240 /<br>FL 200                      | Class C.<br><br>London Control (Swanwick)<br>Freq: 126.075 (All Levels).   |
| △                                    | GIBSO               | 504459N 0023107W              |         |                                |                                 |                   |  |                           | Intersection with M17.                          |  |
| (RNAV 5)                             |                     | 075°/<br>255°                 | 11.1 nm |                                | FL 245 /<br>FL 195              |                   | 10 nm  | odd<br>FL 230 /<br>FL 210 | even<br>FL 240 /<br>FL 200                      | Class C.<br><br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).   |
| △                                    | BEVUP               | 504800N 0021420W              |         |                                |                                 |                   |  |                           |   |  |
| (RNAV 5)                             |                     | 075°/<br>256°                 | 10.1 nm |                                | FL 245 /<br>FL 135              |                   | 10 nm  | odd<br>FL 230 /<br>FL 150 | even<br>FL 240 /<br>FL 140                      | FL 245/FL 195 Class C,<br>FL 195/FL 135 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).   |
| △                                    | ABKIM               | 505043N 0015858W              |         |                                |                                 |                   |  |                           |   |  |
| (RNAV 5)                             |                     | 076°/<br>256°                 | 25.1 nm |                                | FL 245 /<br>FL 95               |                   | 10 nm  | odd<br>FL 230 /<br>FL 110 | even<br>FL 240 /<br>FL 100                      | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Between ABKIM and 10 nm<br>before SAM:<br>London Control (Swanwick)<br>Freq: 129.425 (All levels).<br><br>Between 10 nm before SAM<br>and SAM:<br>London Control (Swanwick) |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                                 | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                            |  |
|--------------------------------------|---------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|----------------------------|--|
| Significant Point Name               |                                 | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                            |  |
| (RNP/RNAV Type)                      |                                 | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                            | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                                 |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                            |  |
|                                      |                                 |                               |         |     |                                |                                 |                   | ↓                                 | ↑                          | Freq: 129.425 (FL 155 and above);<br>Freq: 129.080 (Below FL 155 to FL 105);<br>Freq: 134.125 (Below FL 105).  |
| △                                    | SOUTHAMPTON<br>VOR/DME<br>(SAM) | 505718.90N 0012042.20W        |         |     |                                |                                 |                   |                                   |                            | Intersection with N621, N866, Q41 and Y8.  |
| (RNAV 5)                             |                                 | 078°/<br>258°                 | 14.0 nm |     | FL 245 /<br>5500 ft<br>ALT     |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/Alt 5500 ft Class A.<br><br>Between SAM and 5 nm before SAM:<br>London Control (Swanwick)<br>Freq: 129.425 (FL 155 and above);<br>Freq: 129.080 (Below FL 155 to FL 105);<br>Freq: 134.125 (Below FL 105).<br><br>Between 5 nm before SAM and HAZEL:<br>London Control (Swanwick)<br>Freq: 129.425 (FL 175 and above);<br>Freq: 129.080 (Below FL 175 to FL 105);<br>Freq: 134.125 (Below FL 105).  |
| △                                    | HAZEL                           | 510019N 0005904W              |         |     |                                |                                 |                   |                                   |                            |  |
| (RNAV 5)                             |                                 | 078°/<br>259°                 | 13.9 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between HAZEL and 10 nm before MID:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and above);<br>Freq: 129.425 (Below FL 215 to FL 175);<br>Freq: 129.080 (Below FL 175 to FL 105);<br>Freq: 134.125 (Below FL 105).<br><br>Between 10 nm before MID and MID:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and above);<br>Freq: 129.425 (Below FL 215 to FL 175);<br>Freq: 133.175 (Below FL 175). |
| △                                    | MIDHURST<br>VOR/DME<br>(MID)    | 510314.23N 0003730.01W        |         |     |                                |                                 |                   |                                   |                            | Extremity of partition of L620.  |
|                                      |                                 |                               |         |     | - / -                          |                                 |                   |                                   |                            | <b>ROUTE BREAK - THIS AIRWAY IS NOT CONTINUOUS.</b>  |
| △                                    | CLACTON<br>VOR/DME<br>(CLN)     | 515054.50N 0010851.32E        |         |     |                                |                                 |                   |                                   |                            | <b>Eastbound route only.</b><br>Extremity of partition of L620.  |
| (RNAV 5)                             |                                 | 072°/-                        | 10.9 nm |     | FL 245 /<br>FL 65              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 70          |                            | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and above);<br>Freq: 121.225 (Below FL 215).   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |  |
|--|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|--|
| Significant Point Name   |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |  |
| (RNP/RNAV Type)  |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|  |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |  |
|  |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑  |  |
| △  | ARTOV | 515419N 0012533E              |         |     |                                |                                 |                   |                                   | Base level change is aligned with Clacton CTA. Intersection with M604 and P44. |  |
| (RNAV 5)   |       | 072°/-                        | 41.3 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          |  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and above);<br>Freq: 121.225 (Below FL 215). |
| △  | REDFA | 520653N 0022917E              |         |     |                                |                                 |                   |                                   | FIR Boundary.<br>For continuation see AIP Netherlands.                         |  |
| Route Remarks:   |       |                               |         |     |                                |                                 |                   |                                   |  |  |
| <ul style="list-style-type: none"><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 85, bounded by: 521307N 0023420E - 515220N 0021738E - 515222N 0012635E - 515904N 0012302E - 521307N 0023420E, is part of L620.</li><li>Outside the Solent CTA notified hours of operation that portion of L620 that overlies the Solent CTA has a base expressed as FL 55.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |       |                               |         |     |                                |                                 |                   |                                   |  |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |  |
|                                      |       | ↓                             |         |     |                                |                                 |                   |                                   | ↑  |  |
| L975<br>(RNAV)                       |       |                               |         |     |                                |                                 |                   |                                   |  |  |
| △                                    | GOLES | 533629N 0010500W              |         |     |                                |                                 |                   |                                   | Extremity of L975.<br>Intersection with Y70.<br>The eastern limits of L975 at<br>GOLES are not at right angles<br>to the CL and extends between<br>534149N 0010209W<br>and 533109N 0010751W. |  |
| (RNAV 5)                             |       | 262°/<br>082°                 | 5.7 nm  |     | FL 245 /<br>FL 65              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).   |
| △                                    | ARPUB | 533534N 0011428W              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |       | 262°/<br>082°                 | 2.2 nm  |     | FL 245 /<br>FL 55              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 55 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).   |
| △                                    | UPTON | 533513N 0011803W              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |       | 262°/<br>082°                 | 9.4 nm  |     | FL 245 /<br>FL 55              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 55 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).   |
| △                                    | UNIGO | 533340N 0013339W              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |       | 262°/<br>082°                 | 12.1 nm |     | FL 245 /<br>3500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/Alt 3500 ft Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195). |
| △                                    | DESIG | 533138N 0015334W              |         |     |                                |                                 |                   |                                   | Intersection with L70 and<br>L603.   |  |
| (RNAV 5)                             |       | 262°/<br>082°                 | 2.5 nm  |     | FL 245 /<br>FL 55              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 55 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).       |
| △                                    | DENBY | 533113N 0015740W              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |       | 262°/<br>081°                 | 7.7 nm  |     | FL 245 /<br>FL 55              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 55 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).       |
| △                                    | SONEX | 532953N 0021021W              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |       | 261°/<br>081°                 | 9.3 nm  |     | FL 245 /<br>FL 55              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 55 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).       |
| △                                    | BARTN | 532814N 0022541W              |         |     |                                |                                 |                   |                                   | Intersection with P17.   |  |
| (RNAV 5)                             |       | 261°/<br>081°                 | 8.2 nm  |     | FL 245 /<br>FL 55              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 55 Class A.<br><br>Scottish Control (Prestwick)  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |   |  |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|--|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |   |  |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|                                      |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |  |
|                                      |                              |                               |         |     |                                |                                 |                   |                                   |                           | Freq: 118.780 (FL 195 and above);<br>Freq: 128.050 (Below FL 195).  |  |
| △                                    | ASMIM                        | 532646N 0023911W              |         |     |                                |                                 |                   |                                   |                           |   |  |
| (RNAV 5)                             |                              | 261°/<br>081°                 | 17.6 nm |     | FL 245 /<br>FL 55              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 55 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and above);<br>Freq: 128.050 (Below FL 195).   |  |
| △                                    | WALLASEY<br>VOR/DME<br>(WAL) | 532330.97N 0030804.06W        |         |     |                                |                                 |                   |                                   |                           | <b>Eastbound route only btn LIFFY and WAL.</b><br>Intersection with L10, L151, N862 and Y53.  |  |
| (RNAV 5)                             |                              | -/096°                        | 8.0 nm  |     | FL 245 /<br>3500 ft<br>ALT     |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 50  | FL 245/FL 195 Class C,<br>FL 195/Alt 3500 ft Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and above);<br>Freq: 128.050 (Below FL 195).                                   |  |
| △                                    | EMLIP                        | 532408N 0032124W              |         |     |                                |                                 |                   |                                   |                           | The base level change point is not at the usual right angles to the CL of L975, and is defined as straight lines joining points:<br>531909N 0032201W -<br>532621N 0032107W -<br>533213N 0031406W. |  |
| (RNAV 5)                             |                              | -/096°                        | 9.1 nm  |     | FL 245 /<br>FL 45              |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 50  | FL 245/FL 195 Class C,<br>FL 195/FL 45 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and above);<br>Freq: 128.050 (Below FL 195).   |  |
| △                                    | MALUD                        | 532448N 0033630W              |         |     |                                |                                 |                   |                                   |                           | Intersection with L15.  |  |
| (RNAV 5)                             |                              | -/096°                        | 3.9 nm  |     | FL 245 /<br>FL 45              |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 50  | FL 245/FL 195 Class C,<br>FL 195/FL 45 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).  |  |
| △                                    | OSLOR                        | 532505N 0034303W              |         |     |                                |                                 |                   |                                   |                           | The base level change point is not at the usual right angles to the CL of L975, and is defined as straight lines joining points:<br>533944N 0033153W -<br>533054N 0034222W -<br>532006N 0034339W. |  |
| (RNAV 5)                             |                              | -/096°                        | 9.0 nm  |     | FL 245 /<br>FL 75              |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).  |  |
| △                                    | ROLEX                        | 532542N 0035804W              |         |     |                                |                                 |                   |                                   |                           |   |  |
| (RNAV 5)                             |                              | -/096°                        | 13.1 nm |     | FL 245 /<br>FL 115             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 130 | FL 245/FL 195 Class C,<br>FL 195/FL 115 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).   |  |
| △                                    | LYNAS                        | 532633N 0042000W              |         |     |                                |                                 |                   |                                   |                           |   |  |
| (RNAV 5)                             |                              | -/096°                        | 10.9 nm |     | FL 245 /<br>FL 145             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).   |  |
| △                                    | NATKO                        | 532712N 0043807W              |         |     |                                |                                 |                   |                                   |                           |   |  |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)                  |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |  |
|---|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|
| Significant Point Name                                |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |  |
| (RNP/RNAV Type)                                       |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|   |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |
|   |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         |  |
| (RNAV 5)  |       | -/096°                        | 8 nm    |     | FL 245 /<br>FL 145             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).  |
| △   | GINIS | 532739N 0045129W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)  |       | -/096°                        | 11.0 nm |     | FL 245 /<br>FL 115             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 130 | Class C.<br><br>ATS delegated to Dublin ATC<br>Freq: 129.175.  |
| △   | IDEXA | 532814N 0050951W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)  |       | -/095°                        | 12.1 nm |     | FL 245 /<br>FL 35              |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 50  | Class C.<br><br>AWY base is FL 35 or 3014 ft<br>amsl, whichever is higher.<br>Consequently, when low<br>atmospheric pressure pre-<br>vails, FL 40 may not be avail-<br>able as a cruising FL.<br><br>ATS delegated to Dublin ATC<br>Freq: 129.175.<br>Dublin ATIS<br>Freq:124.525. |
| △   | LIFFY | 532848N 0053000W              |         |     |                                |                                 |                   |                                   |                           |  |
| FIR Boundary.<br>For continuation see AIP<br>Ireland. |       |                               |         |     |                                |                                 |                   |                                   |                           |  |

Route Remarks:

Between WAL and LIFFY where the width is 12 nm, the AWY extends 5 nm to the south and 7 nm to the north of the CL.

An area of Class A controlled airspace bounded by straight lines joining:

L975 Crossing Area

533835N 0013503W - 534007N 0011937W -  
534626.98N 0011937.00W - 534308.41N 0011615.09W -  
534127.82N 0010357.97W - 533059N 0010932W -  
532845N 0013215W - 533835N 0013503W,  
from AWY base level to an upper limit of FL 120, occasionally to FL 190 on request;

is notified for the purposes SERA.6001(a) Classification of Airspaces in accordance with the conditions established in the Letter of Agreement (LOA) btn the Derbyshire and Lancashire (Camphill) Gliding Club, British Gliding Association (BGA), Leeds Bradford International Airport, and Scottish Control (Prestwick).

An area of Class C controlled airspace, base level FL 35, bounded by great circle lines joining:  
531500N 0053000W - 532348N 0053000W -  
532315N 0051017W - 531500N 0053000W,  
is part of L975.

See also ENR 1.1, paragraph 1.1.3.

# ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|                                      |                              |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |  |
| L980<br>(RNP/RNAV)                   |                              |                               |         |     |                                |                                 |                   |                                   |   |  |
| △                                    | ORTAC                        | 495957N 0020018W              |         |     |                                |                                 |                   |                                   | Eastbound route only btn<br>ORTAC and MID.<br>FIR Boundary.<br>Extremity of AWY is the N and<br>E Boundaries of the Channel<br>Islands CTR. |  |
| (RNAV 5)                             |                              | 040°/-                        | 10.9 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.825 (All Levels).   |
| △                                    | VEXEN                        | 500822N 0014934W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                              | 040°/-                        | 9.5 nm  |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.825 (All Levels).   |
| △                                    | DOMUT                        | 501543N 0014009W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                              | 040°/-                        | 20.2 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.825 (All Levels).   |
| △                                    | KATHY                        | 503114N 0012000W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                              | 041°/-                        | 9.5 nm  |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.440 (FL 185 and<br>above);<br>Freq: 127.825 (Below FL 185). |
| △                                    | ABSAV                        | 503829N 0011029W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                              | 041°/-                        | 14.0 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.440 (FL 185 and<br>above);<br>Freq: 127.825 (Below FL 185). |
| △                                    | AVANT                        | 504912N 0005618W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                              | 041°/-                        | 18.4 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.825 (All Levels).   |
| △                                    | MIDHURST<br>VOR/DME<br>(MID) | 510314.23N 0003730.01W        |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                              | 025°/<br>205°                 | 16.5 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 100  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 118.825 (Below FL 215).  |
| △                                    | OCKHAM<br>VOR/DME<br>(OCK)   | 511818.17N 0002649.86W        |         |     |                                |                                 |                   |                                   | Westbound route only btn<br>Amsterdam/London FIR<br>Bdry and OCK.   |  |
| (RNAV 5)                             |                              | -/228°                        | 30.4 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Between OCK and abm BPK:<br>London Control (Swanwick)   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                               | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                            |  |
|--------------------------------------|-------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|----------------------------|--|
| Significant Point Name               |                               | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                            |  |
| (RNP/RNAV Type)                      |                               | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                            | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                               |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                            |  |
|                                      |                               |                               |         |     |                                |                                 |                   |                                   |                            | Freq: 132.165 (FL 215 and above);<br>Freq: 118.825 (Below FL 215).<br><br>Between abm BPK and LAM:<br>London Control (Swanwick)<br>Freq: 128.160 (All Levels). |
| △                                    | LAMBOURNE<br>VOR/DME<br>(LAM) | 513845.69N 0000906.13E        |         |     |                                |                                 |                   |                                   |                            |  |
| (RNAV 5)                             |                               | -/264°                        | 12.6 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.160 (All Levels).  |
| △                                    | WESUL                         | 514015N 0002909E              |         |     |                                |                                 |                   |                                   |                            |  |
| (RNAV 5)                             |                               | -/264°                        | 7.4 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.160 (All Levels).  |
| △                                    | BRASO                         | 514107N 0004100E              |         |     |                                |                                 |                   |                                   |                            | Due to the presence of DA EG D138 pilots should ensure that they do not fly south of track from abm CLN VOR until abm SND NDB.                                 |
| (RNAV 5)                             |                               | -/264°                        | 4.0 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.160 (All Levels).  |
| △                                    | MANGO                         | 514134N 0004726E              |         |     |                                |                                 |                   |                                   |                            |  |
| (RNAV 5)                             |                               | -/264°                        | 2.2 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.160 (All Levels).  |
| △                                    | LIVSU                         | 514149N 0005058E              |         |     |                                |                                 |                   |                                   |                            |  |
| (RNAV 5)                             |                               | -/264°                        | 3.8 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.160 (All Levels).  |
| △                                    | SABER                         | 514214N 0005658E              |         |     |                                |                                 |                   |                                   |                            |  |
| (RNAV 5)                             |                               | -/264°                        | 5 nm    |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.160 (All Levels).  |
| △                                    | TRIPO                         | 514247N 0010458E              |         |     |                                |                                 |                   |                                   |                            |  |
| (RNAV 5)                             |                               | -/264°                        | 12.9 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.160 (All Levels).  |
| △                                    | JACKO                         | 514409N 0012536E              |         |     |                                |                                 |                   |                                   |                            |  |
| (RNAV 5)                             |                               | -/264°                        | 6.9 nm  |     | FL 245 /<br>FL 65              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 80  | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.160 (All Levels).  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |   |  |
|--|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|--|
| Significant Point Name   |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |   |  |
| (RNP/RNAV Type)  |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|  |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |  |
| △  | LOGAN | 514451N 0013643E              |         |     |                                |                                 |                   |                                   | ↓                         | ↑   |  |
| (RNAV 5)   |       | -/264°                        | 22.9 nm |     | FL 245 /<br>FL 65              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 80 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215). |  |
| △  | XAMAN | 514705N 0021327E              |         |     |                                |                                 |                   |                                   |                           | FIR Boundary.<br>For continuation see AIP<br>Netherlands.<br>Intersection with P49.   |  |
| Route Remarks:   |       |                               |         |     |                                |                                 |                   |                                   |                           |   |  |
| <ul style="list-style-type: none"><li>Areas of controlled airspace, Class C above FL 195 and Class A below FL 195:<br/>base level FL 195, bounded by great circle lines joining:<br/>500440N 0014420W - 500000N 0014700W - 500000N 0014301W -<br/>500620N 0014207W - 500440N 0014420W;<br/><b>and</b><br/>base level FL 105, bounded by great circle lines joining:<br/>500440N 0014420W - 500000N 0015018W -<br/>500000N 0014700W - 500440N 0014420W,<br/>are parts of L980.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |       |                               |         |     |                                |                                 |                   |                                   |                           |   |  |

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |   |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|---|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |   |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |   |
|                                      |       | ↓                             |         |     |                                |                                 |                   |                                   | ↑  |   |
| M8<br>(RNP/RNAV)                     |       |                               |         |     |                                |                                 |                   |                                   |  |   |
| △                                    | SUBIP | 502644N 0005306E              |         |     |                                |                                 |                   |                                   | Westbound route only.<br>FIR Boundary.<br>Extremity of M8. |   |
| (RNAV 5)                             |       | 287°/-                        | 9.1 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.425 (FL 145 and<br>above);<br>Freq: 135.325 (Below FL 145). |
| △                                    | ELDAX | 502918N 0003930E              |         |     |                                |                                 |                   |                                   | Intersection with N20.                                     |   |
| (RNAV 5)                             |       | 296°/-                        | 13.1 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).   |
| △                                    | WAFFU | 503457N 0002059E              |         |     |                                |                                 |                   |                                   | Extremity of M8.<br>Intersection with Y8.                  |   |
| Route Remarks:                       |       |                               |         |     |                                |                                 |                   |                                   |  |   |
| • See also ENR 1.1, paragraph 1.1.3. |       |                               |         |     |                                |                                 |                   |                                   |  |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                              | Route Usage Notes             |         |                                |                                 |                   |                                   |   |   |
|--|------------------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name   |                              | Significant Point Coordinates |         |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)  | Track<br>MAG<br>↓↑           | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|  |                              |                               |         |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|  |                              |                               |         |                                |                                 |                   | ↓                                 | ↑ |   |
| M17<br>(RNP/RNAV)  |                              |                               |         |                                |                                 |                   |                                   |   |   |
| △  | KUMIL                        | 503431N 0013639W              |         |                                |                                 |                   |                                   |   | Eastbound route only.<br>Extremity of M17.  |
| (RNAV 5)   |                              | -108°                         | 20.6 nm |                                | FL 245 /<br>FL 165              |                   | 10 nm                             |   | even<br>FL 240 /<br>FL 200<br><br>FL 245/FL 195 Class C,<br>FL 195/FL 165 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 129.425. |
| △  | BILNI                        | 504031N 0020733W              |         |                                |                                 |                   |                                   |   | En-route RNAV hold.<br>Intersection with N866.  |
| (RNAV 5)   |                              | -108°                         | 15.6 nm |                                | FL 245 /<br>FL 195              |                   | 10 nm                             |   | even<br>FL 240 /<br>FL 200<br><br>Class C.<br>London Control (Swanwick)<br>(All Levels)<br>Freq: 129.425.   |
| △  | GIBSO                        | 504459N 0023107W              |         |                                |                                 |                   |                                   |   | Extremity of partition of M17.<br>Intersection with L620.   |
|  |                              |                               |         |                                | - / -                           |                   |                                   |   | ROUTE BREAK - THIS AIR-<br>WAY IS NOT CONTINUOUS.   |
| △  | STRUMBLE<br>VOR/DME<br>(STU) | 515940.88N 0050224.69W        |         |                                |                                 |                   |                                   |   | Westbound route only.<br>Extremity of partition of M17.   |
| (RNAV 5)   |                              | 336°/-                        | 10.0 nm |                                | FL 245 /<br>FL 145              |                   | 10 nm                             |   | even<br>FL 240 /<br>FL 160<br><br>FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.375 (All Levels).    |
| △  | PEMOB                        | 520838N 0050941W              |         |                                |                                 |                   |                                   |   | Intersection with N14.  |
| (RNAV 5)   |                              | 336°/-                        | 27.6 nm |                                | FL 245 /<br>FL 145              |                   | 10 nm                             |   | even<br>FL 240 /<br>FL 160<br><br>FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.375 (All Levels).    |
| △  | VATRY                        | 523316N 0053000W              |         |                                |                                 |                   |                                   |   | FIR Boundary.<br>For continuation see AIP<br>Ireland.   |
| Route Remarks:   |                              |                               |         |                                |                                 |                   |                                   |   |   |
| <ul style="list-style-type: none"><li>CDR Category One and Three (CDR 1 and 3) between STU and VATRY (ENR 1.1, paragraph 1.1.7 refers). Availability subject to activity within EG D201A/F/G.<br/>CDR 1 and 3 H24.</li><li>Pilots who depart M17 within the confines of EG D201A are encouraged to seek a DACS from Aberporth or Swanwick Mil, as detailed at ENR 5.1.</li><li>An area bounded by the northern edges of L9 and M17 and a straight line joining 523531N 0052241W and 520052N 0042856W, FL 195 - FL 245, is also part of M17.<br/>Class C.<br/>Availability of this area is subject to activity within EG D201 and is only to be used when directed by London Control (Swanwick).</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                              |                               |         |                                |                                 |                   |                                   |   |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |  |  |   |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|--|---|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |  |  |   |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |       |                               |         |     |                                |                                 |                   | ↓  | ↑  |   |
| M20<br>(RNP/RNAV)                    |       |                               |         |     |                                |                                 |                   |  |  |   |
| △                                    | RINIS | 515430N 0021921E              |         |     |                                |                                 |                   |  | <b>Westbound route only.</b><br>ATC may allocate Odd levels<br>on a tactical basis.<br>FIR Boundary.<br>For continuation see<br>Netherlands AIP. |   |
| (RNAV 5)                             |       | 268°/-                        | 16.2 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120                         |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 220 and<br>above);<br>Freq: 135.425 (FL 210 and<br>below). |
| △                                    | IDESI | 515352N 0015308E              |         |     |                                |                                 |                   |  | Intersection with Y6.  |   |
| (RNAV 5)                             |       | 298°/-                        | 28.3 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120                         |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 220 and<br>above);<br>Freq: 121.225 (FL 210 and<br>below). |
| △                                    | LAPRA | 520707N 0011236E              |         |     |                                |                                 |                   |  | Extremity of M20.  |   |
| Route Remarks:                       |       |                               |         |     |                                |                                 |                   |  |  |   |
| • See also ENR 1.1, paragraph 1.1.3. |       |                               |         |     |                                |                                 |                   |  |  |   |

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |  |
|                                      |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑  |  |
| M84<br>(RNP/RNAV)                    |       |                               |         |     |                                |                                 |                   |                                   |  |  |
| △                                    | KONAN | 510751N 0020000E              |         |     |                                |                                 |                   |                                   | Southbound route only.<br>FIR Boundary.<br>Extremity of M84. |  |
| (RNAV 5)                             |       | -/128°                        | 29.8 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 110                                    | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 135 and<br>above);<br>Freq: 135.325 (Below FL 135). |
| △                                    | ABTUM | 512604N 0012229E              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |       | -/178°                        | 12.7 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 110                                    | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.605 (All Levels).   |
| △                                    | NONVA | 513846N 0012144E              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |       | -/147°                        | 10.7 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 110                                    | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.605 (All Levels).   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                             | Route Usage Notes             |        |     |                                |                                 |                   |                                   |                           |  |  |
|--------------------------------------|-----------------------------|-------------------------------|--------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|--|
| Significant Point Name               |                             | Significant Point Coordinates |        |     |                                |                                 |                   |                                   |                           |  |  |
| (RNP/RNAV Type)                      |                             | Track<br>MAG<br>↓↑            | Dist   | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |  |
|                                      |                             |                               |        |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |  |
| △                                    | EVMEK                       | 514741N 0011218E              |        |     |                                |                                 |                   |                                   | ↓                         | ↑  |  |
| (RNAV 5)                             |                             | -147°                         | 3.9 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.605 (All Levels). |  |
| △                                    | CLACTON<br>VOR/DME<br>(CLN) | 515054.50N 0010851.32E        |        |     |                                |                                 |                   |                                   |                           | Extremity of M84.  |  |
| Route Remarks:                       |                             |                               |        |     |                                |                                 |                   |                                   |                           |  |  |
| • See also ENR 1.1, paragraph 1.1.3. |                             |                               |        |     |                                |                                 |                   |                                   |                           |  |  |

| Route Designator/<br>(RNP/RNAV Type)  |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |
|---|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name  |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)   |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|   |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|   |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |   |
| M85<br>(RNP/RNAV)   |       |                               |         |     |                                |                                 |                   |                                   |   |   |
| △   | ITVIP | 511714N 0010312E              |         |     |                                |                                 |                   |                                   | Southbound route only.<br>Extremity of M85.<br>Intersection with L10 and Q70. |   |
| (RNAV 5)  |       | -163°                         | 33.6 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.605 (All Levels). |
| △   | DAGGA | 514919N 0004739E              |         |     |                                |                                 |                   |                                   | Extremity of M85.   |   |
| Route Remarks:  |       |                               |         |     |                                |                                 |                   |                                   |   |   |
| <ul style="list-style-type: none"><li>CDR Category One (CDR 1) between ITVIP and DAGGA (ENR 1.1 paragraph 1.1.7 refers).<br/>CDR 1 H24.</li><li>The use of this route may be interrupted when MOD (Shoeburyness) requires the activation of Danger Areas EG D138 and EG D138A above ALT 13000 ft through which the route passes. These Danger Areas are activated by NOTAM.<br/>Non-availability of M85 will be notified by means of the daily UK CDR Closure NOTAM and the Eurocontrol CRAM.</li></ul> |       |                               |         |     |                                |                                 |                   |                                   |   |   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |  |  |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|--|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |  |  |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |  | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |         |     |                                |                                 |                   | ↓  | ↑  |  |
| M87<br>(RNP/RNAV)                    |       |                               |         |     |                                |                                 |                   |  |  |  |
| Δ                                    | UMTUM | 511227N 0010103E              |         |     |                                |                                 |                   |  | Southbound route only.<br>Extremity of M87.<br>Intersection with L9. |  |
| (RNAV 5)                             |       | -/129°                        | 19.0 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq 134.900 (FL 195 and<br>above);<br>Freq: 120.525 (Below FL 195). |
| Δ                                    | EKNIV | 512426N 0003731E              |         |     |                                |                                 |                   |  | Extremity of M87.  |  |

| Route Designator/<br>(RNP/RNAV Type) |                          | Route Usage Notes             |         |     |                                |                                 |                   |  |   |  |
|--------------------------------------|--------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|---|--|
| Significant Point Name               |                          | Significant Point Coordinates |         |     |                                |                                 |                   |  |   |  |
| (RNP/RNAV Type)                      |                          | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                          |                               |         |     |                                |                                 |                   | ↓  | ↑   |  |
| M91<br>(RNP/RNAV)                    |                          |                               |         |     |                                |                                 |                   |  |   |  |
| △                                    | LYDD<br>VOR/DME<br>(LYD) | 505958.87N 0005243.18E        |         |     |                                |                                 |                   |  | Southbound route only.<br>Extremity of M91. |  |
| (RNAV 5)                             |                          | -/157°                        | 16.2 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 90                    | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq 134.900 (FL 195 and<br>above);<br>Freq: 120.525 (Below FL 195). |
| △                                    | EMKAD                    | 511450N 0004234E              |         |     |                                |                                 |                   |  |   |  |
| (RNAV 5)                             |                          | -/162°                        | 10.1 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 90                    | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq 134.900 (FL 195 and<br>above);<br>Freq: 120.525 (Below FL 195). |
| △                                    | EKNIV                    | 512426N 0003731E              |         |     |                                |                                 |                   |  | Extremity of M91.                           |  |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |  |   |  |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|---|--|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |  |   |  |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                              |                               |         |     |                                |                                 |                   | ↓  | ↑   |  |
| M140<br>(RNP/RNAV)                   |                              |                               |         |     |                                |                                 |                   |  |   |  |
| △                                    | MIDHURST<br>VOR/DME<br>(MID) | 510314.23N 0003730.01W        |         |     |                                |                                 |                   |  | Extremity of M140.<br>Intersection with L620. |  |
| (RNAV 5)                             |                              | 095°/<br>275°                 | 28.2 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90                       | even<br>FL 240 /<br>FL 100                    | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between MID and 10 nm east<br>of MID:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 175);<br>Freq: 133.175 (Below FL 175).<br><br>Between 10 nm east of MID<br>and 5 nm west of MAY:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.050 (Below FL 215<br>to FL 175);<br>Freq: 133.175 (Below FL 175).<br><br>Between 5 nm west of MAY<br>and MAY:<br>London Control (Swanwick)<br>Freq: 128.425 (FL 175 and<br>above);<br>Freq: 133.175 (Below FL 175). |
| △                                    | MAYFIELD<br>VOR/DME<br>(MAY) | 510101.86N 0000658.04E        |         |     |                                |                                 |                   |  |   |  |
| (RNAV 5)                             |                              | 079°/<br>260°                 | 32.2 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90                       | even<br>FL 240 /<br>FL 100                    | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Between MAY and 15 nm<br>west of WIZAD:<br>London Control (Swanwick)<br>Freq: 128.425 (FL 195 and<br>above);<br>Freq: 120.175 (Below FL 195).<br><br>Between 15 nm west of<br>WIZAD and WIZAD:<br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 120.175 (Below FL 195).  |
| △                                    | WIZAD                        | 510700N 0005711E              |         |     |                                |                                 |                   |  |   |  |
| (RNAV 5)                             |                              | 080°/<br>260°                 | 15.6 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90                       | even<br>FL 240 /<br>FL 100                    | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Between WIZAD and 8 nm<br>west of DVR:<br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 120.175 (Below FL 195).<br><br>Between 8 nm west of DVR<br>and DVR:<br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 120.525 (Below FL 195<br>to FL 135);<br>Freq: 135.325 (Below FL 135).  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                           | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |   |
|--------------------------------------|---------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|---|
| Significant Point Name               |                           | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |   |
| (RNP/RNAV Type)                      |                           | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |   |
|                                      |                           |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |   |
| △                                    | DOVER<br>VOR/DME<br>(DVR) | 510945.44N 0012132.72E        |         |     |                                |                                 |                   |                                   | ↓ | ↑  | Eastbound route only btn<br>DVR and VABIK.<br>Intersection with L9. |
| (RNAV 5)                             |                           | 078°/-                        | 24.7 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Between DVR and 10 nm east<br>of DVR:<br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 120.525 (Below FL 195<br>to FL 135);<br>Freq: 135.325 (Below FL 135).<br><br>Between 10 nm east of DVR<br>and VABIK:<br>London Control (Swanwick)<br>Freq: 134.900 (FL 135 and<br>above);<br>Freq: 135.325 (Below FL 135). |   |
| △                                    | VABIK                     | 511447N 0020000E              |         |     |                                |                                 |                   |                                   |   | FIR Boundary.<br>Extremity of M140.<br>Intersection with Q70 (see AIP<br>Belgium).   |   |
| Route Remarks:                       |                           |                               |         |     |                                |                                 |                   |                                   |   |  |   |
| • See also ENR 1.1, paragraph 1.1.3. |                           |                               |         |     |                                |                                 |                   |                                   |   |  |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |  |
|--------------------------------------|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|--|
| Significant Point Name               |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |  |
| (RNP/RNAV Type)                      |                             | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|                                      |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |  |
|                                      |                             |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |   |  |
| M183<br>(RNP/RNAV)                   |                             |                               |         |     |                                |                                 |                   |                                   |   |   |  |
| △                                    | COMPTON<br>VOR/DME<br>(CPT) | 512929.66N 0011310.89W        |         |     |                                |                                 |                   |                                   | Westbound route only btn<br>BKY and CPT.<br>Intersection with L9, N859 and<br>Y321. |   |  |
| (RNAV 5)                             |                             | -/201°                        | 22.8 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between SILVA and 5 nm<br>north of CPT:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 121.025 (Below FL 215<br>to FL 155);<br>Freq: 131.130 (Below FL 155<br>to FL 125);<br>Freq: 119.175 (Below FL 125).<br><br>Between 5 nm north of CPT<br>and CPT:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 155);<br>Freq: 134.125 (Below FL 155).   |  |
| △                                    | SILVA                       | 515051N 0010019W              |         |     |                                |                                 |                   |                                   | Intersection with (U)M605.  |   |  |
| (RNAV 5)                             |                             | -/259°                        | 35.6 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between NUGBO and 5 nm<br>west of NUGBO:<br>London Control (Swanwick)<br>Freq: 130.925 (FL 155 and<br>above);<br>Freq: 129.280 (Below FL 155).<br><br>Between 5 nm west of<br>NUGBO and 10 nm east of<br>SILVA:<br>London Control (Swanwick)<br>Freq: 127.105 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215<br>to FL 155);<br>Freq: 131.130 (Below FL 155<br>to FL 125);<br>Freq: 119.175 (Below FL 125).<br><br>Between 10 nm east of SILVA<br>and SILVA:<br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 121.025 (Below FL 215<br>to FL 155);<br>Freq: 131.130 (Below FL 155<br>to FL 125);<br>Freq: 119.175 (Below FL 125). |  |
| △                                    | NUGBO                       | 515822N 0000412W              |         |     |                                |                                 |                   |                                   |   |   |  |
| (RNAV 5)                             |                             | -/259°                        | 5 nm    |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 130.925 (FL 155 and<br>above);<br>Freq: 129.280 (Below FL 155).   |  |
| △                                    | BARKWAY<br>VOR/DME<br>(BKY) | 515923.17N 0000342.87E        |         |     |                                |                                 |                   |                                   | Eastbound route only btn<br>BKY and REDFA.  |   |  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|                                      |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑ |  |
| (RNAV 5)                             |       | 085°/-                        | 4.3 nm  |     | FL 245 /<br>FL 135             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 150         |   | FL 245/FL 195 Class C,<br>FL 195/FL 135 Class A.<br><br>London Control (Swanwick)<br>Freq: 124.930 (FL 155 and<br>above);<br>Freq: 129.280 (Below FL 155).   |
| △                                    | ADMIS | 515949N 0001036E              |         |     |                                |                                 |                   |                                   |   | Intersection with M189.  |
| (RNAV 5)                             |       | 085°/-                        | 35.4 nm |     | FL 245 /<br>FL 135             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 150         |   | FL 245/FL 195 Class C,<br>FL 195/FL 135 Class A.<br><br>Between ADMIS and 20 nm<br>west of TEDSA:<br>London Control (Swanwick)<br>Freq: 124.930 (FL 155 and<br>above);<br>Freq: 129.280 (Below FL 155).<br><br>Between 20 nm west of<br>TEDSA and 5 nm west of<br>TEDSA:<br>London Control (Swanwick)<br>Freq: 124.930 (FL 155 and<br>above);<br>Freq: 119.775 (Below FL 155).<br><br>Between 5 nm west of TEDSA<br>and TEDSA:<br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 124.930 (Below FL 215<br>to FL 155);<br>Freq: 121.225 (Below FL 155). |
| △                                    | TEDSA | 520303N 0010739E              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |       | 085°/-                        | 25.4 nm |     | FL 245 /<br>FL 135             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 150         |   | FL 245/FL 195 Class C,<br>FL 195/FL 135 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 121.225 (Below FL 215).   |
| △                                    | SONDO | 520506N 0014842E              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |       | 086°/-                        | 17.0 nm |     | FL 245 /<br>FL 135             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 150         |   | FL 245/FL 195 Class C,<br>FL 195/FL 135 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 121.225 (Below FL 215).   |
| △                                    | SONOG | 520620N 0021610E              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |       | 086°/-                        | 8.1 nm  |     | FL 245 /<br>FL 135             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 150         |   | FL 245/FL 195 Class C,<br>FL 195/FL 135 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 121.225 (Below FL 215).   |
| △                                    | REDFA | 520653N 0022917E              |         |     |                                |                                 |                   |                                   |   | FIR Boundary.<br>Extremity of M183.<br>Intersection with L620 (see<br>AIP Netherlands).  |
| Route Remarks:                       |       |                               |         |     |                                |                                 |                   |                                   |   |  |
| • See also ENR 1.1, paragraph 1.1.3. |       |                               |         |     |                                |                                 |                   |                                   |   |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                                    | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |  |
|--------------------------------------|------------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|--|
| Significant Point Name               |                                    | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |  |
| (RNP/RNAV Type)                      |                                    | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                                    |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |  |
|                                      |                                    |                               |         |     |                                |                                 |                   | ↓                                 | ↑  |  |
| M185<br>(RNP/RNAV)                   |                                    |                               |         |     |                                |                                 |                   |                                   |  |  |
| △                                    | ORTAC                              | 495957N 0020018W              |         |     |                                |                                 |                   |                                   | Eastbound route only btn<br>ORTAC and MID.<br>FIR Boundary.<br>Extremity of M185.<br>Not available for flight plan-<br>ning ORTAC - ELDER.<br>Route may be used on a tacti-<br>cal basis under instruction<br>from ATC only. |  |
| (RNAV 5)                             |                                    | 034°/-                        | 47.4 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.825 (FL 195 and<br>above);<br>Freq: 129.425 (Below FL 195).                     |
| △                                    | ELDER                              | 503948N 0012014W              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |                                    | 034°/-                        | 7.1 nm  |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 127.825.  |
| △                                    | BEGTO                              | 504545N 0011408W              |         |     |                                |                                 |                   |                                   | Intersection with N514.  |  |
| (RNAV 5)                             |                                    | 034°/-                        | 17.4 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 127.825.  |
| △                                    | HAZEL                              | 510019N 0005904W              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |                                    | 078°/-                        | 13.9 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 127.825.  |
| △                                    | MIDHURST<br>VOR/DME<br>(MID)       | 510314.23N 0003730.01W        |         |     |                                |                                 |                   |                                   | Mnm cruising level to be flight<br>planned within London TMA.  |  |
| (RNAV 5)                             |                                    | 025°/<br>205°                 | 16.5 nm |     | FL 245 /<br>3500 ft<br>ALT     |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 100   | FL 245/FL 195 Class C,<br>FL 195/Alt 3500 ft Class A.<br><br>Dual designation with L980<br>btn MID and OCK.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 132.165. |
| △                                    | OCKHAM<br>VOR/DME<br>(OCK)         | 511818.17N 0002649.86W        |         |     |                                |                                 |                   |                                   | Eastbound route only btn<br>OCK and BPK.   |  |
| (RNAV 5)                             |                                    | 026°/-                        | 29.6 nm |     | FL 245 /<br>3500 ft<br>ALT     |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          |  | FL 245/FL 195 Class C,<br>FL 195/Alt 3500 ft Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 132.165.   |
| △                                    | BROOKMANS PARK<br>VOR/DME<br>(BPK) | 514459.05N 0000624.25W        |         |     |                                |                                 |                   |                                   | Extremity of M185.   |  |
| Route Remarks:                       |                                    |                               |         |     |                                |                                 |                   |                                   |  |  |
| • See also ENR 1.1, paragraph 1.1.3. |                                    |                               |         |     |                                |                                 |                   |                                   |  |  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                           | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |
|--------------------------------------|---------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name               |                           | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)                      |                           | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                           |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|                                      |                           | ↓                             |         |     |                                |                                 |                   | ↑                                 |   |   |
| M189<br>(RNP/RNAV)                   |                           |                               |         |     |                                |                                 |                   |                                   |   |   |
| △                                    | NEVIL                     | 500000N 0002206W              |         |     |                                |                                 |                   |                                   | FIR Boundary.<br>Extremity of M189.<br>Intersection with G27 (see AIP<br>France). |   |
| (RNAV 5)                             |                           | 038°/<br>219°                 | 11.4 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 80   | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).   |
| △                                    | OSPOL                     | 500900N 0001108W              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             |                           | 039°/<br>219°                 | 17.1 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 80   | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).   |
| △                                    | HAWKE                     | 502227N 0000525E              |         |     |                                |                                 |                   |                                   | Intersection with L612.   |   |
| (RNAV 5)                             |                           | 039°/<br>219°                 | 16.0 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 80   | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (FL 175 and<br>above);<br>Freq: 133.175 (Below FL 175).   |
| △                                    | WAFFU                     | 503457N 0002059E              |         |     |                                |                                 |                   |                                   | Intersection with M605 and<br>Y8.   |   |
| (RNAV 5)                             |                           | 039°/<br>219°                 | 11.2 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 80   | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).   |
| △                                    | HASTY                     | 504342N 0003200E              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             |                           | 039°/<br>219°                 | 20.9 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 80   | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (All Levels).   |
| △                                    | LYDD<br>VOR/DME<br>(LYD)  | 505958.87N 0005243.18E        |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             |                           | 062°/<br>242°                 | 8.1 nm  |     | FL 245 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 80   | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Dual designation with Y803<br>btn LYD and DVR.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 120.175 (Below FL 195). |
| △                                    | SANDY                     | 510351N 0010403E              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             |                           | 062°/<br>242°                 | 12.5 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 80   | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Dual designation with Y803<br>btn LYD and DVR.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 135.325 (Below FL 195). |
| △                                    | DOVER<br>VOR/DME<br>(DVR) | 510945.44N 0012132.72E        |         |     |                                |                                 |                   |                                   |   |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                            |   |
|--------------------------------------|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|----------------------------|---|
| Significant Point Name               |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                            |   |
| (RNP/RNAV Type)                      |                             | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                            | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                            |   |
|                                      |                             |                               |         |     |                                |                                 |                   | ↓                                 | ↑                          |   |
| (RNAV 5)                             |                             | 004°/<br>184°                 | 34.5 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between DVR and 20 nm<br>north of DVR:<br>London Control (Swanwick)<br>Freq: 134.900 (All Levels).<br><br>Between 20 nm north of DVR<br>and JACKO:<br>London Control (Swanwick)<br>Freq: 128.160 (All Levels).                       |
| △                                    | JACKO                       | 514409N 0012536E              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)                             |                             | 303°/<br>123°                 | 12.4 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.160 (All Levels).   |
| △                                    | CLACTON<br>VOR/DME<br>(CLN) | 515054.50N 0010851.32E        |         |     |                                |                                 |                   |                                   |                            | Eastbound route only btn<br>UNGAP and CLN.  |
| (RNAV 5)                             |                             | -/104°                        | 37.2 nm |     | FL 245 /<br>FL 85              |                                 | 9.5 nm            |                                   | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.160 (All Levels).   |
| △                                    | ADMIS                       | 515949N 0001036E              |         |     |                                |                                 |                   |                                   |                            | Intersection with M183.   |
| (RNAV 5)                             |                             | -/104°                        | 23.0 nm |     | FL 245 /<br>FL 85              |                                 | 9.5 nm            |                                   | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between ADMIS and abm<br>BKY:<br>London Control (Swanwick)<br>Freq: 128.160 (All Levels).<br><br>Between abm BKY and<br>POTON:<br>London Control (Swanwick)<br>Freq: 127.105 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215). |
| △                                    | POTON                       | 520504N 0002538W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)                             |                             | -/104°                        | 7.4 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.105 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215).   |
| △                                    | HEIDI                       | 520644N 0003724W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)                             |                             | -/104°                        | 4.2 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.105 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215).   |
| △                                    | OLNEY                       | 520740N 0004403W              |         |     |                                |                                 |                   |                                   |                            | Intersection with P166.   |
| (RNAV 5)                             |                             | -/103°                        | 14.4 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.105 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215).   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |   |                                 |
|--|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|---|---------------------------------|
| Significant Point Name   |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |   |                                 |
| (RNP/RNAV Type)  |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |                                 |
|  |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |   |                                 |
| △  | DAVENTRY<br>VOR/DME<br>(DTY) | 521048.51N 0010649.64W        |         |     |                                |                                 |                   |                                   | ↓                        | ↑   | Intersection with L10 and M605. |
| (RNAV 5)   |                              | -137°                         | 14.9 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.105 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215). |                                 |
| △  | UNGAP                        | 522129N 0012339W              |         |     |                                |                                 |                   |                                   |                          |   | Extremity of M189.              |
| Route Remarks:   |                              |                               |         |     |                                |                                 |                   |                                   |                          |   |                                 |
| <ul style="list-style-type: none"><li>The area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 85, bounded by straight lines joining:<br/>512947N 0011552E - 512257N 0011505E -<br/>512412N 0010924E - 512441N 0010412E -<br/>512947N 0011552E, is part of M189.</li><li>Between POTON and CLN the airway is published as 9.5 nm wide with the northern boundary 4.5 nm from the CL.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                              |                               |         |     |                                |                                 |                   |                                   |                          |   |                                 |

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |  |   |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|---|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |  |   |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |         |     |                                |                                 |                   | ↓  | ↑   |  |
| M604<br>(RNP/RNAV)                   |       |                               |         |     |                                |                                 |                   |  |   |  |
| △                                    | ARTOV | 515419N 0012533E              |         |     |                                |                                 |                   |  | Eastbound (northbound)<br>route only.<br>Extremity of M604. |  |
| (RNAV 5)                             |       | 033°/-                        | 14.2 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110                          |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 121.225 (Below FL 215). |
| △                                    | OTBAP | 520612N 0013800E              |         |     |                                |                                 |                   |  |   |  |
| (RNAV 5)                             |       | 033°/-                        | 16.1 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 210                          |   | Class C.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 121.225 (Below FL 215).   |
| △                                    | ABEDA | 521940N 0015216E              |         |     |                                |                                 |                   |  |   |  |
| (RNAV 5)                             |       | 033°/-                        | 15.5 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 210                          |   | Class C.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 121.225 (Below FL 215).   |
| △                                    | LEDBO | 523235N 0020608E              |         |     |                                |                                 |                   |  | Extremity of M604.  |  |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |  |
|--------------------------------------|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|--|
| Significant Point Name               |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |  |
| (RNP/RNAV Type)                      |                             | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|                                      |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |  |
|                                      |                             | ↓                             |         |     |                                |                                 |                   |                                   | ↑   |   |  |
| M605<br>(RNP/RNAV)                   |                             |                               |         |     |                                |                                 |                   |                                   |   |   |  |
| △                                    | XIDIL                       | 502106N 0003829E              |         |     |                                |                                 |                   |                                   | Southbound route only be-<br>tween SFD and XIDIL.<br>FIR Boundary.<br>For continuation see AIP<br>France. |   |  |
| (RNAV 5)                             |                             | -/141°                        | 9.2 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).   |  |
| △                                    | HARDY                       | 502816N 0002928E              |         |     |                                |                                 |                   |                                   |   |   |  |
| (RNAV 5)                             |                             | -/141°                        | 8.6 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).   |  |
| △                                    | WAFFU                       | 503457N 0002059E              |         |     |                                |                                 |                   |                                   | Intersection with M189.   |   |  |
| (RNAV 5)                             |                             | -/141°                        | 13.8 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (FL 175 and<br>above);<br>Freq: 133.175 (Below FL 175).   |  |
| △                                    | SEAFORD<br>VOR/DME<br>(SFD) | 504538.49N 0000718.89E        |         |     |                                |                                 |                   |                                   |   |   |  |
| (RNAV 5)                             |                             | 318°/<br>138°                 | 56.2 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 175);<br>Freq: 133.175 (Below FL 175).   |  |
| △                                    | WOODLEY<br>NDB<br>(WOD)     | 512710.02N 0005243.68W        |         |     |                                |                                 |                   |                                   | Intersection with L612.   |   |  |
| (RNAV 5)                             |                             | 350°/<br>170°                 | 7.7 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 155);<br>Freq: 129.080 (Below FL 155<br>to FL 135);<br>Freq: 134.125 (Below FL 135). |  |
| △                                    | BENSU                       | 513444N 0005508W              |         |     |                                |                                 |                   |                                   | Intersection with Q70.  |   |  |
| (RNAV 5)                             |                             | 350°/<br>170°                 | 16.5 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 119.775 (Below FL 215).   |  |
| △                                    | SILVA                       | 515051N 0010019W              |         |     |                                |                                 |                   |                                   |   |   |  |
| (RNAV 5)                             |                             | 350°/<br>170°                 | 9.1 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)  |  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                               | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |   |
|--------------------------------------|-------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|---|
| Significant Point Name               |                               | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |   |
| (RNP/RNAV Type)                      |                               | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                               |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |   |
|                                      |                               |                               |         |     |                                |                                 |                   |                                   |                          | Freq: 131.130 (FL 195 and above);<br>Freq: 130.925 (Below FL 195).  |
| △                                    | FINMA                         | 515947N 0010313W              |         |     |                                |                                 |                   |                                   |                          | Intersection with L15.  |
| (RNAV 5)                             |                               | 350°/<br>170°                 | 11.3 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 131.130 (FL 195 and above);<br>Freq: 130.925 (Below FL 195).  |
| △                                    | DAVENTRY<br>VOR/DME<br>(DTY)  | 521048.51N 0010649.64W        |         |     |                                |                                 |                   |                                   |                          | Intersection with Y250.   |
| (RNAV 5)                             |                               | 328°/<br>148°                 | 40.6 nm |     | FL 245 /<br>FL 65              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>Between DTY and abm<br>Birmingham:<br>London Control (Swanwick)<br>Freq: 131.130 (FL 195 and above);<br>Freq: 130.925 (Below FL 195).<br><br>Between abm Birmingham<br>and PEDIG:<br>London Control (Swanwick)<br>Freq: 134.390 (FL 195 and above);<br>Scottish Control (Prestwick)<br>Freq: 134.425 (Below FL 195).   |
| △                                    | PEDIG                         | 524448N 0014310W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |                               | 348°/<br>168°                 | 61.5 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Between PEDIG and abm<br>TNT:<br>London Control (Swanwick)<br>Freq: 134.390 (FL 195 and above);<br>Scottish Control (Prestwick)<br>Freq: 134.425 (Below FL 195).<br><br>Between abm TNT and<br>533328N 0020149W:<br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and above);<br>Freq: 134.425 (Below FL 195).<br><br>Between 533328N 0020149W<br>and POL:<br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and above);<br>Freq: 136.575 (Below FL 195). |
| △                                    | POLE HILL<br>VOR/DME<br>(POL) | 534437.56N 0020611.98W        |         |     |                                |                                 |                   |                                   |                          | Extremity of M605.  |
| Route Remarks:                       |                               |                               |         |     |                                |                                 |                   |                                   |                          |   |
| • See also ENR 1.1, paragraph 1.1.3. |                               |                               |         |     |                                |                                 |                   |                                   |                          |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|                                      |                              |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |   |
| M733<br>(RNP/RNAV)                   |                              |                               |         |     |                                |                                 |                   |                                   |   |   |
| △                                    | SUBIP                        | 502644N 0005306E              |         |     |                                |                                 |                   |                                   | Northbound route only.<br>FIR Boundary.<br>Extremity of M733. |   |
| (RNAV 5)                             |                              | 320°/-                        | 7.8 nm  |     | FL 245 /<br>FL 175             |                                 | 10 nm             | even<br>FL 240 /<br>FL 180        |   | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 128.425. |
| △                                    | BANVA                        | 503242N 0004512E              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             |                              | 320°/-                        | 19.3 nm |     | FL 245 /<br>FL 175             |                                 | 10 nm             | even<br>FL 240 /<br>FL 180        |   | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 128.425. |
| △                                    | UNDUG                        | 504724N 0002530E              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             |                              | 320°/-                        | 18.0 nm |     | FL 245 /<br>FL 175             |                                 | 10 nm             | even<br>FL 240 /<br>FL 180        |   | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 128.425. |
| △                                    | MAYFIELD<br>VOR/DME<br>(MAY) | 510101.86N 0000658.04E        |         |     |                                |                                 |                   |                                   | Extremity of M733.  |   |
| Route Remarks:                       |                              |                               |         |     |                                |                                 |                   |                                   |   |   |
| • See also ENR 1.1, paragraph 1.1.3. |                              |                               |         |     |                                |                                 |                   |                                   |   |   |



ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                           | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |   |
|--|---------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|---|
| Significant Point Name   |                           | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |   |
| (RNP/RNAV Type)  |                           | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|  |                           |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |   |
|  |                           |                               |         |     |                                |                                 |                   | ↓                                 | ↑  |   |
| M868<br>(RNP/RNAV)   |                           |                               |         |     |                                |                                 |                   |                                   |  |   |
| △  | TRENT<br>VOR/DME<br>(TNT) | 530314.23N 0014011.89W        |         |     |                                |                                 |                   |                                   | Eastbound route only.<br>Extremity of M868.  |   |
| (RNAV 5)   |                           | 341°/-                        | 7.2 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          |  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Dual designation with N57 btn<br>TNT and TIPIL.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 119.525 (Below FL 195). |
| △  | TIPIL                     | 531000N 0014423W              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)   |                           | 015°/-                        | 11.8 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          |  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 119.525 (Below FL 195).  |
| △  | EVSON                     | 532127N 0013949W              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)   |                           | 043°/-                        | 6.8 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          |  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).  |
| △  | ADELU                     | 532630N 0013213W              |         |     |                                |                                 |                   |                                   | Extremity of M868.<br>Intersection with L60. |   |
| Route Remarks:   |                           |                               |         |     |                                |                                 |                   |                                   |  |   |
| <ul style="list-style-type: none"><li>The area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 85, bounded by straight lines joining:<br/>531930N 0013131W - 530517N 0013152W -<br/>531057N 0013528W - 531903N 0013212W -<br/>531930N 0013131W, is part of M868.</li><li>The portion of airspace formed by joining positions:</li></ul> |                           |                               |         |     |                                |                                 |                   |                                   |  |   |
| Camphill Box   |                           |                               |         |     |                                |                                 |                   |                                   |  |   |
| 532719N 0014617W - 533017N 0011641W -<br>531938N 0011532W - 532012N 0011840W -<br>532110N 0012901W - 532002.91N 0013042.10W -<br>531418.31N 0012448.84W - 531137N 0013631W -<br>532719N 0014617W,<br>from AWY base level to an upper limit of FL 100, occasionally to FL 190 on request;   |                           |                               |         |     |                                |                                 |                   |                                   |  |   |
| is notified for the purposes of SERA.6001(a) Classification of Airspaces in accordance with the conditions established in the Letter of Agreement (LOA) btn the Derbyshire and Lancashire (Camphill) Gliding Club, British Gliding Association (BGA), Leeds Bradford International Airport, and Scottish Control (Prestwick).  |                           |                               |         |     |                                |                                 |                   |                                   |  |   |
| <ul style="list-style-type: none"><li>Due to ATC operational requirements, the cruising level allocation between TNT and TIPIL is inappropriate to the MAG Track.</li></ul>  |                           |                               |         |     |                                |                                 |                   |                                   |  |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                     | Route Usage Notes             |         |                                |                                 |                   |  |                            |  |
|--|---------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------|--|----------------------------|--|
| Significant Point Name   |                     | Significant Point Coordinates |         |                                |                                 |                   |  |                            |  |
| (RNP/RNAV Type)  | Track<br>MAG<br>↓/↑ | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |                            | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|  |                     |                               |         |                                |                                 |                   | ↓  | ↑                          |  |
| N14<br>(RNP/RNAV)  |                     |                               |         |                                |                                 |                   |  |                            |  |
| △  | KENET               | 513114N 0012718W              |         |                                |                                 |                   |  |                            | Westbound route only.<br>Extremity of N14.   |
| (RNAV 5)   |                     | 295°/-                        | 28.0 nm |                                | FL 245 /<br>FL 105              |                   | 10 nm  | even<br>FL 240 /<br>FL 120 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.750 (All Levels). |
| △  | UGNUS               | 514232N 0020823W              |         |                                |                                 |                   |  |                            |  |
| (RNAV 5)   |                     | 295°/-                        | 16.5 nm |                                | FL 245 /<br>FL 155              |                   | 10 nm  | even<br>FL 240 /<br>FL 160 | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.750 (All Levels). |
| △  | OKTAD               | 514904N 0023246W              |         |                                |                                 |                   |  |                            |  |
| (RNAV 5)   |                     | 284°/-                        | 14.6 nm |                                | FL 245 /<br>FL 195              |                   | 10 nm  | even<br>FL 240 /<br>FL 200 | Class C.<br><br>London Control (Swanwick)<br>Freq: 134.750 (All Levels).   |
| △  | DOBEM               | 515211N 0025545W              |         |                                |                                 |                   |  |                            | Extremity of partition of N14.   |
|  |                     |                               |         |                                | - / -                           |                   |  |                            | ROUTE BREAK - THIS AIR-<br>WAY IS NOT CONTINUOUS.  |
| △  | PEMOB               | 520838N 0050941W              |         |                                |                                 |                   |  |                            | Extremity of partition of N14.   |
| (RNAV 5)   |                     | 290°/-                        | 8.9 nm  |                                | FL 245 /<br>FL 155              |                   | 10 nm  | even<br>FL 240 /<br>FL 160 | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.375 (All Levels). |
| △  | LANPI               | 521115N 0052330W              |         |                                |                                 |                   |  |                            | Extremity of N14.<br>Intersection with Q63.  |
| Route Remarks:   |                     |                               |         |                                |                                 |                   |  |                            |  |
| <ul style="list-style-type: none"><li>CDR Category One and Three (CDR 1 and 3) between PEMOB and LANPI (ENR 1.1, paragraph 1.1.7 refers).<br/>Availability subject to activity within EG D201F.<br/>CDR 1 and 3 H24.</li><li>An area of Class C airspace, base FL 195, bounded by great circle lines joining:<br/>514603N 0024812W - 514418N 0023515W - 514409N 0023442W - 514539N 0024814W - 514603N 0024812W is part of N14.</li></ul> |                     |                               |         |                                |                                 |                   |  |                            |  |

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |  |  |   |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|--|---|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |  |  |   |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                              |                               |         |     |                                |                                 |                   | ↓  | ↑  |   |
| N16<br>(RNP/RNAV)                    |                              |                               |         |     |                                |                                 |                   |  |  |   |
| Δ                                    | GOODWOOD<br>VOR/DME<br>(GWC) | 505118.78N 0004524.25W        |         |     |                                |                                 |                   |  | Eastbound route only.<br>Extremity of N16. |   |
| (RNAV 5)                             |                              | 047°/-                        | 27.6 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90                           |  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 175);<br>Freq: 134.125 (Below FL 175). |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                                    | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |   |
|---|------------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|---|
| Significant Point Name  |                                    | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |   |
| (RNP/RNAV Type)   |                                    | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|   |                                    |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |   |
| △   | OTSID                              | 511023N 0001351W              |         |     |                                |                                 |                   |                                   |  | Intersection with Y321.   |
| (RNAV 5)  |                                    | 047°/-                        | 13.8 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          |  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 175);<br>Freq: 134.125 (Below FL 175). |
| △   | BIGGIN<br>VOR/DME<br>(BIG)         | 511951.15N 0000205.32E        |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)  |                                    | 349°/-                        | 25.7 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          |  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 127.955 (Below FL 215<br>to FL 175);<br>Freq: 123.900 (Below FL 175). |
| △   | BROOKMANS PARK<br>VOR/DME<br>(BPK) | 514459.05N 0000624.25W        |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)  |                                    | 024°/-                        | 15.7 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          |  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 245 and<br>above);<br>Freq: 135.425 (Below FL 245<br>to FL 175);<br>Freq: 123.900 (Below FL 175). |
| △   | BARKWAY<br>VOR/DME<br>(BKY)        | 515923.17N 0000342.87E        |         |     |                                |                                 |                   |                                   |  | Extremity of N16.   |
| Route Remarks:  |                                    |                               |         |     |                                |                                 |                   |                                   |  |   |
| • Due to ATC operational requirements, the cruising level allocation between BIG and BPK is inappropriate to the MAG Track. |                                    |                               |         |     |                                |                                 |                   |                                   |  |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |  |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|--|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |  |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|                                      |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |  |
|                                      |                              | ↓                             |         |     |                                |                                 |                   |                                   | ↑   |   |  |
| N20<br>(RNP/RNAV)                    |                              |                               |         |     |                                |                                 |                   |                                   |   |   |  |
| △                                    | KUNAV                        | 503054N 0010356E              |         |     |                                |                                 |                   |                                   | Westbound route only.<br>FIR boundary.<br>For continuation see AIP<br>France. |   |  |
| (RNAV 5)                             |                              | 264°/-                        | 15.7 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         |   | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.425 (FL 145 and<br>above);<br>Freq: 120.175 (Below FL 145).   |  |
| △                                    | ELDAX                        | 502918N 0003930E              |         |     |                                |                                 |                   |                                   | Intersection with M8.   |   |  |
| (RNAV 5)                             |                              | 279°/-                        | 41.6 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (FL 175 and<br>above);<br>Freq: 133.175 (Below FL 175).   |  |
| △                                    | NOTGI                        | 503510N 0002503W              |         |     |                                |                                 |                   |                                   |   |   |  |
| (RNAV 5)                             |                              | 315°/-                        | 8.6 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (FL 175 and<br>above);<br>Freq: 133.175 (Below FL 175).   |  |
| △                                    | EVEXU                        | 504116N 0003441W              |         |     |                                |                                 |                   |                                   |   |   |  |
| (RNAV 5)                             |                              | 327°/-                        | 12.1 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         |   | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Dual designation with N859<br>btn EVEXU and GWC.<br><br>London Control (Swanwick)<br>Freq: 135.050 (FL 175 and<br>above);<br>Freq: 133.175 (Below FL 175). |  |
| △                                    | GOODWOOD<br>VOR/DME<br>(GWC) | 505118.78N 0004524.25W        |         |     |                                |                                 |                   |                                   | Extremity of N20.   |   |  |
| Route Remarks:                       |                              |                               |         |     |                                |                                 |                   |                                   |   |   |  |
| • See also ENR 1.1, paragraph 1.1.3. |                              |                               |         |     |                                |                                 |                   |                                   |   |   |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name   |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)  |                             | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|  |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|  |                             |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |  |
| N34<br>(RNP/RNAV)  |                             |                               |         |     |                                |                                 |                   |                                   |   |  |
| △  | NEVRI                       | 540406N 0061611W              |         |     |                                |                                 |                   |                                   | Northbound route only.<br>DRA Entry Fix.<br>FIR Boundary.<br>For continuation see AIP<br>Ireland. |  |
| (RNAV 5)   |                             | 005°/-                        | 13.5 nm |     | FL 255 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 250 /<br>FL 90          |   | FL 255/FL 195 Class C,<br>FL 195/FL 75 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels). |
| △  | ABSUN                       | 541732N 0061518W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)   |                             | 006°/-                        | 22.2 nm |     | FL 255 /<br>FL 55              |                                 | 10 nm             | odd<br>FL 250 /<br>FL 70          |   | FL 255/FL 195 Class C,<br>FL 195/FL 55 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels). |
| △  | BELFAST<br>VOR/DME<br>(BEL) | 543940.12N 0061347.67W        |         |     |                                |                                 |                   |                                   | DRA Arrival and Departure<br>Transition Fix.<br>Extremity of N34.                                 |  |
| Route Remarks:   |                             |                               |         |     |                                |                                 |                   |                                   |   |  |
| <ul style="list-style-type: none"><li>An area of Class D controlled airspace, below FL 195, base FL 75 bounded by straight lines joining:<br/>541720N 0060646W - 541711N 0060044W -<br/>540905N 0060721W - 541720N 0060646W, is part of N34.</li><li>An area of Class D controlled airspace, below FL 195, base FL 55 bounded by straight lines joining:<br/>542244N 0060623W - 541711N 0060044W -<br/>541720N 0060646W - 542244N 0060623W, is part of N34.</li><li>An area of Class D controlled airspace, below FL 195, base FL 105, bounded by straight lines joining:<br/>542244N 0060623W - 542802N 0060613W -<br/>542610N 0060131W - 542139N 0060517W -<br/>542244N 0060623W, is part of N34.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                             |                               |         |     |                                |                                 |                   |                                   |   |  |

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |  |   |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|---|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |  |   |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |         |     |                                |                                 |                   | ↓  | ↑   |  |
| N42<br>(RNP/RNAV)                    |       |                               |         |     |                                |                                 |                   |  |   |  |
| △                                    | RETSI | 523042N 0025233W              |         |     |                                |                                 |                   |  | Southbound route only.<br>Extremity of N42. |  |
| (RNAV 5)                             |       | -/156°                        | 25.3 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 150                   | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.600 (All Levels). |
| △                                    | MONTY | 525334N 0031026W              |         |     |                                |                                 |                   |  | Extremity of N42.                           |  |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                               | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |   |
|--------------------------------------|-------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|---|
| Significant Point Name               |                               | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |   |
| (RNP/RNAV Type)                      |                               | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                               |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |   |
|                                      |                               |                               |         |     |                                |                                 |                   | ↓                                 | ↑  |   |
| N57<br>(RNP/RNAV)                    |                               |                               |         |     |                                |                                 |                   |                                   |  |   |
| △                                    | DEVAL                         | 505125N 0012800E              |         |     |                                |                                 |                   |                                   | Northbound route only btm<br>DEVAL and SAPCO.<br>FIR Boundary. |   |
| (RNAV 5)                             |                               | 309°/-                        | 19.6 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         |  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 135.325 (Below FL 195).   |
| △                                    | SANDY                         | 510351N 0010403E              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)                             |                               | 309°/-                        | 22.9 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Dual designation with N601<br>between SANDY and DET.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 120.525 (Below FL 195).   |
| △                                    | DETLING<br>VOR/DME<br>(DET)   | 511814.41N 0003550.19E        |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)                             |                               | 321°/-                        | 26.5 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (All Levels).   |
| △                                    | LAMBOURNE<br>VOR/DME<br>(LAM) | 513845.69N 0000906.13E        |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)                             |                               | 315°/-                        | 40.2 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Between LAM and abm BPK:<br>London Control (Swanwick)<br>Freq: 134.900 (All Levels).<br><br>Between abm BPK and<br>515732N 0002157W:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 119.775 (Below FL 215).<br><br>Between 515732N 0002157W<br>and abm WOBUN:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 119.775 (Below FL 215).<br><br>Between abm WOBUN and<br>HEIDI:<br>Freq: 127.105 (FL 195 and<br>above);<br>Freq: 130.925 (Below FL 195). |
| △                                    | HEIDI                         | 520644N 0003724W              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)                             |                               | 315°/-                        | 11.7 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.105 (FL 195 and<br>above);<br>Freq: 130.925 (Below FL 195).   |
| △                                    | WELIN                         | 521450N 0005108W              |         |     |                                |                                 |                   |                                   | Intersection with T420.  |   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                               | Route Usage Notes             |     |                                |                                 |                   |  |                          |   |
|--------------------------------------|-------------------------------|-------------------------------|-----|--------------------------------|---------------------------------|-------------------|--|--------------------------|---|
| Significant Point Name               |                               | Significant Point Coordinates |     |                                |                                 |                   |  |                          |   |
| (RNP/RNAV Type)                      | Track<br>MAG<br>↓/↑           | Dist                          | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                               |                               |     |                                |                                 |                   | ↓  | ↑                        |   |
| (RNAV 5)                             | 315°/-                        | 25.6 nm                       |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80                      |                          | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Between WELIN and abm<br>Birmingham:<br>London Control (Swanwick)<br>Freq: 127.105 (FL 195 and<br>above);<br>Freq: 130.925 (Below FL 195).<br><br>Between abm Birmingham<br>and SAPCO:<br>London Control (Swanwick)<br>Freq: 127.105 (FL 195 and<br>above);<br>Scottish Control (Prestwick)<br>Freq: 119.525 (Below FL 195). |
| △                                    | SAPCO                         | 523225N 0012125W              |     |                                |                                 |                   |  |                          | Intersection with Y53.  |
| (RNAV 5)                             | 341°/<br>161°                 | 32.9 nm                       |     | FL 245 /<br>5500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 80                      | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/Alt 5500 ft Class A.<br><br>FL 140 not available between<br>SAPCO and TNT.<br><br>London Control (Swanwick)<br>Freq: 127.105 (Above FL<br>195);<br>Scottish Control (Prestwick)<br>Freq: 119.525 (Below FL 195).   |
| △                                    | TRENT<br>VOR/DME<br>(TNT)     | 530314.23N 0014011.89W        |     |                                |                                 |                   |  |                          | Intersection with L28 and<br>M868.  |
| (RNAV 5)                             | 341°/<br>161°                 | 7.2 nm                        |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80                      | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Dual designation with M868<br>btn TNT and TIPIL.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 119.525 (Below FL 195).  |
| △                                    | TIPIL                         | 531000N 0014423W              |     |                                |                                 |                   |  |                          |   |
| (RNAV 5)                             | 341°/<br>161°                 | 22.7 nm                       |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80                      | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 119.525 (Below FL 195).  |
| △                                    | DENBY                         | 533113N 0015740W              |     |                                |                                 |                   |  |                          | Intersection with L975.   |
| (RNAV 5)                             | 341°/<br>161°                 | 14.4 nm                       |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80                      | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).  |
| △                                    | POLE HILL<br>VOR/DME<br>(POL) | 534437.56N 0020611.98W        |     |                                |                                 |                   |  |                          | <b>Eastbound (southbound)<br/>route only btn DCS and<br/>POL.</b><br>Intersection with P18.   |
| (RNAV 5)                             | -145°                         | 10.0 nm                       |     | FL 245 /<br>4500 ft<br>ALT     |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/Alt 4500 ft Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).  |
| △                                    | BAMEP                         | 535242N 0021609W              |     |                                |                                 |                   |  |                          |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                            | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |  |
|---|----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|
| Significant Point Name  |                            | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |  |
| (RNP/RNAV Type)   |                            | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|   |                            |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |
|   |                            |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         |  |
| (RNAV 5)  |                            | -145°                         | 10.0 nm |     | FL 245 /<br>FL 55              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 55 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).                           |
| △   | SETEL                      | 540045N 0022609W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)  |                            | -145°                         | 6.0 nm  |     | FL 245 /<br>FL 75              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).                           |
| △   | OLPOP                      | 540532N 0023208W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)  |                            | -145°                         | 10.1 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br>(Variable lower limit)<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195). |
| △   | IPNOX                      | 541340N 0024222W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)  |                            | -145°                         | 37.1 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br>(Variable lower limit)<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195). |
| △   | DEAN CROSS<br>DME<br>(DCS) | 544318.88N 0032026.30W        |         |     | Extremity of N57.              |                                 |                   |                                   |                           |  |
| Route Remarks:  |                            |                               |         |     |                                |                                 |                   |                                   |                           |  |
| <ul style="list-style-type: none"><li>An area of Class A controlled airspace, base Alt 5500 ft, upper limit FL 75, bounded by straight lines joining:<br/>523238N 0012014W - 523406N 0011224W -<br/>521403N 0010009W - 521355N 0010026W -<br/>523238N 0012014W, is part of N57.</li><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, base 4500 ft Alt, upper limit FL 245, bounded by straight lines joining:<br/>534945N 0022257W - 534613N 0021835W -<br/>534127N 0023240W - 534529N 0023244W -<br/>534945N 0022257W, is part of N57.</li><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 55, upper limit FL 245, bounded by straight lines joining:<br/>535747N 0023258W - 534945N 0022257W -<br/>534529N 0023244W - 535747N 0023258W, is part of N57.</li><li>Daily from 0700 to 2000 (1 hr earlier in summer) btn DCS and OLPOP the lower limit is FL 125 making the Mnm FL (Southbound) FL 130.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                            |                               |         |     |                                |                                 |                   |                                   |                           |  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name   |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)  |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|  |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|  |       | ↓                             |         |     |                                |                                 |                   |                                   | ↑   |  |
| N90<br>(RNP/RNAV)  |       |                               |         |     |                                |                                 |                   |                                   |   |  |
| △  | SKESO | 494929N 0030203W              |         |     |                                |                                 |                   |                                   | Southbound route only.<br>FIR Boundary.<br>Extremity of N90.<br>For continuation see AIP<br>France. |  |
| (RNAV 5)   |       | -173°                         | 37.1 nm |     | FL 245 /<br>FL 105             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 110   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Western edge of AWY is 7 nm<br>west of the CL.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 126.075.  |
| △  | NOTRO | 502612N 0031021W              |         |     |                                |                                 |                   |                                   | Intersection with Y91.  |  |
| (RNAV 5)   |       | -188°                         | 52.3 nm |     | FL 245 /<br>FL 105             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 110   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Western edge of AWY is 7 nm<br>west of the CL.<br><br>Due to ATC operational re-<br>quirements, the cruising level<br>allocation between LAMAT<br>and NOTRO is inappropriate<br>to the MAG Track.<br><br>0600 - 2300 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 126.075 (Above FL<br>165);<br>Cardiff ATC<br>Freq: 125.850 (FL 165 and<br>below).<br>2300 - 0600 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>(All Levels)<br>Freq: 134.750. |
| △  | LAMAT | 511807N 0030103W              |         |     |                                |                                 |                   |                                   | Extremity of N90.   |  |
| Route Remarks:   |       |                               |         |     |                                |                                 |                   |                                   |   |  |
| <ul style="list-style-type: none"><li>CDR Category One and Three (CDR 1 and 3) (ENR 1.1, paragraph 1.1.7 refers).<br/>CDR 1 and 3 1600 Fri - 0745 Mon Winter (Summer 1 hr earlier).</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |       |                               |         |     |                                |                                 |                   |                                   |   |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                    | Route Usage Notes             |       |                                |                                 |                   |                                   |                            |   |   |
|---|--------------------|-------------------------------|-------|--------------------------------|---------------------------------|-------------------|-----------------------------------|----------------------------|---|---|
| Significant Point Name  |                    | Significant Point Coordinates |       |                                |                                 |                   |                                   |                            |   |   |
| (RNP/RNAV Type)   | Track<br>MAG<br>↓↑ | Dist                          | COP   | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                            | Controlling Unit/<br>Airspace Class/<br>Remarks       |   |
|   |                    |                               |       |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                            |   |   |
|   |                    |                               |       |                                |                                 |                   | ↓                                 | ↑                          |   |   |
| N160<br>(RNP/RNAV)  |                    |                               |       |                                |                                 |                   |                                   |                            |   |   |
| △   | BOGMI              | 505953N 0071217W              |       |                                |                                 |                   |                                   |                            | Extremity of N160.                                    |   |
| (RNAV 5)  |                    | 320°/<br>140°                 | 20 nm |                                | FL 245 /<br>FL 175              |                   | 10 nm                             | even<br>FL 240 /<br>FL 180 | odd<br>FL 230 /<br>FL 190                             | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 132.950. |
| △   | LEDGO              | 511424N 0073405W              |       |                                |                                 |                   |                                   |                            | FIR Boundary.<br>For continuation see AIP<br>Ireland. |   |
| Route Remarks:  |                    |                               |       |                                |                                 |                   |                                   |                            |   |   |
| <ul style="list-style-type: none"><li>CDR Category One and Three (CDR 1 and 3) (ENR 1.1, paragraph 1.1.7 refers).<br/>Availability subject to SWMDA activity.<br/>CDR 1 and 3 H24.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                    |                               |       |                                |                                 |                   |                                   |                            |   |   |

| Route Designator/<br>(RNP/RNAV Type)  |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|---|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name  |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)   |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|   |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|   |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |  |
| N514<br>(RNP/RNAV)  |       |                               |         |     |                                |                                 |                   |                                   |   |  |
| △   | GIBSO | 504459N 0023107W              |         |     |                                |                                 |                   |                                   | Extremity of N514.<br>Intersection with L620. |  |
| (RNAV 5)  |       | 090°/<br>270°                 | 27.0 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 170         | even<br>FL 240 /<br>FL 160                    | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).   |
| △   | BEWLI | 504531N 0014837W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)  |       | 090°/<br>270°                 | 21.9 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 170         | even<br>FL 240 /<br>FL 160                    | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>Between BEWLI and 10 nm<br>west of BEGTO:<br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).<br><br>Between 10 nm west of<br>BEGTO and BEGTO:<br>London Control (Swanwick)<br>Freq: 134.440 (FL 185 and<br>above);<br>Freq: 127.825 (Below FL 185). |
| △   | BEGTO | 504545N 0011408W              |         |     |                                |                                 |                   |                                   | Intersection with M185.                       |  |
| (RNAV 5)  |       | 090°/<br>271°                 | 10.7 nm |     | FL 245 /<br>FL 125             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 130         | even<br>FL 240 /<br>FL 140                    | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.440 (FL 185 and<br>above);<br>Freq: 127.825 (Below FL 185).   |
| △   | POMPI | 504548N 0005715W              |         |     |                                |                                 |                   |                                   | Extremity of N514.                            |  |
| Route Remarks:  |       |                               |         |     |                                |                                 |                   |                                   |   |  |
| <ul style="list-style-type: none"><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, base Alt 5500 ft, bounded by great circle lines joining:<br/>505259N 0011506W - 505435N 0010335W -</li></ul> |       |                               |         |     |                                |                                 |                   |                                   |   |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                    | Route Usage Notes             |     |                                |                                 |                   |  |   |   |  |
|--|--------------------|-------------------------------|-----|--------------------------------|---------------------------------|-------------------|--|---|---|--|
| Significant Point Name   |                    | Significant Point Coordinates |     |                                |                                 |                   |  |   |   |  |
| (RNP/RNAV Type)  | Track<br>MAG<br>↓↑ | Dist                          | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |   | Controlling Unit/<br>Airspace Class/<br>Remarks |  |
|  |                    |                               |     |                                |                                 |                   | ↓  | ↑ |   |  |
| 504928N 0011713W - 505259N 0011506W, is part of N514.  |                    |                               |     |                                |                                 |                   |  |   |   |  |
| • <b>Variable lower limit:</b> Outside the Solent CTA notified hours of operation that portion of N514 that overlies the Solent CTA has a base expressed as FL 55. |                    |                               |     |                                |                                 |                   |  |   |   |  |

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |                                |                                 |                   |  |   |  |   |
|--------------------------------------|------------------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------|--|---|--|---|
| Significant Point Name               |                              | Significant Point Coordinates |         |                                |                                 |                   |  |   |  |   |
| (RNP/RNAV Type)                      | Track<br>MAG<br>↓↑           | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |   | Controlling Unit/<br>Airspace Class/<br>Remarks                            |   |
|                                      |                              |                               |         |                                |                                 |                   | ↓  | ↑ |  |   |
| N546<br>(RNP/RNAV)                   |                              |                               |         |                                |                                 |                   |  |   |  |   |
| △                                    | STRUMBLE<br>VOR/DME<br>(STU) | 515940.88N 0050224.69W        |         |                                |                                 |                   |  |   | Eastbound route only.<br>Dublin TMA Departures only.<br>Extremity of N546. |   |
| (RNAV 5)                             |                              | -124°                         | 27.9 nm |                                | FL 245 /<br>FL 145              |                   | 10 nm  |   | odd<br>FL 230 /<br>FL 150  | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 129.375. |
| △                                    | BAKUR                        | 521430N 0054049W              |         |                                |                                 |                   |  |   |  | FIR Boundary.<br>Extremity of N546.   |

|                                      |  |  |  |  |  |  |  |  |  |  |
|--------------------------------------|--|--|--|--|--|--|--|--|--|--|
| Route Remarks:                       |  |  |  |  |  |  |  |  |  |  |
| • See also ENR 1.1, paragraph 1.1.3. |  |  |  |  |  |  |  |  |  |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--------------------------------------|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name               |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)                      |                             | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|                                      |                             |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |  |
| N560<br>(RNP/RNAV)                   |                             |                               |         |     |                                |                                 |                   |                                   |   |  |
| △                                    | GLASGOW<br>VOR/DME<br>(GOW) | 555213.81N 0042644.61W        |         |     |                                |                                 |                   |                                   | Extremity of N560.<br>Intersection with L612. |  |
| (RNAV 5)                             |                             | 010°/<br>190°                 | 16.5 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 210         | even<br>FL 240 /<br>FL 200                    | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels).  |
| △                                    | FOYLE                       | 560834N 0042256W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                             | 010°/<br>190°                 | 19.4 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 210         | even<br>FL 240 /<br>FL 200                    | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels).  |
| △                                    | ERSON                       | 562748N 0041824W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                             | 010°/<br>190°                 | 14.4 nm |     | FL 245 /<br>FL 125             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 130         | even<br>FL 240 /<br>FL 140                    | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class E and<br>TMZ.<br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels). |
| △                                    | INBAS                       | 564200N 0041459W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                             | 010°/<br>191°                 | 11.7 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         | even<br>FL 240 /<br>FL 120                    | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class E and<br>TMZ.<br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels). |
| △                                    | LAGAV                       | 565335N 0041210W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                             | 011°/<br>191°                 | 13.9 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         | even<br>FL 240 /<br>FL 120                    | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class E and<br>TMZ.<br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels). |
| △                                    | NESDI                       | 570718N 0040848W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                             | 011°/<br>191°                 | 5.5 nm  |     | FL 195 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 190 /<br>FL 110         | even<br>FL 180 /<br>FL 120                    | Class E and TMZ.<br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels).  |
| △                                    | GUSSI                       | 571247N 0040727W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                             | 011°/<br>191°                 | 8 nm    |     | FL 195 /<br>FL 95              |                                 | 10 nm             | odd<br>FL 190 /<br>FL 110         | even<br>FL 180 /<br>FL 100                    | Class E and TMZ.<br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels).  |
| △                                    | DAVOT                       | 572042N 0040529W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                             | 011°/<br>191°                 | 12.0 nm |     | FL 195 /<br>FL 95              |                                 | 10 nm             | odd<br>FL 190 /<br>FL 110         | even<br>FL 180 /<br>FL 100                    | Class E and TMZ.<br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels).  |
| △                                    | RIMOL                       | 573233N 0040230W              |         |     |                                |                                 |                   |                                   | Intersection with Y906.                       |  |
| (RNAV 5)                             |                             | 338°/<br>158°                 | 23.1 nm |     | FL 195 /<br>FL 95              |                                 | 10 nm             | odd<br>FL 190 /<br>FL 110         | even<br>FL 180 /<br>FL 100                    | Class E and TMZ.<br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels).  |
| △                                    | BONBY                       | 575330N 0042036W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                             | 052°/<br>232°                 | 6.6 nm  |     | FL 195 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 190 /<br>FL 90          | even<br>FL 180 /<br>FL 80                     | Class E and TMZ.<br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels).  |
| △                                    | CHINN                       | 575751N 0041117W              |         |     |                                |                                 |                   |                                   |   |  |

**ENR 3.1 LOWER ATS ROUTES (continued)**

| Route Designator/<br>(RNP/RNAV Type)   |                          | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |   |
|--|--------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|
| Significant Point Name   |                          | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |   |
| (RNP/RNAV Type)  |                          | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks                                     |
|  |                          |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |
|  |                          |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         |   |
| (RNAV 5)   |                          | 052°/<br>232°                 | 45.6 nm |     | FL 195 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 190 /<br>FL 90          | even<br>FL 180 /<br>FL 80 | Class E and TMZ.<br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels). |
| △  | WICK<br>VOR/DME<br>(WIK) | 582731.74N 0030601.33W        |         |     |                                |                                 |                   |                                   |                           | Intersection with Y904.   |
| (RNAV 5)   |                          | 015°/<br>195°                 | 30.8 nm |     | FL 195 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 190 /<br>FL 90          | even<br>FL 180 /<br>FL 80 | Class E and TMZ.<br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels). |
| △  | KOKAL                    | 585735N 0025338W              |         |     |                                |                                 |                   |                                   |                           | Extremity of N560.  |
| Route Remarks:   |                          |                               |         |     |                                |                                 |                   |                                   |                           |   |
| <ul style="list-style-type: none"><li>• <b>Transponder carriage and operation required within that part of N560 notified as Class E and TMZ.</b></li><li>• Inverness Radar provide a radar service for tfc inbound to and outbound from Inverness via N560 during the promulgated hours of Inverness Radar as published in UK AIP AD 2. EGPE AD 2.18 (and as amended by NOTAM). Outside the hours of Inverness Radar an approach procedural service is provided by Inverness Approach.</li><li>• Tfc inbound to Inverness via N560:<ul style="list-style-type: none"><li>(i) Tfc from the South has a clearance limit of GUSSI, descent clearance will be issued by Scottish Control to be level by GUSSI unless otherwise instructed by ATC.</li><li>(ii) Tfc from the North has a clearance limit of BONBY, descent clearance will be issued by Scottish Control to be level by BONBY unless otherwise instructed by ATC. Scottish Control will instruct tfc when to contact Inverness Approach or Inverness Radar (122.600 MHz), this will normally be at or before 40 nm from RIMOL.</li></ul></li><li>• Due to ATC operational requirements, the cruising level allocation between RIMOL and BONBY is inappropriate to the MAG Track.</li><li>• En-route Danger Area EG D703 to the east between RIMOL and WIK.</li></ul> |                          |                               |         |     |                                |                                 |                   |                                   |                           |   |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                             | Route Usage Notes             |         |                                |                                 |                   |  |  |   |   |
|--|-----------------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------|--|--|---|---|
| Significant Point Name   |                             | Significant Point Coordinates |         |                                |                                 |                   |  |  |   |   |
| (RNP/RNAV Type)  | Track<br>MAG<br>↓/↑         | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |  | Controlling Unit/<br>Airspace Class/<br>Remarks |   |
|  |                             |                               |         |                                |                                 |                   | ↓  | ↑  |   |   |
| N580<br>(RNP/RNAV)   |                             |                               |         |                                |                                 |                   |  |  |   |   |
| △  | GLASGOW<br>VOR/DME<br>(GOW) | 555213.81N 0042644.61W        |         |                                |                                 |                   |  | Extremity of N580.<br>Intersection with L612, UL602,<br>UL612 and UL983. |   |   |
| (RNAV 5)   |                             | 299°/<br>118°                 | 13.0 nm |                                | FL 255 /<br>5500 ft<br>ALT      |                   | 10 nm  | even<br>FL 240 /<br>FL 80  | odd<br>FL 250 /<br>FL 70                        | FL 255/FL 195 Class C,<br>FL 195/Alt 5500 ft Class E and<br>TMZ.<br><b>(See Note)</b><br><br>Within the confines of the<br>Glasgow CTR and Scottish<br>TMA, N580 assumes the air-<br>space classification of the<br>Glasgow CTR and Scottish<br>TMA.<br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels). |
| △  | CLYDE                       | 555748N 0044732W              |         |                                |                                 |                   |  |  |   |   |
| (RNAV 5)   |                             | 298°/<br>118°                 | 12.0 nm |                                | FL 255 /<br>5500 ft<br>ALT      |                   | 10 nm  | even<br>FL 240 /<br>FL 60  | odd<br>FL 250 /<br>FL 70                        | FL 255/FL 195 Class C,<br>FL 195/Alt 5500 ft Class E and<br>TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels).  |
| △  | FYNER                       | 560256N 0050655W              |         |                                |                                 |                   |  |  |   |   |
| (RNAV 5)   |                             | 298°/<br>118°                 | 26.8 nm |                                | FL 255 /<br>5500 ft<br>ALT      |                   | 10 nm  | even<br>FL 240 /<br>FL 60  | odd<br>FL 250 /<br>FL 70                        | FL 255/FL 195 Class C,<br>FL 195/Alt 5500 ft Class E and<br>TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels).  |
| △  | BRUCE                       | 561411N 0055028W              |         |                                |                                 |                   |  |  |   | DRA Arrival and Departure<br>Transition Fix.<br>Intersection with Y958.   |
| (RNAV 5)   |                             | 298°/<br>118°                 | 37.8 nm |                                | FL 255 /<br>FL 115              |                   | 10 nm  | even<br>FL 240 /<br>FL 120   | odd<br>FL 250 /<br>FL 130                       | FL 255/FL 195 Class C,<br>FL 195/FL 115 Class E and<br>TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels).   |
| △  | TIREE<br>VOR/DME<br>(TIR)   | 562935.56N 0065232.12W        |         |                                |                                 |                   |  |  |   | Extremity of N580.  |
| Route Remarks:   |                             |                               |         |                                |                                 |                   |  |  |   |   |
| <ul style="list-style-type: none"><li>For use by t/c climbing to or descending from the Shanwick OCA Boundary and the NOTA.</li><li><b>Note:</b> Transponder carriage and operation required within that part of N580 notified as Class E and TMZ.</li></ul> |                             |                               |         |                                |                                 |                   |  |  |   |   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                                    | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--------------------------------------|------------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name               |                                    | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)                      |                                    | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                                    |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|                                      |                                    | ↓                             |         |     |                                |                                 |                   |                                   | ↑   |  |
| N601<br>(RNP/RNAV)                   |                                    |                               |         |     |                                |                                 |                   |                                   |   |  |
| △                                    | SANDY                              | 510351N 0010403E              |         |     |                                |                                 |                   |                                   | Northbound route only btn<br>SANDY and DET.<br>Extremity of N601. |  |
| (RNAV 5)                             |                                    | 309°/-                        | 22.9 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Dual designation with N57 btn<br>SANDY and DET.<br><br>London Control (Swanwick)<br>Freq: 134.900 (FL 195 and<br>above);<br>Freq: 120.525 (Below FL 195).   |
| △                                    | DETLING<br>VOR/DME<br>(DET)        | 511814.41N 0003550.19E        |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                                    | 316°/<br>136°                 | 16.1 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Between DET and 5 nm be-<br>fore BAKER:<br>London Control (Swanwick)<br>Freq: 134.900 (FL 175 and<br>above);<br>Freq: 120.525 (Below FL 175).<br><br>Between 5 nm before BAKER<br>and BAKER:<br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 127.955 (Below FL 215<br>to FL 175);<br>Freq: 120.525 (Below FL 175).  |
| △                                    | BAKER                              | 512942N 0001753E              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                                    | 316°/<br>136°                 | 21.5 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Between BAKER and abm<br>LAM:<br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 127.955 (Below FL 215<br>to FL 175);<br>Freq: 118.825 (Below FL 175).<br><br>Between abm LAM and BPK:<br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 127.955 (Below FL 215<br>to FL 175);<br>Freq: 129.280 (Below FL 175<br>to FL 115);<br>Freq: 118.825 (Below FL 115). |
| △                                    | BROOKMANS PARK<br>VOR/DME<br>(BPK) | 514459.05N 0000624.25W        |         |     |                                |                                 |                   |                                   | Westbound route only btn<br>BPK and TLA.                          |  |
| (RNAV 5)                             |                                    | 330°/-                        | 23.4 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Between BPK and 10 nm be-<br>fore POTON:<br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 119.775 (Below FL 215<br>to FL 155);<br>Freq: 131.130 (Below FL 155).  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                     | Route Usage Notes             |     |                                |                                 |                   |                                   |   |   |
|--------------------------------------|---------------------|-------------------------------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name               |                     | Significant Point Coordinates |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)                      | Track<br>MAG<br>↓/↑ | Dist                          | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                     |                               |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|                                      |                     |                               |     |                                |                                 |                   | ↓                                 | ↑ |   |
|                                      |                     |                               |     |                                |                                 |                   |                                   |   | Between 10 nm before<br>POTON and POTON:<br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215<br>to FL 155);<br>Freq: 131.130 (Below FL 155).        |
| △                                    | POTON               | 520504N 0002538W              |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             | 330°/-              | 9.8 nm                        |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.605 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215).  |
| △                                    | BEDFO               | 521330N 0003348W              |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             | 330°/-              | 9.4 nm                        |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.105 (FL 195 and<br>above);<br>Freq: 130.925 (Below FL 195).  |
| △                                    | EBOTO               | 522133N 0004140W              |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             | 330°/-              | 17.6 nm                       |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.105 (FL 195 and<br>above);<br>Freq: 130.925 (Below FL 195).  |
| △                                    | PIPIN               | 523636N 0005630W              |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             | 330°/-              | 9.2 nm                        |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.105 (FL 195 and<br>above);<br>Freq: 130.925 (Below FL 195).  |
| △                                    | LESTA               | 524427N 0010419W              |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             | 330°/-              | 15.7 nm                       |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |   | Intersection with P6 and Y250.<br><br>FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 119.525 (Below FL 195). |
| △                                    | ROBIN               | 525748N 0011745W              |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             | 330°/-              | 23.1 nm                       |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 119.525 (Below FL 195).                                       |
| △                                    | DISAL               | 531729N 0013751W              |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             | 330°/-              | 12.4 nm                       |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 119.525 (Below FL 195).                                       |
| △                                    | BOLBI               | 532800N 0014845W              |     |                                |                                 |                   |                                   |   |   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                               | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--------------------------------------|-------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name               |                               | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)                      |                               | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                               |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|                                      |                               |                               |         |     |                                |                                 |                   | ↓                                 | ↑ |  |
| (RNAV 5)                             |                               | 330°/-                        | 9.3 nm  |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 119.525 (Below FL 195).  |
|                                      | ULSAX                         | 533554N 0015700W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                               | 329°/-                        | 10.3 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).   |
| △                                    | POLE HILL<br>VOR/DME<br>(POL) | 534437.56N 0020611.98W        |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                               | 340°/-                        | 7.7 nm  |     | FL 245 /<br>FL 95              |                                 | 8 nm              | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).   |
| △                                    | NELSA                         | 535148N 0021105W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                               | 340°/-                        | 9.9 nm  |     | FL 245 /<br>FL 95              |                                 | 8 nm              | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).   |
| △                                    | RIBEL                         | 540058N 0021723W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                               | 340°/-                        | 9.1 nm  |     | FL 245 /<br>FL 95              |                                 | 8 nm              | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).   |
|                                      | ERGAB                         | 540922N 0022312W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                               | 340°/-                        | 22.3 nm |     | FL 245 /<br>FL 95              |                                 | 8 nm              | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br>(Variable lower limit; see<br>Route Remarks)<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195). |
| △                                    | SHAPP                         | 543000N 0023738W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                               | 339°/-                        | 13.5 nm |     | FL 245 /<br>FL 95              |                                 | 8 nm              | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br>(Variable lower limit; see<br>Route Remarks)<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).   |
| △                                    | ABEVI                         | 544227N 0024629W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                               | 339°/-                        | 11.0 nm |     | FL 245 /<br>FL 95              |                                 | 8 nm              | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br>(Variable lower limit; see<br>Route Remarks)<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                           | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |   |
|---|---------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|---|
| Significant Point Name  |                           | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |   |
| (RNP/RNAV Type)   |                           | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|   |                           |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |   |
| Δ   | INPIP                     | 545236N 0025346W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)  |                           | 339°/-                        | 16.4 nm |     | FL 245 /<br>FL 95              |                                 | 8 nm              | even<br>FL 240 /<br>FL 100        |                          | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br>(Variable lower limit; see<br>Route Remarks)<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).          |
|   | UTOGU                     | 550740N 0030443W              |         |     |                                |                                 |                   |                                   |                          | The change in the lower limit<br>occurs along the straight line<br>joining:<br>550858N 0030000W -<br>550529N 0031233W and not<br>at the usual right angle to the<br>AWY CL. |
| (RNAV 5)  |                           | 339°/-                        | 1.4 nm  |     | FL 245 /<br>FL 85              |                                 | 8 nm              | even<br>FL 240 /<br>FL 100        |                          | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).  |
| Δ   | INREV                     | 550857N 0030539W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)  |                           | 339°/-                        | 9.8 nm  |     | FL 245 /<br>FL 85              |                                 | 8 nm              | even<br>FL 240 /<br>FL 100        |                          | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).  |
| Δ   | ESKDO                     | 551756N 0031215W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)  |                           | 339°/-                        | 5.1 nm  |     | FL 245 /<br>FL 85              |                                 | 8 nm              | even<br>FL 240 /<br>FL 100        |                          | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).  |
|   | IPDOR                     | 552239N 0031545W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)  |                           | 339°/-                        | 7.9 nm  |     | FL 245 /<br>FL 85              |                                 | 8 nm              | even<br>FL 240 /<br>FL 100        |                          | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).  |
| Δ   | TALLA<br>VOR/DME<br>(TLA) | 552956.92N 0032110.20W        |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)  |                           | 347°/<br>167°                 | 43.4 nm |     | FL 245 /<br>6000 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/Alt 6000 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).  |
| Δ   | GRICE                     | 561148N 0034108W              |         |     |                                |                                 |                   |                                   |                          | Intersection with P600.<br>Extremity of N601.   |
| Route Remarks:  |                           |                               |         |     |                                |                                 |                   |                                   |                          |   |
| <ul style="list-style-type: none"><li><b>Variable lower limit:</b> Daily from 0700 to 2000 (1hr earlier in summer) btn ERGAB and UTOGU the lower limit is FL 125 making FL 140 the Mnm FL available.</li><li>Three areas of controlled airspace Class C are part of N601:<br/><br/>Area A (Class C FL 115 - FL 155)<br/>522632N 0003702W - 522630N 0002732W -<br/>522106N 0002214W - 521104N 0002159W -<br/>522632N 0003702W.<br/><br/>Area B (Class C FL 145 - FL 245)<br/>522632N 0003702W - 522630N 0002732W -<br/>524757N 0004834W - 524523N 0005538W -<br/>522632N 0003702W.<br/><br/>Area C (Class C FL 195 - FL 245)<br/>524757N 0004834W - 524523N 0005538W -<br/>532003N 0013042W - 532109N 0012904W -<br/>532012N 0011840W - 531755N 0010606W -</li></ul> |                           |                               |         |     |                                |                                 |                   |                                   |                          |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                    | Route Usage Notes             |     |                                |                                 |                   |                                   |   |   |
|---|--------------------|-------------------------------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name  |                    | Significant Point Coordinates |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)   | Track<br>MAG<br>↓↑ | Dist                          | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks |
|   |                    |                               |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|   |                    |                               |     |                                |                                 |                   | ↓                                 | ↑ |   |
| 530016N 0010043W - 524757N 0004834W.  |                    |                               |     |                                |                                 |                   |                                   |   |   |
| Areas A, B and C are available H24.   |                    |                               |     |                                |                                 |                   |                                   |   |   |
| <ul style="list-style-type: none"><li>An area of Class C controlled airspace, base level FL 195 bounded by great circle lines joining:<br/>545610N 0024159W - 544628N 0023625W -<br/>541500N 0021001W - 541113N 0021858W -<br/>545442N 0024940W - 545610N 0024159W,<br/>is part of N601.</li><li>Btn the hours of 1700 to 0900 each day Mon - Fri and 1700 Fri to 0900 Mon + PH (1 hr earlier in summer) (See GEN 2.1, paragraph 6 for PHs) <b>two</b> areas of controlled airspace, Class C above FL 195 and Class D below FL 195, are part of N601.</li></ul>   |                    |                               |     |                                |                                 |                   |                                   |   |   |
| Area 1, base level FL 165, bounded by great circle lines joining:<br>551735N 0025427W - 551724N 0024532W -<br>551241N 0023052W - 545912N 0022555W -<br>545610N 0024159W - 551735N 0025427W.   |                    |                               |     |                                |                                 |                   |                                   |   |   |
| Area 2, base level FL 195, bounded by great circle lines joining:<br>545912N 0022555W - 541500N 0021001W -<br>544628N 0023625W - 545610N 0024159W -<br>545912N 0022555W.  |                    |                               |     |                                |                                 |                   |                                   |   |   |
| Part or all of these two areas of airspace may not be avbl when MoD requires access to the area. Non availability of airspace will be notified to GAT by Scottish Control (Prestwick).  |                    |                               |     |                                |                                 |                   |                                   |   |   |
| <ul style="list-style-type: none"><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, with variable lower limit as specified for N601, bounded by great circle lines joining:<br/>550449N 0031204W - 542007N 0023955W -<br/>544500N 0031150W - 550449N 0031204W,<br/>is part of N601.</li><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, base level FL 165 bounded by great circle lines joining:<br/>551742N 0030000W - 551735N 0025427W -<br/>545610N 0024159W - 545442N 0024940W -<br/>550858N 0030000W - 551742N 0030000W,<br/>is part of N601.<br/>Part or all of this airspace may not be avbl when activity associated with D510, Spadeadam requires access to the area. Non availability of airspace will be notified to GAT by Scottish Control (Prestwick).</li><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, base level FL 85, bounded by great circle lines joining:<br/>552700N 0030000W - 550858N 0030000W -<br/>552358N 0031101W - 552700N 0030000W,<br/>is part of N601.</li><li>The portion of airspace formed by joining positions:</li></ul> |                    |                               |     |                                |                                 |                   |                                   |   |   |
| <b>Camphill Box</b>   |                    |                               |     |                                |                                 |                   |                                   |   |   |
| 532719N 0014617W - 533017N 0011641W -<br>531938N 0011532W - 532012N 0011840W -<br>532110N 0012901W - 532002.91N 0013042.10W -<br>531418.31N 0012448.84W - 531137N 0013631W -<br>532719N 0014617W,<br>from AWY base level to an upper limit of FL 100, occasionally to FL 190 on request;  |                    |                               |     |                                |                                 |                   |                                   |   |   |
| is notified for the purposes of SERA.6001(a) Classification of Airspaces in accordance with the conditions established in the Letter of Agreement (LOA) btn the Derbyshire and Lancashire (Camphill) Gliding Club, British Gliding Association (BGA), Leeds Bradford International Airport, and Scottish Control (Prestwick).   |                    |                               |     |                                |                                 |                   |                                   |   |   |
| <ul style="list-style-type: none"><li>Between POL and TLA the airway is 8 nm wide with eastern edge of the airway 3 nm east of the centre-line.</li></ul>   |                    |                               |     |                                |                                 |                   |                                   |   |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                                 | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |
|--|---------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name   |                                 | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)  |                                 | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|  |                                 |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|  |                                 |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |   |
| N621<br>(RNP/RNAV)   |                                 |                               |         |     |                                |                                 |                   |                                   |   |   |
| △  | LELNA                           | 495857N 0020623W              |         |     |                                |                                 |                   |                                   | Westbound (southbound)<br>route only.<br>FIR Boundary.<br>For continuation see AIP<br>France. |   |
| (RNAV 5)   |                                 | -186°                         | 15.9 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 210   | Class C.<br><br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).  |
| △  | MARUK                           | 501447N 0020420W              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)   |                                 | -199°                         | 10.7 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 210   | Class C.<br><br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).  |
| △  | BEVEL                           | 502454N 0015907W              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)   |                                 | -199°                         | 16.4 nm |     | FL 245 /<br>FL 165             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 170   | FL 245/FL 195 Class C,<br>FL 195/FL 165 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).  |
| △  | KAPEX                           | 504030N 0015100W              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)   |                                 | -230°                         | 25.5 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 170   | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).  |
| △  | SOUTHAMPTON<br>VOR/DME<br>(SAM) | 505718.90N 0012042.20W        |         |     |                                |                                 |                   |                                   | Intersection with L620.   |   |
| (RNAV 5)   |                                 | -214°                         | 24 nm   |     | FL 245 /<br>FL 75              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (FL 155 and<br>above);<br>Freq: 134.125 (Below FL 155). |
| △  | GOGSI                           | 511727N 0010002W              |         |     |                                |                                 |                   |                                   | Extremity of N621.  |   |
| Route Remarks:   |                                 |                               |         |     |                                |                                 |                   |                                   |   |   |
| <ul style="list-style-type: none"><li>If necessary, traffic will be radar vectored to remain 5 nm from eastern edge of EG D023 until 2000 ft above the notified level of Unusual Air Activity.</li><li>Due to Brest ACC operational requirements, the cruising level allocation for the entire route is inappropriate to the MAG Track.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                                 |                               |         |     |                                |                                 |                   |                                   |   |   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |  |  |   |  |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|--|---|--|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |  |  |   |  |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|                                      |                              |                               |         |     |                                |                                 |                   | ↓  | ↑  |   |  |
| N859<br>(RNP/RNAV)                   |                              |                               |         |     |                                |                                 |                   |  |  |   |  |
| △                                    | SITET                        | 500600N 0000000E              |         |     |                                |                                 |                   |  | Eastbound (southbound)<br>route only btn CPT and<br>SITET.<br>FIR Boundary.<br>Continues as UN859 and in-<br>tersects with A34 (See AIP<br>France).          |   |  |
| (RNAV 5)                             |                              | -/156°                        | 7.2 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Dual designation with L151<br>btn SITET and DRAKE.<br><br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).   |  |
| △                                    | DRAKE                        | 501234N 0000434W              |         |     |                                |                                 |                   |  |  |   |  |
| (RNAV 5)                             |                              | -/147°                        | 31.7 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between 25 nm before<br>DRAKE and DRAKE:<br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).<br><br>Between INKEK and 25 nm<br>before DRAKE:<br>London Control (Swanwick)<br>Freq: 135.050 (FL 175 and<br>above);<br>Freq: 133.175 (Below FL 175). |  |
| △                                    | INKEK                        | 503853N 0003209W              |         |     |                                |                                 |                   |  | Base level change point is not<br>at right angles to the CL of<br>N859 and extends between:<br>503606N 0003840W -<br>504012N 0002904W -<br>504114N 0002509W. |   |  |
| (RNAV 5)                             |                              | -/147°                        | 2.9 nm  |     | FL 245 /<br>FL 65              |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (FL 175 and<br>above);<br>Freq: 133.175 (Below FL 175).   |  |
| △                                    | EVEXU                        | 504116N 0003441W              |         |     |                                |                                 |                   |  |  |   |  |
| (RNAV 5)                             |                              | -/147°                        | 12.1 nm |     | FL 245 /<br>FL 65              |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>Dual designation with N20 btn<br>EVEXU and GWC.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 175);<br>Freq: 133.175 (Below FL 175).  |  |
| △                                    | GOODWOOD<br>VOR/DME<br>(GWC) | 505118.78N 0004524.25W        |         |     |                                |                                 |                   |  |  |   |  |
| (RNAV 5)                             |                              | -/156°                        | 26.3 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between 10 nm before GWC<br>and GWC:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 175);  |  |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |   |
|--------------------------------------|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|---|
| Significant Point Name               |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |   |
| (RNP/RNAV Type)                      |                             | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |   |
|                                      |                             |                               |         |     |                                |                                 |                   | ↓                                 | ↑                        | Freq: 133.175 (Below FL 175).<br><br>Between VAPID and 10 nm<br>before GWC:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 175);<br>Freq: 129.080 (Below FL 175<br>to FL 105);<br>Freq: 134.125 (Below FL 105).   |
| △                                    | VAPID                       | 511514N 0010242W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |                             | -156°                         | 15.7 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between 5 nm after CPT and<br>VAPID:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 155);<br>Freq: 129.080 (Below FL 155<br>to FL 105);<br>Freq: 134.125 (Below FL 105).<br><br>Between CPT and 5 nm after<br>CPT:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 155);<br>Freq: 129.080 (Below FL 155<br>to FL 135);<br>Freq: 134.125 (Below FL 135). |
| △                                    | COMPTON<br>VOR/DME<br>(CPT) | 512929.66N 0011310.89W        |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |                             | 343°/<br>163°                 | 10 nm   |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 155);<br>Freq: 129.080 (Below FL 155<br>to FL 135);<br>Freq: 134.125 (Below FL 135).   |
| △                                    | DIGUT                       | 513901N 0011759W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |                             | 343°/<br>163°                 | 7.6 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between DIGUT and 5 nm<br>from DIGUT:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 133.080 (Below FL 215<br>to FL 155);<br>Freq: 131.130 (Below FL 155<br>to FL 125);<br>Freq: 119.775 (Below FL 125).<br><br>Between 5 nm from DIGUT<br>and KIDLI:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 133.080 (Below FL 215).   |
| △                                    | KIDLI                       | 514617N 0012141W              |         |     |                                |                                 |                   |                                   |                          |   |
|                                      |                             | Intersection with L151.       |         |     |                                |                                 |                   |                                   |                          |   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |   |
|---|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|---|
| Significant Point Name  |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |   |
| (RNP/RNAV Type)   |                             | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|   |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |   |
|   |                             |                               |         |     |                                |                                 |                   | ↓                                 | ↑                        |   |
| (RNAV 5)  |                             | 343°/<br>163°                 | 36.9 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between KIDLI and 10 nm<br>from KIDLI:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 133.080 (Below FL 215).<br><br>Between 10 nm from KIDLI<br>and 13 nm before HON:<br>London Control (Swanwick)<br>Freq: 134.390 (FL 225 and<br>above);<br>Freq: 133.080 (Below FL 225).<br><br>Between 13 nm before HON<br>and HON:<br>London Control (Swanwick)<br>Freq: 134.390 (FL 215 and<br>above);<br>Freq: 133.080 (Below FL 215).                      |
| △   | HONILEY<br>VOR/DME<br>(HON) | 522124.04N 0013949.41W        |         |     |                                |                                 |                   |                                   |                          | <b>Southbound route only btm<br/>SANBA and HON.</b><br>Intersection with L10, L15,<br>L612 and P155.  |
| (RNAV 5)  |                             | -154°                         | 44.1 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between abm EGBB and<br>HON:<br>London Control (Swanwick)<br>Freq: 134.390 (FL 195 and<br>above);<br>Freq: 133.080 (Below FL 195).<br><br>Between 10 nm after UTUXA<br>and abm EGBB:<br>London Control (Swanwick)<br>Freq: 134.390 (FL 195 and<br>above).<br>Scottish Control (Prestwick)<br>Freq: 134.425 (Below FL 195).<br><br>Between UTUXA and 10 nm<br>after UTUXA:<br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 134.425 (Below FL 195). |
| △   | UTUXA                       | 530030N 0021313W              |         |     |                                |                                 |                   |                                   |                          | Intersection with P18.  |
| (RNAV 5)  |                             | -154°                         | 8.9 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 134.425 (Below FL 195).  |
| △   | SANBA                       | 530822N 0022003W              |         |     |                                |                                 |                   |                                   |                          | Extremity of N859.  |
| Route Remarks:  |                             |                               |         |     |                                |                                 |                   |                                   |                          |   |
| <ul style="list-style-type: none"><li>An area of controlled Class A airspace below FL 85, base FL 65, bounded by great circle lines joining:<br/>504625N 0003040W - 504626N 0002908W -<br/>504132N 0002357W - 504012N 0002904W -<br/>504140N 0002537W - 504625N 0003040W,<br/>is part of N859.</li><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 85, bounded by great circle lines joining:<br/>513911N 0012629W - 513601N 0012453W -<br/>513640N 0013011W - 513911N 0012629W,<br/>is part of N859.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                             |                               |         |     |                                |                                 |                   |                                   |                          |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                                | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |   |
|--------------------------------------|--------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|---|
| Significant Point Name               |                                | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |   |
| (RNP/RNAV Type)                      |                                | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                                |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |   |
|                                      |                                |                               |         |     |                                |                                 |                   | ↓                                 | ↑  |   |
| N862<br>(RNP/RNAV)                   |                                |                               |         |     |                                |                                 |                   |                                   |  |   |
| △                                    | SKESO                          | 494929N 0030203W              |         |     |                                |                                 |                   |                                   | Available H24 SKESO - BHD.<br>FIR Boundary.<br>Continues as UN862 and in-<br>tersects with A25, UN90 and<br>UY29 (see AIP France).   |   |
| (RNAV 5)                             |                                | 334°/<br>154°                 | 11.8 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between London/Brest FIR<br>Bdry and 500000N:<br>Jersey Control<br>Freq: 125.200 (All Levels).   |
| △                                    | SKERY                          | 500000N 0031023W              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)                             |                                | 334°/<br>154°                 | 26.9 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 126.075 (All Levels).   |
| △                                    | BERRY HEAD<br>VOR/DME<br>(BHD) | 502354.98N 0032937.46W        |         |     |                                |                                 |                   |                                   | Southbound route only btn<br>WAL and BHD.<br>ERNOK - BHD available <b>only</b><br>during:<br>1600 Fri to 0800 Mon Winter<br>(Summer 1hr earlier).<br>Intersection with N864. |   |
| (RNAV 5)                             |                                | -/200°                        | 57.2 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 110  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Between BHD and abm<br>EGTE:<br>London Control (Swanwick)<br>Freq: 126.075 (All Levels).<br><br>Between abeam EGTE and<br>LAMAT:<br>0600 - 2300 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 or 126.075<br>(Above FL 165);<br>Cardiff ATC<br>Freq: 125.850 (FL 165 and<br>below).<br>2300 - 0600 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels). |
| △                                    | LAMAT                          | 511807N 0030103W              |         |     |                                |                                 |                   |                                   | Intersection with N90.   |   |
| (RNAV 5)                             |                                | -/188°                        | 23.6 nm |     | FL 245 /<br>FL 105             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 110  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>0600 - 2300 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 or 126.075<br>(Above FL 165);<br>Cardiff ATC<br>Freq: 125.850 (FL 165 and<br>below).<br>2300 - 0600 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels).   |
| △                                    | ERNOK                          | 514130N 0025644W              |         |     |                                |                                 |                   |                                   | Available H24 WAL - ERNOK.   |   |
| (RNAV 5)                             |                                | -/188°                        | 1.1 nm  |     | FL 245 /<br>FL 105             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 110  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>0600 - 2300 Winter (Summer<br>1hr earlier)  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes   |         |     |                                |                                 |                   |                                   |                           |   |
|--------------------------------------|-------|---|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|
| Significant Point Name               |       | Significant Point Coordinates   |         |     |                                |                                 |                   |                                   |                           |   |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑  | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |       |   |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |
|                                      |       |   |         |     |                                |                                 |                   | ↓                                 | ↑                         | London Control (Swanwick)<br>Freq: 134.750 or 126.075<br>(Above FL 165);<br>Cardiff ATC<br>Freq: 125.850 (FL 165 and<br>below).<br>2300 - 0600 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels).   |
| △                                    | PERUP | 514234N 0025632W  |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |       | -/184°  | 9.6 nm  |     | FL 245 /<br>FL 105             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>0600 - 2300 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 or 126.075<br>(Above FL 165);<br>Cardiff ATC<br>Freq: 125.850 (FL 165 and<br>below).<br>2300 - 0600 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels). |
| △                                    | DOBEM | 515211N 0025545W  |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |       | -/184°  | 4.8 nm  |     | FL 245 /<br>FL 105             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>0600 - 2300 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 or 126.075<br>(Above FL 165);<br>Cardiff ATC<br>Freq: 125.850 (FL 165 and<br>below).<br>2300 - 0600 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels). |
| △                                    | RILES | 515655N 0025522W  |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |       | -/185°  | 10.0 nm |     | FL 245 /<br>FL 145             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).  |
| △                                    | AMRAL | 520653N 0025433W  |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |       | -/185°  | 23.9 nm |     | FL 245 /<br>FL 145             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).  |
| △                                    | RETSI | 523042N 0025233W  |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |       | -/180°  | 12.0 nm |     | FL 245 /<br>FL 145             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).  |
| △                                    | NENVO | 524238N 0025315W  |         |     |                                |                                 |                   |                                   |                           |   |
|                                      |       | The change in the lower limit<br>occurs along the straight line<br>joining:<br>524259N 0030447W -<br>524223N 0024501W and not<br>at the usual right angle to the<br>AWY CL. |         |     |                                |                                 |                   |                                   |                           |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |   |
|--|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|
| Significant Point Name   |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |   |
| (RNP/RNAV Type)  |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|  |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |
|  |                              |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         |   |
| (RNAV 5)   |                              | -/180°                        | 5.4 nm  |     | FL 245 /<br>FL 125             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 130 | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).  |
| △  | ROBVA                        | 524804N 0025334W              |         |     |                                |                                 |                   |                                   |                           | The change in the lower limit occurs along the straight line joining:<br>524825N 0030508W -<br>524749N 0024519W and not at the usual right angle to the AWY CL. |
| (RNAV 5)   |                              | -/180°                        | 5.6 nm  |     | FL 245 /<br>FL 95              |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).   |
| △  | KARNO                        | 525340N 0025354W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)   |                              | -/185°                        | 8.2 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and above);<br>Freq: 128.050 (Below FL 195).       |
| △  | RISLA                        | 530151N 0025312W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)   |                              | -/185°                        | 2.8 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and above);<br>Freq: 128.050 (Below FL 195).       |
| △  | NOKIN                        | 530436N 0025258W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)   |                              | -/156°                        | 21.0 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and above);<br>Freq: 128.050 (Below FL 195).       |
| △  | WALLASEY<br>VOR/DME<br>(WAL) | 532330.97N 0030804.06W        |         |     |                                |                                 |                   |                                   |                           | Extremity of N862.  |
| Route Remarks:   |                              |                               |         |     |                                |                                 |                   |                                   |                           |   |
| <ul style="list-style-type: none"><li>AWY is 12 nm wide between LAMAT and KARNO, the western edge of the AWY is 7 nm west of the CL.</li><li>Due to ATC operational requirements, the cruising level allocation between NOKIN and BHD is inappropriate to the MAG Track.</li><li>The following areas, within N862 between the airway base level and FL 195, are notified for the purposes of SERA.6001(a) Classification of Airspaces in accordance with conditions established in a Letter of Agreement (LOA) between the British Gliding Association (BGA) and London Control (Swanwick), Swanwick Mil and Cardiff ATC:<br/><br/><b>MADLEY Gliding Area</b> bounded by great circle lines joining:<br/>520734N 0025744W - 520712N 0024624W -<br/>515640N 0024718W - 515701N 0025836W -<br/>520734N 0025744W.<br/><br/><b>RAGLAN Gliding Area</b> bounded by great circle lines joining:<br/>515701N 0025836W - 515640N 0024718W -<br/>515040N 0024748W - 515153N 0025901W -<br/>515701N 0025836W.<br/>During periods of activation of these areas ATC will direct aircraft towards TALGA to remain clear of the active area.</li></ul> |                              |                               |         |     |                                |                                 |                   |                                   |                           |   |
| <ul style="list-style-type: none"><li>See also ENR 1.1, paragraph 1.1.3.</li></ul>   |                              |                               |         |     |                                |                                 |                   |                                   |                           |   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name   |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)  |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|  |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
| N863<br>(RNP/RNAV)   |       |                               |         |     |                                |                                 |                   |                                   |   |  |
| △  | KOTEM | 500000N 0010314W              |         |     |                                |                                 |                   |                                   | Eastbound (northbound)<br>route only.<br>FIR Boundary.<br>For continuation see AIP<br>France. |  |
| (RNAV 5)   |       | 006°/-                        | 20.2 nm |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |   | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 134.440.  |
| △  | PILIP | 502003N 0010026W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)   |       | 006°/-                        | 17.0 nm |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |   | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 134.440.  |
| △  | SUSIX | 503700N 0005803W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)   |       | 006°/-                        | 12.3 nm |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |   | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.440 (FL 185 and<br>above);<br>Freq: 127.825 (Below FL 185<br>to FL 105);<br>Freq: 133.175 (Below FL 105). |
| △  | AVANT | 504912N 0005618W              |         |     |                                |                                 |                   |                                   | Extremity of N863.  |  |
| Route Remarks:   |       |                               |         |     |                                |                                 |                   |                                   |   |  |
| <ul style="list-style-type: none"><li>• <b>CDR Category One and Three (CDR 1 and 3)</b> (ENR 1.1, paragraph 1.1.7 refers).<br/><b>CDR 1 and 3 above FL 195 H24.</b><br/><b>CDR 3 below FL 195.</b><br/>The use of this airway may be interrupted when MoD (Navy) requires the activation of Danger Areas EG D037 and/or D038 above ALT 19000 ft. Closures will be notified by NOTAM and CRAM. There may also be circumstances when London Control (Swanwick) is given a minimum of only 2 hours notice of Danger Area activity.<br/>Non-availability of N863 will be notified to GAT by 'Brest Control' and tfc will be routed to ORIST Y110 and L980.</li><li>• Due to Brest ACC operational requirements, cruising levels are inappropriate to the MAG TR btn KOTEM and AVANT.</li><li>• An area of controlled airspace, Class C above FL 195 and Class A below FL 195, lower limit FL 125, bounded by:<br/>500000N 0011504W - 502917N 0011220W -<br/>503350N 0010622W - 500000N 0011101W,<br/>is part of N863.</li><li>• See also ENR 1.1, paragraph 1.1.3.</li></ul> |       |                               |         |     |                                |                                 |                   |                                   |   |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                                | Route Usage Notes             |         |     |                                |                                     |                   |                                   |                          |  |  |
|--------------------------------------|--------------------------------|-------------------------------|---------|-----|--------------------------------|-------------------------------------|-------------------|-----------------------------------|--------------------------|--|--|
| Significant Point Name               |                                | Significant Point Coordinates |         |     |                                |                                     |                   |                                   |                          |  |  |
| (RNP/RNAV Type)                      |                                | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude     | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks  |  |
|                                      |                                |                               |         |     |                                |                                     |                   | IFR cruising<br>levels<br>max/min |                          |  |  |
| N864<br>(RNP/RNAV)                   |                                |                               |         |     |                                |                                     |                   |                                   |                          |  |  |
| △                                    | BERRY HEAD<br>VOR/DME<br>(BHD) | 502354.98N 0032937.46W        |         |     |                                |                                     |                   |                                   |                          | Extremity of N864.<br>Intersection with N862.  |  |
| (RNAV 5)                             |                                | 008°/<br>188°                 | 10.6 nm |     | FL 245 /<br>FL 65              | Minimum<br>limit:<br>5500 ft<br>ALT | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 126.075 (All Levels).  |  |
| △                                    | DAWLY                          | 503427N 0032750W              |         |     |                                |                                     |                   |                                   |                          |  |  |
| (RNAV 5)                             |                                | 008°/<br>188°                 | 5.6 nm  |     | FL 245 /<br>FL 65              | Minimum<br>limit:<br>5500 ft<br>ALT | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 126.075 (All Levels).  |  |
| △                                    | TINAN                          | 504000N 0032654W              |         |     |                                |                                     |                   |                                   |                          |  |  |
| (RNAV 5)                             |                                | 008°/<br>188°                 | 8.6 nm  |     | FL 245 /<br>FL 65              | Minimum<br>limit:<br>5500 ft<br>ALT | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>Between TINAN and OHD<br>EGTE:<br>London Control (Swanwick)<br>Freq: 126.075 (All Levels).<br><br>Between OHD EGTE and<br>TIVER:<br>0600 - 2300 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 126.075 (Above FL<br>165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and<br>below).<br><br>2300 - 0600 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels). |  |
| △                                    | TIVER                          | 504833N 0032526W              |         |     |                                |                                     |                   |                                   |                          |  |  |
| (RNAV 5)                             |                                | 008°/<br>188°                 | 2.3 nm  |     | FL 245 /<br>FL 65              | Minimum<br>limit:<br>5500 ft<br>ALT | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>0600 - 2300 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 126.075 (Above FL<br>165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and<br>below).<br><br>2300 - 0600 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels).   |  |
| △                                    | ATWEL                          | 505051N 0032502W              |         |     |                                |                                     |                   |                                   |                          |  |  |
| (RNAV 5)                             |                                | 008°/<br>188°                 | 10.0 nm |     | FL 245 /<br>FL 65              | Minimum<br>limit:<br>5500 ft<br>ALT | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>0600 - 2300 Winter (Summer<br>1hr earlier)<br>London Control (Swanwick)<br>Freq: 126.075 (Above FL<br>165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and<br>below).   |  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                            | Route Usage Notes             |         |     |                                |                                     |                   |  |                          |   |
|--------------------------------------|----------------------------|-------------------------------|---------|-----|--------------------------------|-------------------------------------|-------------------|--|--------------------------|---|
| Significant Point Name               |                            | Significant Point Coordinates |         |     |                                |                                     |                   |  |                          |   |
| (RNP/RNAV Type)                      |                            | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude     | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                            |                               |         |     |                                |                                     |                   | ↓  | ↑                        |   |
|                                      |                            |                               |         |     |                                |                                     |                   |  |                          | 2300 - 0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels).   |
| △                                    | MULIT                      | 510047N 0032319W              |         |     |                                |                                     |                   |  |                          |   |
| (RNAV 5)                             |                            | 008°/<br>188°                 | 10.0 nm |     | FL 245 /<br>FL 65              | Minimum<br>limit:<br>5500 ft<br>ALT | 10 nm             | even<br>FL 240 /<br>FL 80                      | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>0600 - 2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 126.075 (Above FL 165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and below).<br><br>2300 - 0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels).  |
| △                                    | EXMOR                      | 511043N 0032135W              |         |     |                                |                                     |                   |  |                          |   |
| (RNAV 5)                             |                            | 008°/<br>188°                 | 26.1 nm |     | FL 245 /<br>5500 ft<br>ALT     |                                     | 10 nm             | even<br>FL 240 /<br>FL 80                      | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A,<br>FL 105/Alt 5500 ft Class D.<br><br>0600 - 2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 126.075 (Above FL 165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and below).<br><br>2300 - 0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).  |
| △                                    | NUMPO                      | 513636N 0031701W              |         |     |                                |                                     |                   |  |                          |   |
| (RNAV 5)                             |                            | 008°/<br>188°                 | 7.0 nm  |     | FL 245 /<br>5500 ft<br>ALT     |                                     | 10 nm             | even<br>FL 240 /<br>FL 80                      | odd<br>FL 230 /<br>FL 70 | Between NUMPO and 513834N 0031640W:<br>FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A,<br>FL 105/Alt 5500 ft Class D.<br><br>Between 513834N 0031640W and BCN:<br>FL 245/FL 195 Class C,<br>FL 195/Alt 5500 ft Class A.<br><br>0600 - 2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (Above FL 165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and below).<br><br>2300 - 0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 133.600 (All Levels). |
| △                                    | BRECON<br>VOR/DME<br>(BCN) | 514331.89N 0031546.92W        |         |     |                                |                                     |                   |  |                          | Intersection with L9.   |
| (RNAV 5)                             |                            | 004°/<br>184°                 | 3.1 nm  |     | FL 245 /<br>5500 ft<br>ALT     |                                     | 10 nm             | even<br>FL 240 /<br>FL 80                      | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/Alt 5500 ft Class A.<br><br>0600 - 2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)   |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |        |     |                                |                                 |                   |                                   |                           |  |
|--------------------------------------|-------|-------------------------------|--------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|
| Significant Point Name               |       | Significant Point Coordinates |        |     |                                |                                 |                   |                                   |                           |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓/↑           | Dist   | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |        |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |
|                                      |       |                               |        |     |                                |                                 |                   | ↓                                 | ↑                         | Freq: 134.750 (Above FL 165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and below).<br><br>2300 - 0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).  |
| △                                    | DIKAS | 514637N 0031533W              |        |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |       | 004°/<br>184°                 | 1.9 nm |     | FL 245 /<br>5500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70  | FL 245/FL 195 Class C,<br>FL 195/Alt 5500 ft Class A.<br><br>0600-2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (Above FL 165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and below).<br><br>2300-0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 133.600 (All Levels). |
| △                                    | NAVOV | 514831N 0031525W              |        |     |                                |                                 |                   |                                   |                           | The airspace division at NAVOV is not at right angles to the AWY CL but is contiguous with the northern bdry of AWY L9.  |
| (RNAV 5)                             |       | 004°/<br>184°                 | 5.0 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>0600-2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (Above FL 165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and below).<br><br>2300-0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).       |
| △                                    | GOGIG | 515330N 0031502W              |        |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |       | 004°/<br>184°                 | 1.2 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>0600-2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (Above FL 165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and below).<br><br>2300-0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).       |
| △                                    | TOPRO | 515442N 0031457W              |        |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |       | 004°/<br>184°                 | 2.8 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>0600 - 2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                     | Route Usage Notes             |     |                                |                                     |                   |                                   |                          |   |
|--------------------------------------|---------------------|-------------------------------|-----|--------------------------------|-------------------------------------|-------------------|-----------------------------------|--------------------------|---|
| Significant Point Name               |                     | Significant Point Coordinates |     |                                |                                     |                   |                                   |                          |   |
| (RNP/RNAV Type)                      | Track<br>MAG<br>↓/↑ | Dist                          | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude     | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                     |                               |     |                                |                                     |                   | IFR cruising<br>levels<br>max/min |                          |   |
|                                      |                     |                               |     |                                |                                     |                   | ↓                                 | ↑                        | Freq: 134.750 (Above FL 165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and below).<br><br>2300 - 0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).   |
| △                                    | TALGA               | 515730N 0031444W              |     |                                |                                     |                   |                                   |                          | <b>Northbound route only btn TALGA and MONTY.</b>   |
| (RNAV 5)                             | 004°/-              | 10.6 nm                       |     | FL 245 /<br>FL 125             |                                     | 10 nm             | even<br>FL 240 /<br>FL 140        |                          | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>Between TALGA and 5 nm north of TALGA:<br>0600 - 2300 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 134.750 (Above FL 165);<br>Cardiff Approach<br>Freq: 125.850 (FL 165 and below).<br><br>2300 - 0600 Winter (Summer 1hr earlier)<br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).<br><br>Between 5 nm north of TALGA and UMOLO:<br>London Control (Swanwick)<br>Freq: 133.600 (All Levels). |
| △                                    | UMOLO               | 520803N 0031357W              |     |                                |                                     |                   |                                   |                          |   |
| (RNAV 5)                             | 004°/-              | 25.2 nm                       |     | FL 245 /<br>FL 145             |                                     | 10 nm             | even<br>FL 240 /<br>FL 160        |                          | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).  |
| △                                    | NITON               | 523312N 0031201W              |     |                                |                                     |                   |                                   |                          | Intersection with P17.  |
| (RNAV 5)                             | 004°/-              | 10 nm                         |     | FL 245 /<br>FL 145             |                                     | 10 nm             | even<br>FL 240 /<br>FL 160        |                          | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).  |
| △                                    | OKTEM               | 524310N 0031115W              |     |                                |                                     |                   |                                   |                          |   |
| (RNAV 5)                             | 004°/-              | 5.4 nm                        |     | FL 245 /<br>FL 105             |                                     | 10 nm             | even<br>FL 240 /<br>FL 120        |                          | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).  |
| △                                    | NILGI               | 524835N 0031050W              |     |                                |                                     |                   |                                   |                          |   |
| (RNAV 5)                             | 005°/-              | 5.0 nm                        |     | FL 245 /<br>FL 85              |                                     | 10 nm             | even<br>FL 240 /<br>FL 100        |                          | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).   |
| △                                    | MONTY               | 525334N 0031026W              |     |                                |                                     |                   |                                   |                          |   |
| (RNAV 5)                             | 004°/<br>185°       | 5.4 nm                        |     | FL 245 /<br>FL 65              | Minimum<br>limit:<br>5500 ft<br>ALT | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and above);<br>Freq: 128.050 (Below FL 195).   |
| △                                    | GODPA               | 525900N 0031001W              |     |                                |                                     |                   |                                   |                          |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |  |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |  |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |
|                                      |                              |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         |  |
| (RNAV 5)                             |                              | 005°/<br>185°                 | 5.0 nm  |     | FL 245 /<br>4500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 230 /<br>FL 70  | FL 245/FL 195 Class C,<br>FL 195/Alt 4500 ft Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 128.050 (Below FL 195).   |
| △                                    | REXAM                        | 530400N 0030937W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                              | 005°/<br>185°                 | 3.8 nm  |     | FL 245 /<br>4500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 230 /<br>FL 70  | FL 245/FL 195 Class C,<br>FL 195/Alt 4500 ft Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 128.050 (Below FL 195).   |
| △                                    | IVLOD                        | 530746N 0030919W              |         |     |                                |                                 |                   |                                   |                           | Change in BLCP is delineated<br>by a line joining positions:<br>531018N 0031726W and<br>530209N 0025131W.  |
| (RNAV 5)                             |                              | 005°/<br>185°                 | 15.8 nm |     | FL 245 /<br>3000 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 230 /<br>FL 70  | FL 245/FL 195 Class C,<br>FL 195/Alt 3000 ft Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 128.050 (Below FL 195).   |
| △                                    | WALLASEY<br>VOR/DME<br>(WAL) | 532330.97N 0030804.06W        |         |     |                                |                                 |                   |                                   |                           | Intersection with L10, L151,<br>N862 and Y53.  |
| (RNAV 5)                             |                              | 357°/<br>177°                 | 12.2 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 170 | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 128.050 (Below FL 195).  |
| △                                    | GUNTU                        | 533537N 0030954W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                              | 357°/<br>177°                 | 8.3 nm  |     | FL 245 /<br>FL 155             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 170 | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 133.050 (Below FL 195).  |
| △                                    | BILVO                        | 534352N 0031109W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                              | 357°/<br>177°                 | 39.2 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 170 | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>Between BILVO and 5415N:<br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 133.050 (Below FL 195).<br><br>Between 5415N and SUBUK:<br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels). |
| △                                    | SUBUK                        | 542248N 0031711W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)                             |                              | 357°/<br>177°                 | 20.6 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 170 | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels).  |
| △                                    | DEAN CROSS<br>DME<br>(DCS)   | 544318.88N 0032026.30W        |         |     |                                |                                 |                   |                                   |                           | Intersection with L612.  |



**ENR 3.1 LOWER ATS ROUTES (continued)**

| Route Designator/<br>(RNP/RNAV Type)  |                           | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                            |   |
|---|---------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|----------------------------|---|
| Significant Point Name  |                           | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                            |   |
| (RNP/RNAV Type)   |                           | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                            | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|   |                           |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                            |   |
|   |                           | ↓                             | ↑       |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)  |                           | 002°/<br>182°                 | 20.1 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 110  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br>(Variable lower limit; see<br>Route Remarks)<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).              |
| △   | ASRUS                     | 550321N 0032045W              |         |     |                                |                                 |                   |                                   |                            | The change in the lower limit<br>occurs along the great circle<br>line joining:<br>550537N 0031205W -<br>550045N 0032924W and not<br>at the usual right angle to the<br>AWY CL. |
| (RNAV 5)  |                           | 002°/<br>182°                 | 17.9 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).  |
| △   | UNURO                     | 552111N 0032102W              |         |     |                                |                                 |                   |                                   |                            | Base level change is aligned<br>with Scottish TMA.  |
| (RNAV 5)  |                           | 002°/<br>182°                 | 8.8 nm  |     | FL 245 /<br>5500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70   | FL 245/FL 195 Class C,<br>FL 195/Alt 5500 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 126.300 (All Levels).  |
| △   | TALLA<br>VOR/DME<br>(TLA) | 552956.92N 0032110.20W        |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)  |                           | 010°/<br>190°                 | 37.5 nm |     | FL 245 /<br>6000 ft<br>ALT     |                                 | 10 nm             | odd<br>FL 230 /<br>FL 70          | even<br>FL 240 /<br>FL 80  | FL 245/FL 195 Class C,<br>FL 195/Alt 6000 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).  |
| △   | PIPAR                     | 560700N 0031206W              |         |     |                                |                                 |                   |                                   |                            | Base level change is aligned<br>with Scottish TMA.  |
| (RNAV 5)  |                           | 010°/<br>190°                 | 5.1 nm  |     | FL 245 /<br>FL 65              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 70          | even<br>FL 240 /<br>FL 80  | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).  |
| △   | NOVBA                     | 561200N 0031051W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)  |                           | 010°/<br>190°                 | 11.3 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).  |
| △   | IBOLU                     | 562310N 0030803W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)  |                           | 010°/<br>190°                 | 18.7 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         | even<br>FL 240 /<br>FL 120 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).   |
| △   | ANGUS                     | 564139N 0030320W              |         |     |                                |                                 |                   |                                   |                            | Extremity of N864.<br>Intersection with P600.   |
| Route Remarks:  |                           |                               |         |     |                                |                                 |                   |                                   |                            |   |
| <ul style="list-style-type: none"><li>Due to ATC operational requirements, the cruising level allocation between BHD and WAL and between DCS and TLA is inappropriate to the MAG Track.</li><li>An area of N864, below FL105, between a line joining 513946N 0032432W - 513838N 0031727W - 513743N 0030845W and EXMOR is Class D airspace.</li><li>The area of controlled airspace, Class C above FL 195 and Class A below FL 195, base Alt 4500 ft, bounded by straight lines joining:<br/>530513N 0030113W - 530209N 0025131W -<br/>525618N 0030157W - 530513N 0030113W,<br/>is part of N864.</li></ul> |                           |                               |         |     |                                |                                 |                   |                                   |                            |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                    | Route Usage Notes             |     |                                |                                 |                   |  |   |   |
|--|--------------------|-------------------------------|-----|--------------------------------|---------------------------------|-------------------|--|---|---|
| Significant Point Name   |                    | Significant Point Coordinates |     |                                |                                 |                   |  |   |   |
| (RNP/RNAV Type)  | Track<br>MAG<br>↓↑ | Dist                          | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |   | Controlling Unit/<br>Airspace Class/<br>Remarks |
|  |                    |                               |     |                                |                                 |                   | ↓  | ↑ |   |
| <ul style="list-style-type: none"><li>Between 2000 and 0700 daily, Winter (Summer 1hr earlier) an area of Class A controlled airspace, base FL 55 and upper limit FL 105 bounded by straight lines joining:<br/>531733N 0031654W - 530540N 0032345W -<br/>530348N 0031757W - 531733N 0031654W,<br/>is part of N864.</li><li>The area of controlled airspace, Class C above FL 195 and Class A below FL 195, base Alt 3000 ft, bounded by straight lines joining:<br/>531356N 0030030W - 530626N 0024349W -<br/>530209N 0025131W - 530513N 0030113W -<br/>531356N 0030030W, is part of N864.</li><li><b>Variable lower limit:</b> Daily from 0700 to 2000 (1hr earlier in summer) between DCS and ASRUS the lower limit is FL 125 making the Mnm FLs FL 130 (Southbound) and FL 140 (Northbound).</li><li>Between northern bdry of Scottish TMA and ANGUS, N864 is notified for the purposes of SERA.6001(a) Classification of Airspaces in accordance with the conditions established in a Letter of Agreement (LOA) between the British Gliding Association (BGA) and Scottish Control (Prestwick).</li><li>Between WAL and DCS, N864 is only avbl from 1800 on Fridays, or the day preceding a PH, until 0800 on Mondays, or the day following a PH, Winter (Summer 1hr earlier). For limited periods, during these times, this part of AWY N864 may be required for use by the MoD. These activities will be promulgated by Scottish Control (Prestwick) and the alternative route will be 'as directed by ATC'.</li><li>Between TLA and ANGUS, established from 0001 on Sat to 2359 on Sun as an alternative route when AWY P600, to the south of Perth (PTH), has been made avbl to Portmoak for gliding activity. However, acft may flight plan to use this route at any time during the above hours. At certain times, notably when the airspace is required for military use, this weekend route will not be avbl. In these circumstances, all of AWY P600 will be retained for use.</li></ul> |                    |                               |     |                                |                                 |                   |  |   |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                                 | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                            |   |  |
|---|---------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|----------------------------|---|--|
| Significant Point Name  |                                 | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                            |   |  |
| (RNP/RNAV Type)   |                                 | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                            | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|   |                                 |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                            |   |  |
|   |                                 |                               |         |     |                                |                                 |                   | ↓                                 | ↑                          |   |  |
| N866<br>(RNP/RNAV)  |                                 |                               |         |     |                                |                                 |                   |                                   |                            |   |  |
| △   | ROKSI                           | 503013N 0021251W              |         |     |                                |                                 |                   |                                   |                            | Westbound (southbound)<br>route only.<br>Extremity of N866.   |  |
| (RNAV 5)  |                                 | -/199°                        | 10.9 nm |     | FL 245 /<br>FL 165             |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 180 | FL 245/FL 195 Class C,<br>FL 195/FL 165 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).  |  |
| △   | BILNI                           | 504031N 0020733W              |         |     |                                |                                 |                   |                                   |                            |   |  |
| (RNAV 5)  |                                 | -/242°                        | 34.1 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 160 | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).  |  |
| △   | SOUTHAMPTON<br>VOR/DME<br>(SAM) | 505718.90N 0012042.20W        |         |     |                                |                                 |                   |                                   |                            | Intersection with L620.   |  |
| (RNAV 5)  |                                 | -/225°                        | 21.0 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 80  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (FL 155 and<br>above);<br>Freq: 134.125 (Below FL 155). |  |
| △   | GASGU                           | 511224N 0005736W              |         |     |                                |                                 |                   |                                   |                            | Extremity of N866.  |  |
| Route Remarks:  |                                 |                               |         |     |                                |                                 |                   |                                   |                            |   |  |
| <ul style="list-style-type: none"><li>CDR Category One and Three (CDR 1 and 3) between SAM and ROKSI (ENR 1.1, paragraph 1.1.7 refers).<br/>CDR 1 and 3 H24.</li><li>The use of this airway can be interrupted when UN866 is notified as unavailable due to activity above ALT 22000 ft within Danger Area EG D023.</li></ul> |                                 |                               |         |     |                                |                                 |                   |                                   |                            |   |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                                 | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |  |
|---|---------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|--|
| Significant Point Name  |                                 | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |  |
| (RNP/RNAV Type)   |                                 | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|   |                                 |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |  |
|   |                                 |                               |         |     |                                |                                 |                   | ↓                                 | ↑  |  |
| N867<br>(RNP/RNAV)  |                                 |                               |         |     |                                |                                 |                   |                                   |  |  |
| △   | GARMI                           | 500000N 0012250W              |         |     |                                |                                 |                   |                                   | Northbound route only.<br>FIR Boundary.<br>For continuation see AIP<br>France. |  |
| (RNAV 5)  |                                 | 004°/-                        | 31.3 nm |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |  | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.825 (All Levels). |
| △   | KATHY                           | 503114N 0012000W              |         |     |                                |                                 |                   |                                   | Intersection with L980.  |  |
| (RNAV 5)  |                                 | 360°/-                        | 8.6 nm  |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |  | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.825 (All Levels). |
| △   | ELDER                           | 503948N 0012014W              |         |     |                                |                                 |                   |                                   | Intersection with M185.  |  |
| (RNAV 5)  |                                 | 360°/-                        | 17.5 nm |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |  | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.825 (All Levels). |
| △   | SOUTHAMPTON<br>VOR/DME<br>(SAM) | 505718.90N 0012042.20W        |         |     |                                |                                 |                   |                                   | Extremity of N867.   |  |
| Route Remarks:  |                                 |                               |         |     |                                |                                 |                   |                                   |  |  |
| <ul style="list-style-type: none"><li>• CDR Category One and Three (CDR 1 and 3) between GARMI and KATHY (ENR 1.1, paragraph 1.1.7 refers).<br/>CDR 1 and 3 above FL 195 H24.<br/>CDR 3 below FL 195.</li><li>• The use of this airway may be interrupted when MoD (Navy) requires the activation of Danger Area EG D036 above ALT 19000 ft. Closures will be notified by NOTAM and CRAM. There may also be circumstances when London Control (Swanwick) is given a minimum of only 2 hours notice of Danger Area activity.<br/>Non-availability of N867 will be notified to GAT by 'Brest Control' and t/c will be routed to ORIST Y110 and L980.</li><li>• Due to Brest ACC operational requirements, cruising levels are inappropriate to the MAG TR btn GARMI and SAM.</li><li>• See also ENR 1.1, paragraph 1.1.3.</li></ul> |                                 |                               |         |     |                                |                                 |                   |                                   |  |  |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |  |  |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|--|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |  |  |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |  | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |         |     |                                |                                 |                   | ↓  | ↑  |  |
| P2<br>(RNP/RNAV)                     |       |                               |         |     |                                |                                 |                   |  |  |  |
| △                                    | NIGIT | 511847N 0011015W              |         |     |                                |                                 |                   |  | Eastbound route only btn<br>NUMPO and NIGIT.<br>Extremity of P2. |  |
| (RNAV 5)                             |       | -/104°                        | 15 nm   |     | FL 245 /<br>FL 105             |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 110  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Between 8 nm before NIGIT<br>and NIGIT:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 155);<br>Freq: 129.080 (Below FL 155).<br><br>Between BEDEK and 8 nm<br>before NIGIT:<br>London Control (Swanwick)<br>Freq: 134.750 (All Levels). |
| △                                    | BEDEK | 512215N 0013331W              |         |     |                                |                                 |                   |  |  |  |
| (RNAV 5)                             |       | -/104°                        | 19.4 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 110  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.750 (All Levels).   |
| △                                    | OKESI | 512636N 0020342W              |         |     |                                |                                 |                   |  |  |  |
| (RNAV 5)                             |       | -/104°                        | 46.9 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 110  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.750 (All Levels).   |
| △                                    | NUMPO | 513636N 0031701W              |         |     |                                |                                 |                   |  | Extremity of partition of P2.                                    |  |
|                                      |       |                               |         |     | - / -                          |                                 |                   |  |  | ROUTE BREAK - THIS AIR-<br>WAY IS NOT CONTINUOUS.  |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |  |  |
|---|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|--|
| Significant Point Name  |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |  |  |
| (RNP/RNAV Type)   |                              | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |  |
|   |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |  |
| Δ   | STRUMBLE<br>VOR/DME<br>(STU) | 515940.88N 0050224.69W        |         |     |                                |                                 |                   |                                   | ↓                         | ↑  | Extremity of partition of P2.<br>Intersection with L9. |
| (RNAV 5)  |                              | 270°/<br>089°                 | 44.6 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Between STU and the eastern<br>boundary of the BANBA CTA<br>(515729N 0060611W):<br>London Control (Swanwick)<br>Freq: 129.375 (All Levels).<br><br>Between the eastern bound-<br>ary of the BANBA CTA<br>(515729N 0060611W) and<br>BANBA:<br>ATS delegated to Shannon<br>ACC at FL 195 and above.<br><br>The airspace within the<br>BANBA CTA is Class C.<br>(See ENR 2.1).<br><br>Shannon ACC<br>Freq: 132.150 (FL 195 and<br>above);<br>London Control (Swanwick)<br>Freq: 129.375 (Below FL 195). |  |
| Δ   | BANBA                        | 515710N 0061421W              |         |     |                                |                                 |                   |                                   |                           |  | FIR Boundary.<br>For continuation see AIP<br>Ireland.  |
| Route Remarks:  |                              |                               |         |     |                                |                                 |                   |                                   |                           |  |  |
| <ul style="list-style-type: none"><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 145, bounded by the southern edge of AWY L9, northern edge of P2 and FIR boundary is deemed to be part of P2.</li><li>Between NUMPO and NIGIT the southern boundary is approximately 4 nm from the CL of AWY and is co-incident with the southern boundary of Cotswold CTA 3.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                              |                               |         |     |                                |                                 |                   |                                   |                           |  |  |

# ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                             | Route Usage Notes             |         |     |                                |                                     |                   |                                   |   |   |
|--------------------------------------|-----------------------------|-------------------------------|---------|-----|--------------------------------|-------------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name               |                             | Significant Point Coordinates |         |     |                                |                                     |                   |                                   |   |   |
| (RNP/RNAV Type)                      |                             | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude     | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                             |                               |         |     |                                |                                     |                   | IFR cruising<br>levels<br>max/min |   |   |
|                                      |                             | ↓                             |         |     |                                |                                     |                   |                                   | ↑   |   |
| P6<br>(RNP/RNAV)                     |                             |                               |         |     |                                |                                     |                   |                                   |   |   |
| △                                    | LESTA                       | 524427N 0010419W              |         |     |                                |                                     |                   |                                   | Westbound route only.<br>Extremity of P6.               |   |
| (RNAV 5)                             |                             | 318°/-                        | 41.4 nm |     | FL 245 /<br>FL 195             |                                     | 10 nm             | even<br>FL 240 /<br>FL 200        |   | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (All Levels).   |
| △                                    | RODOL                       | 531417N 0015143W              |         |     |                                |                                     |                   |                                   | Extremity of partition of P6.<br>Intersection with L28. |   |
|                                      |                             |                               |         |     | - / -                          |                                     |                   |                                   |   | ROUTE BREAK - THIS AIR-<br>WAY IS NOT CONTINUOUS.   |
| △                                    | UDEGO                       | 535842N 0040250W              |         |     |                                |                                     |                   |                                   | Westbound route only.<br>Extremity of partition of P6.  |   |
| (RNAV 5)                             |                             | 308°/-                        | 15.0 nm |     | FL 255 /<br>FL 195             |                                     | 10 nm             | even<br>FL 240 /<br>FL 200        |   | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels).   |
| △                                    | DIXOV                       | 540720N 0042338W              |         |     |                                |                                     |                   |                                   |   |   |
| (RNAV 5)                             |                             | 308°/-                        | 8.8 nm  |     | FL 255 /<br>FL 135             |                                     | 10 nm             | even<br>FL 240 /<br>FL 140        |   | FL 255/FL 195 Class C,<br>FL 195/FL 135 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels). |
| △                                    | RUBOV                       | 541222N 0043553W              |         |     |                                |                                     |                   |                                   |   |   |
| (RNAV 5)                             |                             | 307°/-                        | 10.0 nm |     | FL 255 /<br>FL 135             |                                     | 10 nm             | even<br>FL 240 /<br>FL 140        |   | FL 255/FL 195 Class C,<br>FL 195/FL 135 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels). |
| △                                    | UMOPO                       | 541803N 0044953W              |         |     |                                |                                     |                   |                                   |   |   |
| (RNAV 5)                             |                             | 307°/-                        | 20.1 nm |     | FL 255 /<br>FL 75              |                                     | 10 nm             | even<br>FL 240 /<br>FL 80         |   | FL 255/FL 195 Class C,<br>FL 195/FL 75 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels).  |
| △                                    | NELBO                       | 542924N 0051810W              |         |     |                                |                                     |                   |                                   | DRA Arrival Transition Fix.                             |   |
| (RNAV 5)                             |                             | 291°/-                        | 34.0 nm |     | FL 255 /<br>FL 55              | Minimum<br>limit:<br>5000 ft<br>ALT | 10 nm             | even<br>FL 240 /<br>FL 60         |   | FL 255/FL 195 Class C,<br>FL 195/FL 55 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels).  |
| △                                    | BELFAST<br>VOR/DME<br>(BEL) | 543940.12N 0061347.67W        |         |     |                                |                                     |                   |                                   | Extremity of P6.  |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |   |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|---|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |   |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |   |  |
|                                      |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑  |   |  |
| P7<br>(RNP/RNAV)                     |       |                               |         |     |                                |                                 |                   |                                   |  |   |  |
| △                                    | LOGAN | 514451N 0013643E              |         |     |                                |                                 |                   |                                   | Westbound route only.<br>Extremity of P7.<br>Intersection with L980.                         |   |  |
| (RNAV 5)                             |       | -/228°                        | 13.6 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215). |  |
| △                                    | IDESI | 515352N 0015308E              |         |     |                                |                                 |                   |                                   |  |   |  |
| (RNAV 5)                             |       | -/229°                        | 18.9 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215). |  |
| △                                    | SONOG | 520620N 0021610E              |         |     |                                |                                 |                   |                                   | Intersection with Y4.  |   |  |
| (RNAV 5)                             |       | -/206°                        | 25.0 nm |     | FL 245 /<br>FL 215             |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 220   | Class C.<br><br>London Control (Swanwick)<br>Freq: 118.480 (All Levels).  |  |
| △                                    | BARMI | 522842N 0023414E              |         |     |                                |                                 |                   |                                   | Extremity of P7.<br>Extremity bounded by the<br>northern lateral limits of<br>Clacton CTA 6. |   |  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |  |
|--|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|
| Significant Point Name   |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |  |
| (RNP/RNAV Type)  |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|  |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |
|  |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         |  |
| P16<br>(RNP/RNAV)  |       |                               |         |     |                                |                                 |                   |                                   |                           |  |
| △  | NOKIN | 530436N 0025258W              |         |     |                                |                                 |                   |                                   |                           | Extremity of P16.<br>Intersection with N862.   |
| (RNAV 5)   |       | 022°/<br>202°                 | 23.7 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        | odd<br>FL 230 /<br>FL 190 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (Above FL 195);<br>Freq: 128.050 (FL 195 and below). |
| △  | ASMIM | 532646N 0023911W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)   |       | 022°/<br>202°                 | 11.6 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        | odd<br>FL 230 /<br>FL 190 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (Above FL 195);<br>Freq: 128.050 (FL 195 and below). |
| △  | CROFT | 533737N 0023220W              |         |     |                                |                                 |                   |                                   |                           | Intersection with L612 and Y70.<br>The western bdy of controlled airspace, abm CROFT, is 4.28 nm from the CL.  |
| (RNAV 5)   |       | 022°/<br>202°                 | 25.0 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        | odd<br>FL 230 /<br>FL 190 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (Above FL 195);<br>Freq: 136.575 (FL 190 and below). |
| △  | RIBEL | 540058N 0021723W              |         |     |                                |                                 |                   |                                   |                           | Southbound route only btn GASKO and RIBEL.<br>Intersection with N601.  |
| (RNAV 5)   |       | -/225°                        | 17.2 nm |     | FL 245 /<br>FL 125             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 190 | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (Above FL 195);<br>Freq: 136.575 (FL 190 and below). |
| △  | GASKO | 541329N 0015721W              |         |     |                                |                                 |                   |                                   |                           | Extremity of P16.  |
| Route Remarks:   |       |                               |         |     |                                |                                 |                   |                                   |                           |  |
| • Due to ATC operational requirements, the cruising level allocation for the entire route is inappropriate to the MAG Track. |       |                               |         |     |                                |                                 |                   |                                   |                           |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                               | Route Usage Notes             |         |                                |                                 |                   |                                   |                            |   |   |
|---|-------------------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------|-----------------------------------|----------------------------|---|---|
| Significant Point Name  |                               | Significant Point Coordinates |         |                                |                                 |                   |                                   |                            |   |   |
| (RNP/RNAV Type)   | Track<br>MAG<br>↓/↑           | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                            | Controlling Unit/<br>Airspace Class/<br>Remarks   |   |
|   |                               |                               |         |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                            |   |   |
|   |                               | ↓                             |         | ↑                              |                                 |                   |                                   |                            |   |   |
| P17<br>(RNP/RNAV)   |                               |                               |         |                                |                                 |                   |                                   |                            |   |   |
| △   | NITON                         | 523312N 0031201W              |         |                                |                                 |                   |                                   |                            | Northbound route only btn<br>NITON and NOKIN.<br>Extremity of P17.  |   |
| (RNAV 5)  |                               | 022°/-                        | 33.5 nm |                                | FL 245 /<br>FL 175              |                   | 10 nm                             | even<br>FL 240 /<br>FL 180 | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.600 (All Levels).  |   |
| △   | NOKIN                         | 530436N 0025258W              |         |                                |                                 |                   |                                   |                            | Intersection with N862 and<br>P16.  |   |
| (RNAV 5)  |                               | 036°/<br>216°                 | 12.9 nm |                                | FL 245 /<br>FL 105              |                   | 10 nm                             | even<br>FL 240 /<br>FL 120 | odd<br>FL 230 /<br>FL 110   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 128.050 (Below FL 195). |
| △   | KUXEM                         | 531511N 0024047W              |         |                                |                                 |                   |                                   |                            |   |   |
| (RNAV 5)  |                               | 036°/<br>216°                 | 15.9 nm |                                | FL 245 /<br>FL 105              |                   | 10 nm                             | even<br>FL 240 /<br>FL 120 | odd<br>FL 230 /<br>FL 110   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 128.050 (Below FL 195). |
| △   | BARTN                         | 532814N 0022541W              |         |                                |                                 |                   |                                   |                            | Intersection with L612 and<br>L975.   |   |
| (RNAV 5)  |                               | 037°/<br>217°                 | 20.1 nm |                                | FL 245 /<br>FL 105              |                   | 10 nm                             | even<br>FL 240 /<br>FL 120 | odd<br>FL 230 /<br>FL 110   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195). |
| △   | POLE HILL<br>VOR/DME<br>(POL) | 534437.56N 0020611.98W        |         |                                |                                 |                   |                                   |                            | Eastbound route only btn<br>POL and OBOXA.<br>Intersection with N601 and<br>P18.  |   |
| (RNAV 5)  |                               | 017°/-                        | 21.0 nm |                                | FL 245 /<br>FL 95               |                   | 10 nm                             | odd<br>FL 230 /<br>FL 110  | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).                            |   |
| △   | IPSIR                         | 540454N 0015657W              |         |                                |                                 |                   |                                   |                            | The base level change point is<br>not at right angles to the CL of<br>P17 and follows an extended<br>line from the northern ex-<br>tremity of the Leeds Bradford<br>CTA, through IPSIR. |   |
| (RNAV 5)  |                               | 017°/-                        | 5.9 nm  |                                | FL 245 /<br>FL 125              |                   | 10 nm                             | odd<br>FL 230 /<br>FL 130  | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).                           |   |
| △   | OBOXA                         | 541036N 0015420W              |         |                                |                                 |                   |                                   |                            | Extremity of P17.   |   |
| Route Remarks:  |                               |                               |         |                                |                                 |                   |                                   |                            |   |   |
| • Due to ATC operational requirements, the cruising level allocation between NITON and POL is inappropriate to the MAG Track. |                               |                               |         |                                |                                 |                   |                                   |                            |   |   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                               | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |  |  |
|--------------------------------------|-------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|--|
| Significant Point Name               |                               | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |  |  |
| (RNP/RNAV Type)                      |                               | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |  |
|                                      |                               |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |  |
| ↓                                    |                               | ↑                             |         |     |                                |                                 |                   |                                   |                           |  |  |
| P18<br>(RNP/RNAV)                    |                               |                               |         |     |                                |                                 |                   |                                   |                           |  |  |
| △                                    | TELBA                         | 523952N 0021907W              |         |     |                                |                                 |                   |                                   |                           | Extremity of P18.  |  |
| (RNAV 5)                             |                               | 015°/<br>195°                 | 12.2 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 134.425 (Below FL 195).  |  |
| △                                    | STAFA                         | 525141N 0021435W              |         |     |                                |                                 |                   |                                   |                           | Intersection with L8.  |  |
| (RNAV 5)                             |                               | 007°/<br>187°                 | 8.9 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 134.425 (Below FL 195).   |  |
| △                                    | UTUXA                         | 530030N 0021313W              |         |     |                                |                                 |                   |                                   |                           | Intersection with N859.  |  |
| (RNAV 5)                             |                               | 007°/<br>187°                 | 8.1 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 134.425 (Below FL 195).   |  |
| △                                    | LISTO                         | 530836N 0021157W              |         |     |                                |                                 |                   |                                   |                           | Intersection with L612.  |  |
| (RNAV 5)                             |                               | 007°/<br>187°                 | 36.2 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between LISTO and abm<br>MCT:<br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 134.425 (Below FL 195).<br><br>Between abm MCT and POL:<br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195). |  |
| △                                    | POLE HILL<br>VOR/DME<br>(POL) | 534437.56N 0020611.98W        |         |     |                                |                                 |                   |                                   |                           | Intersection with N57 and P17.   |  |
| (RNAV 5)                             |                               | 012°/<br>192°                 | 21.5 nm |     | FL 245 /<br>FL 95              |                                 | 14 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).   |  |
| △                                    | IDKOL                         | 540543N 0015945W              |         |     |                                |                                 |                   |                                   |                           | The base level change point is<br>not at right angles to the CL of<br>P18 and follows an extended<br>line from the northern ex-<br>tremity of the Leeds Bradford<br>CTA, through IDKOL.  |  |
| (RNAV 5)                             |                               | 012°/<br>192°                 | 3.2 nm  |     | FL 245 /<br>FL 125             |                                 | 14 nm             | even<br>FL 240 /<br>FL 140        | odd<br>FL 230 /<br>FL 130 | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 136.575 (All Levels).  |  |
| △                                    | ABKAT                         | 540853N 0015847W              |         |     |                                |                                 |                   |                                   |                           |  |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |   |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |   |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |
|                                      |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         |   |
| (RNAV 5)                             |       | 012°/<br>192°                 | 4.7 nm  |     | FL 245 /<br>FL 125             |                                 | 14 nm             | even<br>FL 240 /<br>FL 140        | odd<br>FL 230 /<br>FL 130 | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 136.575 (All Levels).   |
| △                                    | GASKO | 541329N 0015721W              |         |     |                                |                                 |                   |                                   |                           | Intersection with P16 and<br>Y250.  |
| (RNAV 5)                             |       | 012°/<br>192°                 | 11.7 nm |     | FL 245 /<br>FL 125             |                                 | 14 nm             | even<br>FL 240 /<br>FL 140        | odd<br>FL 230 /<br>FL 130 | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).   |
| △                                    | UVAVU | 542500N 0015346W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |       | 012°/<br>192°                 | 8.0 nm  |     | FL 245 /<br>FL 105             |                                 | 14 nm             | even<br>FL 240 /<br>FL 120        | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A,<br>FL 125/FL 105 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (FL 225 and<br>above);<br>Freq: 133.800 (Below FL 225<br>to FL 165);<br>Newcastle Approach<br>Freq: 124.375 (Below FL 165). |
| △                                    | TILNI | 543251N 0015118W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |       | 012°/<br>192°                 | 10.0 nm |     | FL 245 /<br>FL 75              |                                 | 14 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A,<br>FL 125/FL 75 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (FL 225 and<br>above);<br>Freq: 133.800 (Below FL 225<br>to FL 165);<br>Newcastle Approach<br>Freq: 124.375 (Below FL 165).  |
| △                                    | GIRLI | 544241N 0014811W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |       | 012°/<br>192°                 | 20 nm   |     | FL 245 /<br>FL 55              |                                 | 14 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 230 /<br>FL 70  | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A,<br>FL 125/FL 55 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (FL 225 and<br>above);<br>Freq: 133.800 (Below FL 225<br>to FL 165);<br>Newcastle Approach<br>Freq: 124.375 (Below FL 165).  |
| △                                    | NATEB | 550218N 0014154W              |         |     |                                |                                 |                   |                                   |                           | Intersection with L602.   |
| (RNAV 5)                             |       | 012°/<br>192°                 | 4.7 nm  |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).  |
| △                                    | ELMUD | 550656N 0014024W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |       | 012°/<br>192°                 | 20.3 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 170 | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).   |
| △                                    | ALASO | 552650N 0013354W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |       | 350°/<br>170°                 | 15.7 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 170 | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |  |
|--|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|
| Significant Point Name   |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |  |
| (RNP/RNAV Type)  |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|  |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |
| △  | RITSI                        | 554209N 0013925W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)   |                              | 350°/<br>170°                 | 12.9 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 170 | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).  |
| △  | MADAD                        | 555447N 0014402W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)   |                              | 350°/<br>170°                 | 18.4 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 170 | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).  |
| △  | NEXUS                        | 561243N 0015041W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)   |                              | 350°/<br>170°                 | 17.5 nm |     | FL 245 /<br>FL 135             |                                 | 10 nm             | even<br>FL 240 /<br>FL 140        | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 135 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).  |
| △  | BALID                        | 562949N 0015707W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)   |                              | 350°/<br>170°                 | 10.0 nm |     | FL 245 /<br>FL 115             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        | odd<br>FL 230 /<br>FL 130 | FL 245/FL 195 Class C,<br>FL 195/FL 115 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).  |
| △  | UPGET                        | 563935N 0020050W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)   |                              | 350°/<br>170°                 | 10.0 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).   |
| △  | OKPAL                        | 564921N 0020435W              |         |     |                                |                                 |                   |                                   |                           |  |
| (RNAV 5)   |                              | 350°/<br>170°                 | 6.3 nm  |     | FL 245 /<br>4500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 230 /<br>FL 50  | FL 245/FL 195 Class C,<br>FL 195/Alt 4500 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).   |
| △  | RATPU                        | 565532N 0020659W              |         |     |                                |                                 |                   |                                   |                           | The change in the lower limit occurs along the line joining: 565514N 0021611W - 565533N 0020635W thence anti-clockwise by the arc of a circle radius 10 nm centred on 570531N 0020740W to 565659N 0015812W and not at the usual right angle to the AWY CL. |
| (RNAV 5)   |                              | 350°/<br>170°                 | 23.7 nm |     | FL 245 /<br>FL 115             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        | odd<br>FL 230 /<br>FL 130 | FL 245/FL 195 Class C,<br>FL 195/FL 115 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).  |
| △  | ABERDEEN<br>VOR/DME<br>(ADN) | 571837.62N 0021601.95W        |         |     |                                |                                 |                   |                                   |                           | Extremity of P18.  |
| Route Remarks:   |                              |                               |         |     |                                |                                 |                   |                                   |                           |  |
| <ul style="list-style-type: none"><li>• <b>CDR Category One (CDR 1) between NATEB and ADN</b> (ENR 1.1, paragraph 1.1.7 refers).<br/><b>CDR 1</b> Tue-Fri 0530-0900, and from 1500 Fri or the day preceding a PH to 1000 Mon or the day following a PH Winter (Summer 1hr earlier).<br/>Additionally available overnight May-Sep, Mon-Thu 1900-0900.<br/>(See GEN 2.1, paragraph 6 for PHs).<br/>The AWY is not avbl for use during these periods when MoD require access to the airspace.</li><li>• Due to ATC operational requirements, the cruising level allocation between TELBA and ALASO is inappropriate to the MAG Track.</li><li>• The area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 85, bounded by straight lines joining:<br/>540051N 0015409W - 535710N 0015020W -<br/>534803N 0015310W - 534906N 0020115W -<br/>535539N 0020919W - 540051N 0015409W,</li></ul> |                              |                               |         |     |                                |                                 |                   |                                   |                           |  |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                    | Route Usage Notes             |     |                                |                                 |                   |  |   |   |
|---|--------------------|-------------------------------|-----|--------------------------------|---------------------------------|-------------------|--|---|---|
| Significant Point Name  |                    | Significant Point Coordinates |     |                                |                                 |                   |  |   |   |
| (RNP/RNAV Type)   | Track<br>MAG<br>↓↑ | Dist                          | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |   | Controlling Unit/<br>Airspace Class/<br>Remarks |
|   |                    |                               |     |                                |                                 |                   | ↓  | ↑ |   |
| is part of P18.   |                    |                               |     |                                |                                 |                   |  |   |   |
| <ul style="list-style-type: none"><li>The area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 95, bounded by straight lines joining:<br/>541102N 0021850W - 540848N 0021054W -<br/>540222N 0021251W - 541102N 0021850W,<br/>is part of P18.</li><li>The area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 125, bounded by straight lines joining:<br/>541530N 0020852W - 541310N 0020934W -<br/>540954N 0021448W - 541102N 0021850W -<br/>541113N 0021858W - 541530N 0020852W,<br/>is part of P18.</li><li>Two areas of Class D controlled airspace, base level FL 75 and upper limit FL 115, are part of P18:<br/><br/>Area 1, east of P18, bounded by great circle lines joining:<br/>565044N 0015237W - 564530N 0015349W -<br/>565023N 0015541W - 565044N 0015237W.<br/><br/>Area 2, west of P18, bounded by great circle lines joining:<br/>564819N 0021329W - 564326N 0021135W -<br/>564809N 0021455W - 564819N 0021329W.</li><li>Two areas of Class D controlled airspace, base ALT 4500 ft and upper limit FL 115, are part of P18:<br/><br/>Area 1, east of P18, bounded by great circle lines joining:<br/>570417N 0014929W - 565044N 0015237W -<br/>565023N 0015541W - 565659N 0015812W<br/>thence anti-clockwise by the arc of a circle radius 10 nm centred on 570531N 0020740W to 570417N 0014929W.<br/><br/>Area 2, west of P18, bounded by great circle lines joining:<br/>565514N 0021611W - 564819N 0021329W -<br/>564809N 0021455W - 565507N 0021952W -<br/>565514N 0021611W.</li></ul> |                    |                               |     |                                |                                 |                   |  |   |   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|                                      |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |  |
| P25<br>(RNP/RNAV)                    |       |                               |         |     |                                |                                 |                   |                                   |   |  |
| △                                    | LAPRA | 520707N 0011236E              |         |     |                                |                                 |                   |                                   | Westbound route only.<br>Extremity of P25.  |  |
| (RNAV 5)                             |       | -/246°                        | 15.8 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 120  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 121.225 (Below FL 215). |
| △                                    | MIPVO | 521329N 0013609E              |         |     |                                |                                 |                   |                                   | Base level change point is not<br>at right angles to the CL of<br>P25 and is contiguous with the<br>western bdry of Clacton CTA<br>5. |  |
| (RNAV 5)                             |       | -/247°                        | 8.9 nm  |     | FL 245 /<br>FL 165             |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 180  | FL 245/FL 195 Class C,<br>FL 195/FL 165 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 121.225 (Below FL 215). |
| △                                    | DITOB | 521701N 0014927E              |         |     |                                |                                 |                   |                                   | Base level change point is not<br>at right angles to the CL of<br>P25 and is contiguous with the<br>eastern bdry of Clacton CTA<br>5. |  |
| (RNAV 5)                             |       | -/247°                        | 10 nm   |     | FL 245 /<br>FL 195             |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 200  | Class C.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 121.225 (Below FL 215).   |
| △                                    | MEGEL | 522058N 0020425E              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |       | -/247°                        | 19.8 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 220  | Class C.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 121.225 (Below FL 215).   |
| △                                    | BARMI | 522842N 0023414E              |         |     |                                |                                 |                   |                                   | Extremity of P25.<br>Extremity bounded by the<br>northern lateral limits of<br>Clacton CTA 6.   |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                    | Route Usage Notes             |         |                                |                                 |                   |  |  |  |
|--------------------------------------|--------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------|--|--|--|
| Significant Point Name               |                    | Significant Point Coordinates |         |                                |                                 |                   |  |  |  |
| (RNP/RNAV Type)                      | Track<br>MAG<br>↓↑ | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |  | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                    |                               |         |                                |                                 |                   | ↓  | ↑  |  |
| P44<br>(RNP/RNAV)                    |                    |                               |         |                                |                                 |                   |  |  |  |
| △                                    | ARTOV              | 515419N 0012533E              |         |                                |                                 |                   |  | Eastbound route only.<br>Extremity of P44. |  |
| (RNAV 5)                             |                    | 061°/-                        | 10.8 nm |                                | FL 245 /<br>FL 105              |                   | 10 nm  | odd<br>FL 230 /<br>FL 110                  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 121.225 (Below FL 215). |
| △                                    | RATLO              | 515929N 0014055E              |         |                                |                                 |                   |  |  |  |
| (RNAV 5)                             |                    | 061°/-                        | 11.2 nm |                                | FL 245 /<br>FL 135              |                   | 10 nm  | odd<br>FL 230 /<br>FL 150                  | FL 245/FL 195 Class C,<br>FL 195/FL 135 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 121.225 (Below FL 215). |
| △                                    | PIXAM              | 520447N 0015650E              |         |                                |                                 |                   |  |  |  |
| (RNAV 5)                             |                    | 062°/-                        | 29.1 nm |                                | FL 245 /<br>FL 195              |                   | 10 nm  | odd<br>FL 230 /<br>FL 210                  | Class C.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 121.225 (Below FL 215).   |
| △                                    | SOMVA              | 521826N 0023838E              |         |                                |                                 |                   |  | FIR Boundary.<br>Extremity of P44.         |  |
| Route Remarks:                       |                    |                               |         |                                |                                 |                   |  |  |  |
| • See also ENR 1.1, paragraph 1.1.3. |                    |                               |         |                                |                                 |                   |  |  |  |

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |  |   |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|---|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |  |   |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |         |     |                                |                                 |                   | ↓  | ↑   |  |
| P49<br>(RNP/RNAV)                    |       |                               |         |     |                                |                                 |                   |  |   |  |
| △                                    | XAMAN | 514705N 0021327E              |         |     |                                |                                 |                   |  | Westbound (northbound)<br>route only.<br>FIR Boundary.<br>Extremity of P49. |  |
| (RNAV 5)                             |       | 298°/-                        | 14.3 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120                     |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 220 and<br>above);<br>Freq: 135.425 (FL 210 and<br>below). |
| △                                    | IDESI | 515352N 0015308E              |         |     |                                |                                 |                   |  | Extremity of P49.<br>Intersection with M20 and Y6.                          |  |
| Route Remarks:                       |       |                               |         |     |                                |                                 |                   |  |   |  |
| • See also ENR 1.1, paragraph 1.1.3. |       |                               |         |     |                                |                                 |                   |  |   |  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                    | Route Usage Notes             |         |                                |                                 |                   |  |  |  |
|---|--------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------|--|--|--|
| Significant Point Name  |                    | Significant Point Coordinates |         |                                |                                 |                   |  |  |  |
| (RNP/RNAV Type)   | Track<br>MAG<br>↓↑ | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |  | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|   |                    |                               |         |                                |                                 |                   | ↓  | ↑  |  |
| P87<br>(RNP/RNAV)   |                    |                               |         |                                |                                 |                   |  |  |  |
| △   | BOLRO              | 500000N 0014129W              |         |                                |                                 |                   |  | Northbound route only.<br>FIR Boundary.<br>Extremity of P87. |  |
| (RNAV 5)  |                    | 004°/-                        | 15.7 nm |                                | FL 245 /<br>FL 125              |                   | 10 nm  | even<br>FL 240 /<br>FL 200                                   | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.825 (All Levels). |
| △   | DOMUT              | 501543N 0014009W              |         |                                |                                 |                   |  | Extremity of P87.<br>Intersection with L980.                 |  |
| Route Remarks:  |                    |                               |         |                                |                                 |                   |  |  |  |
| <ul style="list-style-type: none"><li>CDR Category One and Three (CDR 1 and 3) (ENR 1.1, paragraph 1.1.7 refers).<br/>CDR 1 and 3 above FL 195 H24.<br/>CDR 3 below FL 195.</li><li>The use of this airway may be interrupted when MoD (Navy) requires the activation of Danger Area EG D036 above ALT 19000 ft. Closures will be notified by NOTAM and CRAM. There may also be circumstances when London Control (Swanwick) is given a minimum of only 2 hours notice of Danger Area activity.<br/>Non-availability of P87 will be notified to GAT by 'Brest Control' and tfc will be routed to ORIST Y110 and L980.</li><li>Due to Brest ACC operational requirements, the cruising level allocation is inappropriate to the MAG Track.</li><li>The area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 125, is part of P87:<br/>501623N 0012910W - 500000N 0013035W -<br/>500000N 0013344W - 501347N 0013231W -<br/>501623N 0012910W.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                    |                               |         |                                |                                 |                   |  |  |  |

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |  |  |   |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|--|---|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |  |  |   |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |       |                               |         |     |                                |                                 |                   | ↓  | ↑  |   |
| P137<br>(RNP/RNAV)                   |       |                               |         |     |                                |                                 |                   |  |  |   |
| △                                    | SONDO | 520506N 0014842E              |         |     |                                |                                 |                   |  | Eastbound route only.<br>Intersection with M183.<br>Extremity of P137. |   |
| (RNAV 5)                             |       | -/112°                        | 41.1 nm |     | FL 245 /<br>FL 205             |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 210  | Class C.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 220 and<br>above);<br>Freq: 121.025 (FL 210 and<br>below). |
| △                                    | UMBAG | 522052N 0004657E              |         |     |                                |                                 |                   |  | Extremity of P137.   |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                               | Route Usage Notes             |         |                                |                                 |                                     |                                   |                          |   |
|--------------------------------------|-------------------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------------------------|-----------------------------------|--------------------------|---|
| Significant Point Name               |                               | Significant Point Coordinates |         |                                |                                 |                                     |                                   |                          |   |
| (RNP/RNAV Type)                      | Track<br>MAG<br>↓↑            | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits                   | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                               |                               |         |                                |                                 |                                     | IFR cruising<br>levels<br>max/min |                          |   |
|                                      |                               |                               |         |                                |                                 |                                     | ↓                                 | ↑                        |   |
| P600<br>(RNP/RNAV)                   |                               |                               |         |                                |                                 |                                     |                                   |                          |   |
| △                                    | ROTEV                         | 540144N 0060358W              |         |                                |                                 |                                     |                                   |                          | Northbound route only btm<br>ROTEV and BLACA.<br>FIR Boundary.  |
| (RNAV 5)                             |                               | 029°/-                        | 37.8 nm |                                | FL 255 /<br>FL 75               |                                     | 10 nm                             | odd<br>FL 250 /<br>FL 90 | FL 255/FL 195 Class C,<br>FL 195/FL 75 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels).                                    |
| △                                    | GOTNA                         | 543541N 0053553W              |         |                                |                                 |                                     |                                   |                          | DRA Arrival Transition Fix.   |
| (RNAV 5)                             |                               | 044°/-                        | 23.1 nm |                                | FL 255 /<br>FL 55               | Minimum<br>limit:<br>5000 ft<br>ALT | 10 nm                             | odd<br>FL 250 /<br>FL 70 | FL 255/FL 195 Class C,<br>FL 195/FL 55 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels).                                    |
| △                                    | BLACA                         | 545300N 0050932W              |         |                                |                                 |                                     |                                   |                          | DRA Arrival and Departure<br>Transition Fix.<br>Intersection with P620.   |
| (RNAV 5)                             |                               | 029°/<br>209°                 | 15.3 nm |                                | FL 255 /<br>FL 55               | Minimum<br>limit:<br>5000 ft<br>ALT | 10 nm                             | odd<br>FL 250 /<br>FL 70 | even<br>FL 240 /<br>FL 60<br>FL 255/FL 195 Class C,<br>FL 195/FL 55 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels).       |
| △                                    | TUNSO                         | 550640N 0045741W              |         |                                |                                 |                                     |                                   |                          |   |
| (RNAV 5)                             |                               | 029°/<br>209°                 | 5 nm    |                                | FL 255 /<br>FL 55               | Minimum<br>limit:<br>5000 ft<br>ALT | 10 nm                             | odd<br>FL 250 /<br>FL 70 | even<br>FL 240 /<br>FL 60<br>FL 255/FL 195 Class C,<br>FL 195/FL 55 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels).       |
| △                                    | GIRVA                         | 551108N 0045347W              |         |                                |                                 |                                     |                                   |                          | Base level change is aligned<br>with Scottish TMA.  |
| (RNAV 5)                             |                               | 029°/<br>210°                 | 8.6 nm  |                                | FL 255 /<br>6000 ft<br>ALT      |                                     | 10 nm                             | odd<br>FL 250 /<br>FL 70 | even<br>FL 240 /<br>FL 80<br>FL 255/FL 195 Class C,<br>FL 195/Alt 6000 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels). |
| △                                    | TURNBERRY<br>VOR/DME<br>(TRN) | 551848.28N 0044701.89W        |         |                                |                                 |                                     |                                   |                          | Intersection with UP600.  |
| (RNAV 5)                             |                               | 037°/<br>218°                 | 29.4 nm |                                | FL 245 /<br>6000 ft<br>ALT      |                                     | 10 nm                             | odd<br>FL 230 /<br>FL 70 | even<br>FL 240 /<br>FL 80<br>FL 245/FL 195 Class C,<br>FL 195/Alt 6000 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels). |
| △                                    | FENIK                         | 554255N 0041731W              |         |                                |                                 |                                     |                                   |                          | Intersection with L612.   |
| (RNAV 5)                             |                               | 038°/<br>218°                 | 5.4 nm  |                                | FL 245 /<br>6000 ft<br>ALT      |                                     | 10 nm                             | odd<br>FL 230 /<br>FL 70 | even<br>FL 240 /<br>FL 80<br>FL 245/FL 195 Class C,<br>FL 195/Alt 6000 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels). |
| △                                    | GOSAM                         | 554719N 0041202W              |         |                                |                                 |                                     |                                   |                          |   |
| (RNAV 5)                             |                               | 038°/<br>218°                 | 30.0 nm |                                | FL 245 /<br>6000 ft<br>ALT      |                                     | 10 nm                             | odd<br>FL 230 /<br>FL 70 | even<br>FL 240 /<br>FL 80<br>FL 245/FL 195 Class C,<br>FL 195/Alt 6000 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels). |
| △                                    | GRICE                         | 561148N 0034108W              |         |                                |                                 |                                     |                                   |                          | Intersection with N601.   |
| (RNAV 5)                             |                               | 038°/<br>218°                 | 2.7 nm  |                                | FL 245 /<br>6000 ft<br>ALT      |                                     | 10 nm                             | odd<br>FL 230 /<br>FL 70 | even<br>FL 240 /<br>FL 80<br>FL 245/FL 195 Class C,<br>FL 195/Alt 6000 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels). |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                     |                   |                                   |                            |   |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|-------------------------------------|-------------------|-----------------------------------|----------------------------|---|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                     |                   |                                   |                            |   |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude     | Lateral<br>limits | FL series                         |                            | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                              |                               |         |     |                                |                                     |                   | IFR cruising<br>levels<br>max/min |                            |   |
| △                                    | ENUKU                        | 561400N 0033819W              |         |     |                                |                                     |                   |                                   |                            |   |
| (RNAV 5)                             |                              | 038°/<br>218°                 | 4.4 nm  |     | FL 245 /<br>FL 55              | Minimum<br>limit:<br>5000 ft<br>ALT | 10 nm             | odd<br>FL 230 /<br>FL 70          | even<br>FL 240 /<br>FL 60  | FL 245/FL 195 Class C,<br>FL 195/FL 55 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).  |
| △                                    | EDONU                        | 561736N 0033341W              |         |     |                                |                                     |                   |                                   |                            |   |
| (RNAV 5)                             |                              | 038°/<br>218°                 | 11.0 nm |     | FL 245 /<br>FL 85              |                                     | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).  |
| △                                    | PERTH<br>VOR<br>(PTH)        | 562632.63N 0032206.96W        |         |     |                                |                                     |                   |                                   |                            | The change in the lower limit<br>occurs along the great circle<br>lines joining:<br>562948N 0032900W -<br>562633N 0032207W (VOR<br>PTH) - 562341N 0031445W<br>and not at the usual right<br>angle to the AWY CL.                                |
| (RNAV 5)                             |                              | 037°/<br>217°                 | 18.4 nm |     | FL 245 /<br>FL 105             |                                     | 10 nm             | odd<br>FL 230 /<br>FL 110         | even<br>FL 240 /<br>FL 120 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).   |
| △                                    | ANGUS                        | 564139N 0030320W              |         |     |                                |                                     |                   |                                   |                            | Intersection with N864.   |
| (RNAV 5)                             |                              | 037°/<br>217°                 | 5.1 nm  |     | FL 245 /<br>FL 105             |                                     | 10 nm             | odd<br>FL 230 /<br>FL 110         | even<br>FL 240 /<br>FL 120 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).   |
| △                                    | GANKI                        | 564548N 0025808W              |         |     |                                |                                     |                   |                                   |                            |   |
| (RNAV 5)                             |                              | 037°/<br>217°                 | 10.0 nm |     | FL 245 /<br>FL 85              |                                     | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).  |
| △                                    | GLESK                        | 565400N 0024745W              |         |     |                                |                                     |                   |                                   |                            |   |
| (RNAV 5)                             |                              | 037°/<br>217°                 | 4.1 nm  |     | FL 245 /<br>FL 55              |                                     | 10 nm             | odd<br>FL 230 /<br>FL 70          | even<br>FL 240 /<br>FL 60  | FL 245/FL 195 Class C,<br>FL 195/FL 55 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).  |
| △                                    | NAXIL                        | 565724N 0024326W              |         |     |                                |                                     |                   |                                   |                            |   |
| (RNAV 5)                             |                              | 037°/<br>217°                 | 26.0 nm |     | FL 245 /<br>FL 115             |                                     | 10 nm             | odd<br>FL 230 /<br>FL 130         | even<br>FL 240 /<br>FL 120 | FL 245/FL 195 Class C,<br>FL 195/FL 115 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 124.500 (All Levels).   |
| △                                    | ABERDEEN<br>VOR/DME<br>(ADN) | 571837.62N 0021601.95W        |         |     |                                |                                     |                   |                                   |                            | Intersection with Y904 and<br>Y905.   |
|                                      |                              | 068°/<br>249°                 | 26.0 nm |     | FL 195 /<br>4500 ft<br>ALT     |                                     | 10 nm             | odd<br>FL 190 /<br>FL 50          | even<br>FL 180 /<br>FL 60  | Class E and TMZ.<br><b>(See Note)</b><br><br>Within the confines of the<br>Aberdeen CTR/CTA, P600 as-<br>sumes the airspace classifica-<br>tion of the Aberdeen CTR/<br>CTA.<br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels). |
| △                                    | OSLEL                        | 572858N 0013158W              |         |     |                                |                                     |                   |                                   |                            |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                            |   |
|---|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|----------------------------|---|
| Significant Point Name  |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                            |   |
| (RNP/RNAV Type)   |       | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                            | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|   |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                            |   |
|   |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑                          |   |
| (RNAV 5)  |       | 069°/<br>249°                 | 9.1 nm  |     | FL 195 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 190 /<br>FL 110         | even<br>FL 180 /<br>FL 120 | Class E and TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels).  |
| △   | LESNI | 573233N 0011622W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)  |       | 069°/<br>249°                 | 24.9 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 110         | even<br>FL 240 /<br>FL 120 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class E and<br>TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels). |
| △   | BUDON | 574207N 0003343W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)  |       | 069°/<br>249°                 | 30.0 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 210         | even<br>FL 240 /<br>FL 200 | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels).   |
| △   | OVDAN | 575321N 0001818E              |         |     |                                |                                 |                   |                                   |                            |   |
| Extremity of P600.  |       |                               |         |     |                                |                                 |                   |                                   |                            |   |
| Route Remarks:  |       |                               |         |     |                                |                                 |                   |                                   |                            |   |
| <ul style="list-style-type: none"><li>Between ROTEV and BLACA below FL 245, AWY P600 lies within the Strangford CTA.</li><li>An area of controlled airspace, Class C above FL 195 and Class D below FL 195, base level FL 125, bounded by straight lines joining:<br/>550250N 0045120W - 551002N 0044501W -<br/>550806N 0043002W - 550250N 0045120W,<br/>is part of P600.</li><li>Use of this route may be interrupted between Southern boundary of Scottish TMA and 5440N due to activities involving aircraft engaged in MoD (DPA) sponsored trials under the control of DRA West Freugh.</li><li>Areas of controlled airspace, Class C above FL 195 and Class A below FL 195:<br/>base FL 85, bounded by great circle lines joining:<br/>562948N 0032900W - 562925N 0032930W -<br/>562030N 0034100W - 562149N 0034418W -<br/>562948N 0032900W;<br/><b>and</b><br/>base FL 55, bounded by great circle lines joining:<br/>562149N 0034418W - 562030N 0034100W -<br/>561400N 0034919W - 561400N 0040926W -<br/>562000N 0034746W - 562149N 0034418W,<br/><b>and</b><br/>base FL 55, bounded by great circle lines joining:<br/>561654N 0034537W - 561400N 0033819W -<br/>561400N 0034919W - 561654N 0034537W,<br/>are parts of P600.</li><li>Intense gliding activity takes place on both sides of this AWY between the Northern Scottish TMA boundary and ADN; and this portion is notified for the purposes of SERA.6001(a) Classification of Airspaces in accordance with the conditions established in the Letter of Agreement between the British Gliding Association (BGA) and Scottish Control (Prestwick).</li><li>When gliding conditions at Portmoak are favourable the use of the portion of AWY P600 between GRICE and PTH may be suspended during daylight hours on Saturdays and Sundays. Aircraft will then be routed via AWY N864 by Scottish Control (Prestwick).</li><li>Traffic which would prefer to use AWY P600 between GRICE and PTH at weekends should FPL accordingly. When this portion of AWY is not available traffic will be tactically re-routed by Scottish Control (Prestwick) via AWY N864.</li><li>Between GRICE and PTH the AWY narrows, with the eastern edge following a non-standard alignment between the following points:<br/>560854N 0033351W - 561400N 0033259W - 562341N 0031445W.</li><li>The area of controlled airspace, Class E and TMZ, base level Alt 4500 ft and upper limit of FL 195, bounded by straight lines joining:<br/>572422.41N 0012815.10W - 570417.00N 0014929.00W -<br/>thence anti-clockwise by the arc of a circle radius 10 nm centred on 570531N 0020740W to<br/>570845.00N 0015019.00W - 571754.92N 0015604.67W -<br/>572422.41N 0012815.10W, is part of P600 <b>(See Note)</b>.</li><li>See also ENR 1.1, paragraph 1.1.3.</li><li><b>Note:</b> Transponder carriage and operation required within that part of P600 notified as Class E and TMZ.</li></ul> |       |                               |         |     |                                |                                 |                   |                                   |                            |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                            |  |
|--|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|----------------------------|--|
| Significant Point Name   |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                            |  |
| (RNP/RNAV Type)  |       | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                            | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|  |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                            |  |
|  |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑                          |  |
| P620<br>(RNP/RNAV)   |       |                               |         |     |                                |                                 |                   |                                   |                            |  |
| △  | NIMAT | 535754N 0054432W              |         |     |                                |                                 |                   |                                   |                            | Westbound (southbound)<br>route only.<br>FIR Boundary.<br>For continuation see AIP<br>Ireland.                     |
| (RNAV 5)   |       | -/209°                        | 12.0 nm |     | FL 255 /<br>FL 95              |                                 | 12 nm             |                                   | even<br>FL 240 /<br>FL 100 | FL 255/FL 195 Class C,<br>FL 195/FL 95 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels). |
| △  | NUMPI | 540840N 0053536W              |         |     |                                |                                 |                   |                                   |                            |  |
| (RNAV 5)   |       | -/209°                        | 23.1 nm |     | FL 255 /<br>FL 95              |                                 | 12 nm             |                                   | even<br>FL 240 /<br>FL 100 | FL 255/FL 195 Class C,<br>FL 195/FL 95 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels). |
| △  | NELBO | 542924N 0051810W              |         |     |                                |                                 |                   |                                   |                            | DRA Departure Transition Fix.  |
| (RNAV 5)   |       | -/195°                        | 24.2 nm |     | FL 255 /<br>FL 95              |                                 | 12 nm             |                                   | even<br>FL 240 /<br>FL 100 | FL 255/FL 195 Class C,<br>FL 195/FL 95 Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels). |
| △  | BLACA | 545300N 0050932W              |         |     |                                |                                 |                   |                                   |                            | DRA Departure Transition Fix.<br>Extremity of P620.  |
| Route Remarks:   |       |                               |         |     |                                |                                 |                   |                                   |                            |  |
| <ul style="list-style-type: none"><li>• Btn NIMAT and BLACA below FL 245, AWY P620 lies within the Strangford CTA.</li><li>• Airway is 12 nm wide with centre-line defined 5 nm from eastern edge and 7 nm from western edge.</li><li>• See also ENR 1.1, paragraph 1.1.3.</li></ul> |       |                               |         |     |                                |                                 |                   |                                   |                            |  |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                            | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |
|--------------------------------------|----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name               |                            | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)                      |                            | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                            |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|                                      |                            |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |   |
| Q3<br>(RNP/RNAV)                     |                            |                               |         |     |                                |                                 |                   |                                   |   |   |
| △                                    | OCKHAM<br>VOR/DME<br>(OCK) | 511818.17N 0002649.86W        |         |     |                                |                                 |                   |                                   | Eastbound (northbound)<br>route only.<br>Extremity of Q3. |   |
| (RNAV 5)                             |                            | 003°/-                        | 30.1 nm |     | FL 245 /<br>FL 175             |                                 | 10 nm             | odd<br>FL 230 /<br>FL 190         |   | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 132.165. |
| △                                    | HEMEL                      | 514820N 0002510W              |         |     |                                |                                 |                   |                                   | Extremity of Q3.<br>Intersection with T420.               |   |

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|                                      |                              |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |  |
| Q4<br>(RNP/RNAV)                     |                              |                               |         |     |                                |                                 |                   |                                   |   |  |
| △                                    | ROBIN                        | 525748N 0011745W              |         |     |                                |                                 |                   |                                   | Westbound route only btn<br>ROBIN and WAL.<br>Extremity of Q4.  |  |
| (RNAV 5)                             |                              | 293°/-                        | 14.6 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (Above FL<br>195);<br>Freq: 119.525 (FL 195 and<br>below). |
| △                                    | TRENT<br>VOR/DME<br>(TNT)    | 530314.23N 0014011.89W        |         |     |                                |                                 |                   |                                   | Intersection with L28.<br>FL 105 and below between<br>TNT & WAL only available for<br>traffic departing EGNX. |  |
| (RNAV 5)                             |                              | 293°/-                        | 41.3 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         |   | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (Above FL<br>195);<br>Freq: 134.425 (FL 195 and<br>below).  |
| △                                    | VABKA                        | 531808N 0024410W              |         |     |                                |                                 |                   |                                   | Intersection with L8.   |  |
| (RNAV 5)                             |                              | 292°/-                        | 15.3 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         |   | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (Above FL<br>195);<br>Freq: 134.425 (FL 195 and<br>below).  |
| △                                    | WALLASEY<br>VOR/DME<br>(WAL) | 532330.97N 0030804.06W        |         |     |                                |                                 |                   |                                   | Eastbound route only btn<br>GIGTO and WAL.<br>Intersection with L10, L975<br>and N864.                        |  |
| (RNAV 5)                             |                              | -115°                         | 21.5 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 150   | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).  |

### ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |   |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |   |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |
| Δ                                    | IBRAR | 533154N 0034111W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |       | -/115°                        | 15.9 nm |     | FL 245 /<br>FL 145             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 150 | FL 245/FL 195 Class C,<br>FL 195/FL 145 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels). |
| Δ                                    | GIGTO | 533801N 0040551W              |         |     |                                |                                 |                   |                                   |                           | Extremity of Q4.  |

| Route Designator/<br>(RNP/RNAV Type) |                                 | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |   |
|--------------------------------------|---------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|
| Significant Point Name               |                                 | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |   |
| (RNP/RNAV Type)                      |                                 | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                                 |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |
| Q41<br>(RNP/RNAV)                    |                                 |                               |         |     |                                |                                 |                   |                                   |                           |   |
| Δ                                    | ORTAC                           | 495957N 0020018W              |         |     |                                |                                 |                   |                                   |                           | FIR Boundary.<br>For continuation see AIP<br>France.  |
| (RNAV 5)                             |                                 | 025°/<br>205°                 | 19.2 nm |     | FL 195 /<br>FL 35              |                                 | 10 nm             | odd<br>FL 190 /<br>FL 50          | even<br>FL 180 /<br>FL 40 | Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).  |
| Δ                                    | ASPEN                           | 501734N 0014820W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |                                 | 025°/<br>205°                 | 13.5 nm |     | FL 245 /<br>FL 35              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 50          | even<br>FL 240 /<br>FL 40 | FL 245/FL 195 Class C,<br>FL 195/FL 35 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).   |
| Δ                                    | THRED                           | 502955N 0013950W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |                                 | 025°/<br>205°                 | 5.0 nm  |     | FL 245 /<br>FL 55              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 70          | even<br>FL 240 /<br>FL 60 | FL 245/FL 195 Class C,<br>FL 195/FL 55 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).   |
| Δ                                    | KUMIL                           | 503431N 0013639W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |                                 | 025°/<br>205°                 | 6.0 nm  |     | FL 245 /<br>FL 55              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 70          | even<br>FL 240 /<br>FL 60 | FL 245/FL 195 Class C,<br>FL 195/FL 55 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).   |
| Δ                                    | NEDUL                           | 503958N 0013252W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |                                 | 025°/<br>205°                 | 19.0 nm |     | FL 245 /<br>FL 55              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 70          | even<br>FL 240 /<br>FL 60 | FL 245/FL 195 Class C,<br>FL 195/FL 55 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (All Levels).   |
| Δ                                    | SOUTHAMPTON<br>VOR/DME<br>(SAM) | 505718.90N 0012042.20W        |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |                                 | 016°/<br>196°                 | 11 nm   |     | FL 245 /<br>FL 55              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 70          | even<br>FL 240 /<br>FL 60 | FL 245/FL 195 Class C,<br>FL 195/FL 55 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (FL 155 and<br>above);<br>Freq: 134.125 (Below FL 155). |
| Δ                                    | ETRID                           | 510756N 0011615W              |         |     |                                |                                 |                   |                                   |                           |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                          | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                            |   |
|--|--------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|----------------------------|---|
| Significant Point Name   |                          | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                            |   |
| (RNP/RNAV Type)  |                          | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                            | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|  |                          |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                            |   |
|  |                          |                               |         |     |                                |                                 |                   | ↓                                 | ↑                          |   |
| (RNAV 5)   |                          | 016°/<br>196°                 | 4 nm    |     | FL 245 /<br>FL 65              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 70          | even<br>FL 240 /<br>FL 80  | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 129.425 (FL 155 and<br>above);<br>Freq: 134.125 (Below FL 155).   |
| △  | PEPIS                    | 511148N 0011437W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)   |                          | 016°/<br>196°                 | 10.4 nm |     | FL 245 /<br>FL 65              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 70          | even<br>FL 240 /<br>FL 80  | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 155);<br>Freq: 134.125 (Below FL 155).   |
| △  | TABEN                    | 512149N 0011022W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)   |                          | 016°/<br>196°                 | 7.2 nm  |     | FL 245 /<br>FL 65              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 70          | even<br>FL 240 /<br>FL 80  | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 155);<br>Freq: 134.125 (Below FL 155).   |
| △  | NORRY                    | 512847N 0010724W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)   |                          | 016°/<br>196°                 | 8.5 nm  |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Between NORRY and abm<br>CPT:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 155);<br>Freq: 134.125 (Below FL 155).<br><br>Between abm CPT and<br>COWLY:<br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215). |
| △  | COWLY                    | 513658N 0010354W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)   |                          | 016°/<br>196°                 | 14.7 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | odd<br>FL 230 /<br>FL 90          | even<br>FL 240 /<br>FL 100 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 130.925 (Below FL 215).   |
| △  | WESTCOTT<br>NDB<br>(WCO) | 515110.51N 0005744.67W        |         |     |                                |                                 |                   |                                   |                            | Extremity of Q41.   |
| Route Remarks:   |                          |                               |         |     |                                |                                 |                   |                                   |                            |   |
| <ul style="list-style-type: none"><li>Between ORTAC and THRED AWY base is FL 35 or 3014 ft amsl, whichever is higher. Consequently, when low atmospheric pressure prevails, FL 40 may not be available as a cruising FL.</li><li>Six areas of controlled airspace, Class C above FL 195 and Class A below FL 195, are part of Q41:<br/><br/>Area 1: FL 65 - FL 245, bounded by:<br/>512455N 0011719W - 511721N 0012030W -<br/>512624N 0012933W - 512455N 0011719W.<br/><br/>Area 2: FL 65 - FL 105, bounded by:<br/>512624N 0012933W - 511721N 0012030W -<br/>511617N 0012057W - 511726N 0012843W -<br/>511837N 0012813W - 512624N 0012933W.</li></ul> |                          |                               |         |     |                                |                                 |                   |                                   |                            |   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                    | Route Usage Notes             |     |                                |                                 |                   |  |   |   |
|---|--------------------|-------------------------------|-----|--------------------------------|---------------------------------|-------------------|--|---|---|
| Significant Point Name  |                    | Significant Point Coordinates |     |                                |                                 |                   |  |   |   |
| (RNP/RNAV Type)   | Track<br>MAG<br>↓↑ | Dist                          | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |   | Controlling Unit/<br>Airspace Class/<br>Remarks |
|   |                    |                               |     |                                |                                 |                   | ↓  | ↑ |   |
| <p>Area 3: FL 65 - FL 115, bounded by:<br/>511726N 0012843W - 511617N 0012057W -<br/>510416N 0012559W - 510045N 0013053W -<br/>505950N 0013614W - 510038N 0013541W -<br/>511726N 0012843W.</p> <p>Area 4: FL 55 - FL 115, bounded by:<br/>510416N 0012559W - 510123N 0012711W -<br/>510045N 0013053W - 510416N 0012559W.</p> <p>Area 5: FL 65 - FL 95, bounded by:<br/>510045N 0013053W - 505334N 0014051W -<br/>505950N 0013614W - 510045N 0013053W.</p> <p>Area 6: FL 55 - FL 95, bounded by:<br/>510123N 0012711W - 505859N 0012811W -<br/>505512N 0013047W - 505334N 0014051W -<br/>510045N 0013053W - 510123N 0012711W.</p> <p>Areas 2 to 6 are open daily 0630-0930 and 1730-2130 (Winter), 0445-0830 and 1630-2030 (Summer).</p> <p>Areas 4 and 6 - During the notified hours of operation of Solent CTA the base changes to 5500 ft ALT.</p> <ul style="list-style-type: none"><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                    |                               |     |                                |                                 |                   |  |   |   |

| Route Designator/<br>(RNP/RNAV Type) |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |
|--------------------------------------|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name               |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)                      |                             | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|                                      |                             |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |   |
| Q75<br>(RNP/RNAV)                    |                             |                               |         |     |                                |                                 |                   |                                   |   |   |
| △                                    | BUZAD                       | 515632N 0003308W              |         |     |                                |                                 |                   |                                   | Westbound route only.<br>Extremity of Q75.<br>Intersection with T420 and L10. |   |
| (RNAV 5)                             |                             | -/264°                        | 18.0 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.105 (FL 195 and<br>above);<br>Freq: 130.925 (Below FL 195<br>to FL 155);<br>Freq: 131.130 (Below FL 155<br>to FL 125);<br>Freq: 119.775 (Below FL 125). |
| △                                    | UTAVA                       | 515847N 0000419W              |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)                             |                             | -/264°                        | 5 nm    |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 124.930 (Above FL<br>155);<br>Freq: 129.280 (FL 155 and<br>below).  |
| △                                    | BARKWAY<br>VOR/DME<br>(BKY) | 515923.17N 0000342.87E        |         |     |                                |                                 |                   |                                   | Extremity of Q75.   |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                    | Route Usage Notes             |         |                                |                                 |                   |                                   |                           |   |  |
|--------------------------------------|--------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|--|
| Significant Point Name               |                    | Significant Point Coordinates |         |                                |                                 |                   |                                   |                           |   |  |
| (RNP/RNAV Type)                      | Track<br>MAG<br>↓↑ | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|                                      |                    |                               |         |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |  |
|                                      |                    | ↓                             | ↑       |                                |                                 |                   |                                   |                           |   |  |
| T71<br>(RNP/RNAV)                    |                    |                               |         |                                |                                 |                   |                                   |                           |   |  |
| △                                    | VAPID              | 511514N 0010242W              |         |                                |                                 |                   |                                   |                           | Eastbound route only.<br>Extremity of T71.<br>Intersection with N859.   |  |
| (RNAV 5)                             |                    | -179°                         | 5.8 nm  |                                | FL 245 /<br>FL 175              |                   | 10 nm                             | odd<br>FL 230 /<br>FL 190 | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 132.165. |  |
| △                                    | TEVSI              | 512101N 0010301W              |         |                                |                                 |                   |                                   |                           |   |  |
| (RNAV 5)                             |                    | -179°                         | 16.0 nm |                                | FL 245 /<br>FL 175              |                   | 10 nm                             | odd<br>FL 230 /<br>FL 190 | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 132.165. |  |
| △                                    | COWLY              | 513658N 0010354W              |         |                                |                                 |                   |                                   |                           | Extremity of T71.   |  |

| Route Designator/<br>(RNP/RNAV Type) |                            | Route Usage Notes             |         |                                |                                 |                   |                                   |                           |  |  |
|--------------------------------------|----------------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|--|--|
| Significant Point Name               |                            | Significant Point Coordinates |         |                                |                                 |                   |                                   |                           |  |  |
| (RNP/RNAV Type)                      | Track<br>MAG<br>↓↑         | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks  |  |
|                                      |                            |                               |         |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |  |  |
|                                      |                            | ↓                             | ↑       |                                |                                 |                   |                                   |                           |  |  |
| T256<br>(RNP/RNAV)                   |                            |                               |         |                                |                                 |                   |                                   |                           |  |  |
| △                                    | DEAN CROSS<br>DME<br>(DCS) | 544318.88N 0032026.30W        |         |                                |                                 |                   |                                   |                           | Eastbound route only.<br>Extremity of T256.<br>Intersection with L612, N57<br>and N864.  |  |
| (RNAV 5)                             |                            | -136°                         | 19.1 nm |                                | FL 245 /<br>FL 95               |                   | 10 nm                             | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br>(Variable lower limit)<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels).                             |  |
| △                                    | RIPNO                      | 545632N 0034415W              |         |                                |                                 |                   |                                   |                           | The change in the lower limit<br>occurs along the straight line<br>joining: 545853N 0033559W -<br>545410N 0035231W and not<br>at the usual right angle to the<br>AWY CL. |  |
| (RNAV 5)                             |                            | -136°                         | 17.3 nm |                                | FL 245 /<br>FL 85               |                   | 10 nm                             | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels).   |  |
| △                                    | OSMEG                      | 550826N 0040603W              |         |                                |                                 |                   |                                   |                           | The change in the lower limit<br>occurs along the straight line<br>joining: 550603N 0041419W -<br>551049N 0035745W and not<br>at the usual right angle to the<br>AWY CL. |  |
| (RNAV 5)                             |                            | -136°                         | 3.2 nm  |                                | FL 245 /<br>6000 ft<br>ALT      |                   | 10 nm                             | odd<br>FL 230 /<br>FL 70  | FL 245/FL 195 Class C,<br>FL 195/Alt 6000 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels).   |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                              | Route Usage Notes             |         |     |                                |                                 |                   |  |                          |  |
|--|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|--------------------------|--|
| Significant Point Name   |                              | Significant Point Coordinates |         |     |                                |                                 |                   |  |                          |  |
| (RNP/RNAV Type)  |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |                          | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|  |                              |                               |         |     |                                |                                 |                   | ↓  | ↑                        |  |
| △  | NEW GALLOWAY<br>NDB<br>(NGY) | 551038.52N 0041007.02W        |         |     |                                |                                 |                   |  |                          |  |
| (RNAV 5)   |                              | -/144°                        | 32.3 nm |     | FL 245 /<br>6000 ft<br>ALT     |                                 | 10 nm             |  | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/Alt 6000 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels). |
| △  | NORBO                        | 553545N 0044543W              |         |     |                                |                                 |                   |  | Extremity of T256.       |  |
| Route Remarks:   |                              |                               |         |     |                                |                                 |                   |  |                          |  |
| <ul style="list-style-type: none"><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, base level FL 95 bounded by great circle lines joining:<br/>550045N 0032924W - 545511N 0032917W -<br/>545853N 0033559W - 550045N 0032924W,<br/>is part of T256 and has the same variable lower limit.</li><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, base level FL 135, bounded by great circle lines joining:<br/>550603N 0041419W - 543306N 0033033W -<br/>543637N 0032230W - 544000N 0032654W -<br/>550603N 0041419W, is part of T256.<br/>ATS within this airspace may be delegated to BAe Warton for test flying.</li><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, base level FL 85, bounded by great circle lines joining:<br/>551845N 0032945W - 550045N 0032924W -<br/>545853N 0033559W - 551049N 0035745W -<br/>551845N 0032945W, is part of T256.</li><li>Variable lower limit: Daily from 0700 to 2000 (1hr earlier in summer) btn DCS and RIPNO the lower limit is FL 125 making the Mnm FL (Eastbound) FL 130.</li></ul> |                              |                               |         |     |                                |                                 |                   |  |                          |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                            | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |  |
|--------------------------------------|----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|--|
| Significant Point Name               |                            | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |  |
| (RNP/RNAV Type)                      |                            | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |  |
|                                      |                            |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |  |
|                                      |                            | ↓                             |         |     |                                |                                 |                   |                                   | ↑ |  |  |
| T420<br>(RNP/RNAV)                   |                            |                               |         |     |                                |                                 |                   |                                   |   |  |  |
| △                                    | ALESO                      | 503432N 0011332E              |         |     |                                |                                 |                   |                                   |   | Northbound route only btn<br>ALESO and WELIN.<br>FIR Boundary.<br>For continuation see AIP<br>France.  |  |
| (RNAV 5)                             |                            | 315°/-                        | 24.0 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.425 (FL 195 and<br>above);<br>Freq: 120.175 (Below FL 195).  |  |
| △                                    | ROTNO                      | 505126N 0004641E              |         |     |                                |                                 |                   |                                   |   | Unless otherwise instructed by<br>ATC, en-route holding at Lydd<br>will be a race-track pattern on<br>an axis of 320° MAG turning<br>right at the VOR at levels up to<br>and including FL 140; acft<br>holding above FL 140 will turn<br>left.   |  |
| (RNAV 5)                             |                            | 315°/-                        | 9.5 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.425 (FL 195 and<br>above);<br>Freq: 120.175 (Below FL 195).  |  |
| △                                    | ETVAX                      | 505807N 0003556E              |         |     |                                |                                 |                   |                                   |   |  |  |
| (RNAV 5)                             |                            | 315°/-                        | 8.5 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.425 (FL 195 and<br>above);<br>Freq: 120.175 (Below FL 195).  |  |
| △                                    | TIGER                      | 510402N 0002622E              |         |     |                                |                                 |                   |                                   |   |  |  |
| (RNAV 5)                             |                            | 316°/-                        | 22 nm   |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.425 (FL 195 and<br>above);<br>Freq: 120.175 (Below FL 195).  |  |
| △                                    | BIGGIN<br>VOR/DME<br>(BIG) | 511951.15N 0000205.32E        |         |     |                                |                                 |                   |                                   |   | Intersection with L9.  |  |
| (RNAV 5)                             |                            | 330°/-                        | 16.0 nm |     | FL 245 /<br>3500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |   | FL 245/FL 195 Class C,<br>FL 195/Alt 3500 ft Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (All Levels).  |  |
| △                                    | FINCH                      | 513336N 0001059W              |         |     |                                |                                 |                   |                                   |   |  |  |
| (RNAV 5)                             |                            | 330°/-                        | 17.2 nm |     | FL 245 /<br>3500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |   | FL 245/FL 195 Class C,<br>FL 195/Alt 3500 ft Class A.<br><br>Between FINCH and abm<br>BPK:<br>London Control (Swanwick)<br>Freq: 132.165 (All Levels).<br><br>Between abm BPK and<br>HEMEL:<br>London Control (Swanwick)<br>Freq: 127.105 (Above FL<br>195);<br>Freq: 130.925 (FL 195 and<br>below). |  |

**ENR 3.1 LOWER ATS ROUTES (continued)**

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |   |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |   |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |
| △                                    | HEMEL | 514820N 0002510W              |         |     |                                |                                 |                   |                                   |                           | Intersection with L610 and Q3.  |
| (RNAV 5)                             |       | 330°/-                        | 9.6 nm  |     | FL 245 /<br>5500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |                           | FL 245/FL 195 Class C,<br>FL 195/Alt 5500 ft Class A.<br><br>London Control (Swanwick)<br>Freq: 127.105 (Above FL 195);<br>Freq: 130.925 (FL 195 and below).  |
| △                                    | BUZAD | 515632N 0003308W              |         |     |                                |                                 |                   |                                   |                           | Intersection with L10.  |
| (RNAV 5)                             |       | 330°/-                        | 13.0 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |                           | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.105 (Above FL 195);<br>Freq: 130.925 (FL 195 and below).  |
| △                                    | OLNEY | 520740N 0004403W              |         |     |                                |                                 |                   |                                   |                           | Intersection with M189.   |
| (RNAV 5)                             |       | 330°/-                        | 8.4 nm  |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |                           | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.105 (Above FL 195);<br>Freq: 130.925 (FL 195 and below).  |
| △                                    | WELIN | 521450N 0005108W              |         |     |                                |                                 |                   |                                   |                           | Intersection with N57.  |
| (RNAV 5)                             |       | 330°/<br>149°                 | 16.8 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>FL 140 not available between<br>WELIN and TNT.<br><br>London Control (Swanwick)<br>Freq: 127.105 (Above FL 195);<br>Freq: 130.925 (FL 195 and below). |
| △                                    | AKUPA | 522912N 0010528W              |         |     |                                |                                 |                   |                                   |                           | Intersection with Y250.   |
| (RNAV 5)                             |       | 329°/<br>149°                 | 5.1 nm  |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>FL 140 not available between<br>WELIN and TNT.<br><br>London Control (Swanwick)<br>Freq: 127.105 (Above FL 195);<br>Freq: 130.925 (FL 195 and below). |
| △                                    | TIMPO | 523332N 0010950W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |       | 329°/<br>149°                 | 10.0 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>FL 140 not available between<br>WELIN and TNT.<br><br>London Control (Swanwick)<br>Freq: 127.105 (Above FL 195);<br>Freq: 130.925 (FL 195 and below). |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                           | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |   |
|--------------------------------------|---------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|
| Significant Point Name               |                           | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |   |
| (RNP/RNAV Type)                      |                           | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                           |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |
|                                      |                           |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         |   |
| △                                    | ELVOS                     | 524201N 0011825W              |         |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)                             |                           | 329°/<br>149°                 | 25.0 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>FL 140 not available between<br>WELIN and TNT.<br><br>London Control (Swanwick)<br>Freq: 127.105 (Above FL<br>195);<br>Scottish Control (Prestwick)<br>Freq: 119.525 (FL 195 and<br>below). |
| △                                    | TRENT<br>VOR/DME<br>(TNT) | 530314.23N 0014011.89W        |         |     |                                |                                 |                   |                                   |                           | Extremity of T420.<br>Intersection with L28.  |
| Route Remarks:                       |                           |                               |         |     |                                |                                 |                   |                                   |                           |   |
| • See also ENR 1.1, paragraph 1.1.3. |                           |                               |         |     |                                |                                 |                   |                                   |                           |   |

| Route Designator/<br>(RNP/RNAV Type) |                            | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--------------------------------------|----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name               |                            | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)                      |                            | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                            |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|                                      |                            |                               |         |     |                                |                                 |                   | ↓                                 | ↑ |  |
| T421<br>(RNP/RNAV)                   |                            |                               |         |     |                                |                                 |                   |                                   |   |  |
| △                                    | KUNAV                      | 503054N 0010356E              |         |     |                                |                                 |                   |                                   |   | Northbound route only.<br>FIR Boundary.<br>For continuation see AIP<br>France.   |
| (RNAV 5)                             |                            | 322°/-                        | 32.2 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        |   | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.425 (FL 195 and<br>above);<br>Freq: 120.175 (Below FL 195). |
| △                                    | NIVKO                      | 505606N 0003228E              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                            | 322°/-                        | 10.5 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        |   | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.425 (FL 195 and<br>above);<br>Freq: 120.175 (Below FL 195). |
| △                                    | BISRU                      | 510418N 0002203E              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                            | 322°/-                        | 20 nm   |     | FL 245 /<br>FL 155             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        |   | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.425 (FL 195 and<br>above);<br>Freq: 120.175 (Below FL 195). |
| △                                    | BIGGIN<br>VOR/DME<br>(BIG) | 511951.15N 0000205.32E        |         |     |                                |                                 |                   |                                   |   | Extremity of T421.   |
| Route Remarks:                       |                            |                               |         |     |                                |                                 |                   |                                   |   |  |
| • See also ENR 1.1, paragraph 1.1.3. |                            |                               |         |     |                                |                                 |                   |                                   |   |  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                    | Route Usage Notes             |         |                                |                                 |                   |  |   |   |  |
|---|--------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------|--|---|---|--|
| Significant Point Name  |                    | Significant Point Coordinates |         |                                |                                 |                   |  |   |   |  |
| (RNP/RNAV Type)   | Track<br>MAG<br>↓↑ | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br><br>IFR cruising<br>levels<br>max/min |   | Controlling Unit/<br>Airspace Class/<br>Remarks |  |
|   |                    |                               |         |                                |                                 |                   | ↓  | ↑   |   |  |
| Y4<br>(RNP/RNAV)  |                    |                               |         |                                |                                 |                   |  |   |   |  |
| △   | ODROB              | 513915N 0015445E              |         |                                |                                 |                   |  | Westbound (southbound)<br>route only.<br>Extremity of Y4.<br>Intersection with Y76. |   |  |
| (RNAV 5)  |                    | -/206°                        | 30.2 nm |                                | FL 245 /<br>FL 95               |                   | 10 nm  |   | even<br>FL 240 /<br>FL 100                      | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 220 and<br>above);<br>Freq: 121.025 (FL 210 and<br>below). |
| △   | SONOG              | 520620N 0021610E              |         |                                |                                 |                   |  |   |   | Extremity of Y4.   |
| Route Remarks:  |                    |                               |         |                                |                                 |                   |  |   |   |  |
| <ul style="list-style-type: none"><li>The northern limits of Y4 are bounded by a perpendicular line to the CL of Y4 at SONOG to a point intersecting the northern bdry of L620, then westwards along the northern bdry of L620.</li></ul> |                    |                               |         |                                |                                 |                   |  |   |   |  |

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |  |
|                                      |       | ↓                             |         |     |                                |                                 |                   | ↑                                 |  |  |
| Y6<br>(RNP/RNAV)                     |       |                               |         |     |                                |                                 |                   |                                   |  |  |
| △                                    | SUMUM | 513814N 0020628E              |         |     |                                |                                 |                   |                                   | Westbound (northbound)<br>route only.<br>FIR Boundary.<br>Extremity of Y6. |  |
| (RNAV 5)                             |       | 332°/-                        | 2.7 nm  |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215). |
| △                                    | TOSVA | 514037N 0020426E              |         |     |                                |                                 |                   |                                   |  |  |
| (RNAV 5)                             |       | 332°/-                        | 15 nm   |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |  | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215). |
| △                                    | IDESI | 515352N 0015308E              |         |     |                                |                                 |                   |                                   | Intersection with M20.   |  |
| (RNAV 5)                             |       | 332°/-                        | 29.8 nm |     | FL 245 /<br>FL 165             |                                 | 10 nm             | even<br>FL 240 /<br>FL 180        |  | FL 245/FL 195 Class C,<br>FL 195/FL 165 Class A.<br><br>London Control (Swanwick)<br>Freq: 133.940 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215). |
| △                                    | BANEM | 522008N 0013019E              |         |     |                                |                                 |                   |                                   | Extremity of Y6.   |  |
| Route Remarks:                       |       |                               |         |     |                                |                                 |                   |                                   |  |  |
| • See also ENR 1.1, paragraph 1.1.3. |       |                               |         |     |                                |                                 |                   |                                   |  |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                                 | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                           |   |  |
|--------------------------------------|---------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|--|
| Significant Point Name               |                                 | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                           |   |  |
| (RNP/RNAV Type)                      |                                 | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|                                      |                                 |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |  |
|                                      |                                 |                               |         |     |                                |                                 |                   | ↓                                 | ↑                         |   |  |
| Y8<br>(RNP/RNAV)                     |                                 |                               |         |     |                                |                                 |                   |                                   |                           |   |  |
| △                                    | KUNAV                           | 503054N 0010356E              |         |     |                                |                                 |                   |                                   |                           | Westbound route only btn<br>KUNAV and WAFFU.<br>FIR Boundary.<br>Extremity of Y8.   |  |
| (RNAV 5)                             |                                 | 279°/-                        | 12.1 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |                           | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.425 (FL 145 and<br>above);<br>Freq: 135.325 (Below FL 145).   |  |
| △                                    | BANVA                           | 503242N 0004512E              |         |     |                                |                                 |                   |                                   |                           | Intersection with M733.   |  |
| (RNAV 5)                             |                                 | 279°/-                        | 15.6 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |                           | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).   |  |
| △                                    | WAFFU                           | 503457N 0002059E              |         |     |                                |                                 |                   |                                   |                           |   |  |
| (RNAV 5)                             |                                 | 292°/<br>111°                 | 45.3 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 110 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).   |  |
| △                                    | GOODWOOD<br>VOR/DME<br>(GWC)    | 505118.78N 0004524.25W        |         |     |                                |                                 |                   |                                   |                           |   |  |
| (RNAV 5)                             |                                 | 286°/<br>106°                 | 23.1 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 132.165 (FL 215 and<br>above);<br>Freq: 135.800 (Below FL 215<br>to FL 175);<br>Freq: 134.125 (Below FL 175). |  |
| △                                    | SOUTHAMPTON<br>VOR/DME<br>(SAM) | 505718.90N 0012042.20W        |         |     |                                |                                 |                   |                                   |                           | Extremity of Y8.  |  |
| Route Remarks:                       |                                 |                               |         |     |                                |                                 |                   |                                   |                           |   |  |
| • See also ENR 1.1, paragraph 1.1.3. |                                 |                               |         |     |                                |                                 |                   |                                   |                           |   |  |

# ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |
|--|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name   |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)  |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|  |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|  |                              |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |   |
| Y47<br>(RNP/RNAV)  |                              |                               |         |     |                                |                                 |                   |                                   |   |   |
| △  | DRAKE                        | 501234N 0000434W              |         |     |                                |                                 |                   |                                   | Southbound route only.<br>Extremity of Y47. |   |
| (RNAV 5)   |                              | -/193°                        | 14.9 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90                    | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (All Levels).   |
| △  | BENBO                        | 502705N 0000037E              |         |     |                                |                                 |                   |                                   | Intersection with L612.                     |   |
| (RNAV 5)   |                              | -/193°                        | 19.1 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90                    | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (FL 175 and<br>above);<br>Freq: 133.175 (Below FL 175). |
| △  | SEAFORD<br>VOR/DME<br>(SFD)  | 504538.49N 0000718.89E        |         |     |                                |                                 |                   |                                   |   |   |
| (RNAV 5)   |                              | -/180°                        | 15.4 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90                    | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 135.050 (FL 175 and<br>above);<br>Freq: 133.175 (Below FL 175). |
| △  | MAYFIELD<br>VOR/DME<br>(MAY) | 510101.86N 0000658.04E        |         |     |                                |                                 |                   |                                   | Extremity of Y47.                           |   |
| Route Remarks:   |                              |                               |         |     |                                |                                 |                   |                                   |   |   |
| • Due to ATC operational requirements, the cruising level allocation for the entire route is inappropriate to the MAG Track. |                              |                               |         |     |                                |                                 |                   |                                   |   |   |

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |   |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|---|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |   |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |   |
|                                      |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑                        |   |
| Y53<br>(RNP/RNAV)                    |       |                               |         |     |                                |                                 |                   |                                   |                          |   |
| △                                    | SAPCO | 523225N 0012125W              |         |     |                                |                                 |                   |                                   |                          | Extremity of Y53.   |
| (RNAV 5)                             |       | 314°/<br>134°                 | 18.1 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>For flight planning purposes<br>the portion of AWY Y53 btn<br>SAPCO and PEDIG is for<br>westbound flights only which<br>are unable to route on AWY<br>N601, exceptionally ATC may<br>clear t/c eastbound.<br><br>London Control (Swanwick)<br>Freq: 127.105 (Above FL<br>195);<br>Freq: 130.925 (FL 195 and<br>below). |
| △                                    | PEDIG | 524448N 0014310W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)                             |       | 310°/<br>130°                 | 27.2 nm |     | FL 245 /<br>FL 65              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70 | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                                   |  |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|-----------------------------------|--|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                                   |  |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                                   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                                   |  |
|                                      |                              |                               |         |     |                                |                                 |                   | ↓                                 | ↑                                 | London Control (Swanwick)<br>Freq: 134.390 (Above FL 195);<br>Scottish Control (Prestwick)<br>Freq: 134.425 (FL 195 and below).  |
| △                                    | NUGRA                        | 530146N 0021814W              |         |     |                                |                                 |                   |                                   |                                   |  |
| (RNAV 5)                             |                              | 306°/<br>126°                 | 11.5 nm |     | FL 245 /<br>FL 65              |                                 | 10 nm             | even<br>FL 240 /<br>FL 80         | odd<br>FL 230 /<br>FL 70          | FL 245/FL 195 Class C,<br>FL 195/FL 65 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.390 (Above FL 195);<br>Scottish Control (Prestwick)<br>Freq: 134.425 (FL 195 and below). |
| △                                    | NANTI                        | 530815N 0023401W              |         |     |                                |                                 |                   |                                   |                                   |  |
| (RNAV 5)                             |                              | 309°/<br>129°                 | 3.1 nm  |     | FL 245 /<br>3500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 230 /<br>5000 ft<br>ALT | FL 245/FL 195 Class C,<br>FL 195/Alt 3500 ft Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (Above FL 195);<br>Freq: 128.050 (FL 195 and below).                        |
| △                                    | MOGTA                        | 531008N 0023810W              |         |     |                                |                                 |                   |                                   |                                   |  |
| (RNAV 5)                             |                              | 309°/<br>129°                 | 8.5 nm  |     | FL 245 /<br>3500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 230 /<br>5000 ft<br>ALT | FL 245/FL 195 Class C,<br>FL 195/Alt 3500 ft Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (Above FL 195);<br>Freq: 128.050 (FL 195 and below).                        |
| △                                    | EKLAD                        | 531514N 0024929W              |         |     |                                |                                 |                   |                                   |                                   |  |
| (RNAV 5)                             |                              | 309°/<br>128°                 | 13.9 nm |     | FL 245 /<br>3500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 240 /<br>FL 60         | odd<br>FL 230 /<br>5000 ft<br>ALT | FL 245/FL 195 Class C,<br>FL 195/Alt 3500 ft Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (Above FL 195);<br>Freq: 128.050 (FL 195 and below).                        |
| △                                    | WALLASEY<br>VOR/DME<br>(WAL) | 532330.97N 0030804.06W        |         |     |                                |                                 |                   |                                   |                                   | Intersection with L10.<br>Extremity of Y53.  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--------------------------------------|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name               |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)                      |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|                                      |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |  |
| Y70<br>(RNP/RNAV)                    |       |                               |         |     |                                |                                 |                   |                                   |   |  |
| △                                    | BODSO | 530308N 0020541E              |         |     |                                |                                 |                   |                                   | Extremity of Y70.<br>Intersection with L17.   |  |
| (RNAV 5)                             |       | 281°/<br>101°                 | 55.3 nm |     | FL 245 /<br>FL 175             |                                 | 10 nm             | even<br>FL 240 /<br>FL 180        | odd<br>FL 230 /<br>FL 190   | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>London Control (Swanwick)<br>Freq: 128.125 (All Levels).   |
| △                                    | SUPEL | 531340N 0003528E              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |       | 281°/<br>101°                 | 20.5 nm |     | FL 245 /<br>FL 175             |                                 | 10 nm             | even<br>FL 240 /<br>FL 180        | odd<br>FL 230 /<br>FL 190   | FL 245/FL 195 Class C,<br>FL 195/FL 175 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).  |
| △                                    | OTBED | 531717N 0000155E              |         |     |                                |                                 |                   |                                   | The base level change south<br>of OTBED to the southern<br>limits of Y70 is at a perpen-<br>dicular line to the CL of L60.  |  |
| (RNAV 5)                             |       | 297°/<br>117°                 | 15.4 nm |     | FL 245 /<br>FL 155             |                                 | 10 nm             | even<br>FL 240 /<br>FL 160        | odd<br>FL 230 /<br>FL 170   | FL 245/FL 195 Class C,<br>FL 195/FL 155 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).  |
| △                                    | VEGUS | 532401N 0002111W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |       | 297°/<br>117°                 | 9.0 nm  |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 140        | odd<br>FL 230 /<br>FL 130   | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).  |
| △                                    | SIVBU | 532755N 0003444W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |       | 296°/<br>116°                 | 8.4 nm  |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        | odd<br>FL 230 /<br>FL 110   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>During Hibaldstow operations<br>acft flying below FL 160 may<br>occasionally be routed by ATC<br>around parachute activity.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels). |
| △                                    | GIPLO | 533131N 0004723W              |         |     |                                |                                 |                   |                                   | Base level change point is not<br>at right angles to the CL of<br>Y70 and extends between<br>533619N 0004448W and<br>532643N 0004958W.  |  |
| (RNAV 5)                             |       | 296°/<br>116°                 | 11.6 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        | odd<br>FL 230 /<br>FL 90  | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).   |
| △                                    | GOLES | 533629N 0010500W              |         |     |                                |                                 |                   |                                   | <b>Westbound route only btn<br/>GOLES and KOLID.</b><br>Base level change point is not<br>at right angles to the CL of<br>Y70 and extends between<br>534115N 0010227W and<br>533142N 0010734W.<br>Intersection with L975. |  |
| (RNAV 5)                             |       | 284°/-                        | 10.1 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).   |
| △                                    | BATLI | 533845N 0012137W              |         |     |                                |                                 |                   |                                   | Intersection with Y250.   |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                               | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |
|---|-------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name  |                               | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)   |                               | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|   |                               |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|   |                               |                               |         |     |                                |                                 |                   | ↓                                 | ↑ |   |
| (RNAV 5)  |                               | 284°/-                        | 27.1 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).  |
| △   | POLE HILL<br>VOR/DME<br>(POL) | 534437.56N 0020611.98W        |         |     |                                |                                 |                   |                                   |   | Intersection with N601.   |
| (RNAV 5)  |                               | 247°/-                        | 17.1 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195).  |
| △   | CROFT                         | 533737N 0023220W              |         |     |                                |                                 |                   |                                   |   | Intersection with P16.  |
| (RNAV 5)  |                               | 249°/-                        | 8.4 nm  |     | FL 245 /<br>FL 85              |                                 | 8 nm              | even<br>FL 240 /<br>FL 100        |   | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>AWY is 8 nm wide, 3 nm north<br>of CL and 5 nm south of CL.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (FL 195 and<br>above);<br>Freq: 136.575 (Below FL 195). |
| △   | KOLID                         | 533426N 0024521W              |         |     |                                |                                 |                   |                                   |   | Intersection with L70.<br>Extremity of Y70.   |
| Route Remarks:  |                               |                               |         |     |                                |                                 |                   |                                   |   |   |
| <ul style="list-style-type: none"><li>The portion of airspace formed by joining positions:<br/><br/><b>L975 Crossing Area</b><br/><br/>533835N 0013503W - 534007N 0011937W -<br/>534626.98N 0011937.00W - 534308.41N 0011615.09W -<br/>534127.82N 0010357.97W - 533059N 0010932W -<br/>532845N 0013215W - 533835N 0013503W,<br/>from AWY base level to an upper limit of FL 120, occasionally to FL 190 on request;<br/><br/>is notified for the purposes of SERA.6001(a) Classification of Airspaces in accordance with the conditions established in the Letter of Agreement (LOA) b/n the Derbyshire and Lancashire (Camphill) Gliding Club, British Gliding Association (BGA), Leeds Bradford International Airport, and Scottish Control (Prestwick).</li><li>The area of Y70 bounded by the co-ordinates:<br/>533142N 0010734W - 533119N 0010614W -<br/>533109N 0010751W - 533142N 0010734W, has a lower limit of FL 85.</li><li>The area of Y70 bounded by the co-ordinates:<br/>534402N 0012252W - 534134N 0010443W -<br/>534007N 0011937W - 534402N 0012252W, has a lower limit of FL 125.</li></ul> |                               |                               |         |     |                                |                                 |                   |                                   |   |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                             | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |   |
|---|-----------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|---|
| Significant Point Name  |                             | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |   |
| (RNP/RNAV Type)   |                             | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|   |                             |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |   |
|   |                             |                               |         |     |                                |                                 |                   | ↓                                 | ↑  |   |
| Y76<br>(RNP/RNAV)   |                             |                               |         |     |                                |                                 |                   |                                   |  |   |
| △   | DETLING<br>VOR/DME<br>(DET) | 511814.41N 0003550.19E        |         |     |                                |                                 |                   |                                   | Westbound (southbound)<br>route only.<br>Extremity of Y76. |   |
| (RNAV 5)  |                             | -/235°                        | 15.1 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100                                 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215). |
| △   | TANET                       | 512658N 0005532E              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)  |                             | -/235°                        | 9.7 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100                                 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215). |
| △   | KOPUL                       | 513232N 0010814E              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)  |                             | -/261°                        | 18.0 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100                                 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215). |
| △   | ERING                       | 513526N 0013643E              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)  |                             | -/251°                        | 11.9 nm |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100                                 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215). |
| △   | ODROB                       | 513915N 0015445E              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)  |                             | -/251°                        | 9.8 nm  |     | FL 245 /<br>FL 95              |                                 | 10 nm             |                                   | even<br>FL 240 /<br>FL 100                                 | FL 245/FL 195 Class C,<br>FL 195/FL 95 Class A.<br><br>London Control (Swanwick)<br>Freq: 118.480 (FL 215 and<br>above);<br>Freq: 135.425 (Below FL 215). |
| △   | RIMBU                       | 514222N 0020943E              |         |     |                                |                                 |                   |                                   | FIR Boundary.<br>For continuation see AIP<br>Netherlands.  |   |
| Route Remarks:  |                             |                               |         |     |                                |                                 |                   |                                   |  |   |
| <ul style="list-style-type: none"><li>Due to presence of EG D138, pilots should ensure that they do not fly north of track from ERING to abm SND NDB (15 DME DET).</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |                             |                               |         |     |                                |                                 |                   |                                   |  |   |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |   |  |
|--|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|--|
| Significant Point Name   |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |   |  |
| (RNP/RNAV Type)  |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |  |
|  |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |  |
|  |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |   |  |
| Y91<br>(RNP/RNAV)  |       |                               |         |     |                                |                                 |                   |                                   |   |   |  |
| △  | BIGNO | 500000N 0024930W              |         |     |                                |                                 |                   |                                   | Southbound route only.<br>Channel Islands CTA Arrivals only.<br>Extremity of Y91 is aligned with the Channel Islands CTR. |   |  |
| (RNAV 5)   |       | -/154°                        | 29.4 nm |     | FL 245 /<br>FL 105             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 110   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 126.075. |  |
| △  | NOTRO | 502612N 0031021W              |         |     |                                |                                 |                   |                                   |   |   |  |
| (RNAV 5)   |       | -/128°                        | 13.9 nm |     | FL 245 /<br>FL 105             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 110   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>London Control (Swanwick)<br>(All Levels)<br>Freq: 126.075. |  |
| △  | DAWLY | 503427N 0032750W              |         |     |                                |                                 |                   |                                   | Extremity of Y91.   |   |  |
| Route Remarks:   |       |                               |         |     |                                |                                 |                   |                                   |   |   |  |
| <ul style="list-style-type: none"><li><b>CDR Category One (CDR 1).</b><br/>Available:<br/>1600 Fri - 0745 Mon (Winter);<br/>1500 Fri - 0645 Mon (Summer).<br/><b>Not</b> available on PHs.</li><li>Western edge of AWY is 7 nm west of the CL.</li></ul> |       |                               |         |     |                                |                                 |                   |                                   |   |   |  |

| Route Designator/<br>(RNP/RNAV Type) |                           | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |  |
|--------------------------------------|---------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|--|
| Significant Point Name               |                           | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |  |
| (RNP/RNAV Type)                      |                           | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |  |
|                                      |                           |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |  |
|                                      |                           |                               |         |     |                                |                                 |                   | ↓                                 | ↑   |  |  |
| Y96<br>(RNP/RNAV)                    |                           |                               |         |     |                                |                                 |                   |                                   |   |  |  |
| △                                    | TALLA<br>VOR/DME<br>(TLA) | 552956.92N 0032110.20W        |         |     |                                |                                 |                   |                                   | Eastbound route only.<br>Extremity of Y96.<br>Intersection with L602. |  |  |
| (RNAV 5)                             |                           | -/099°                        | 48.4 nm |     | FL 245 /<br>6000 ft<br>ALT     |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 70  | FL 245/FL 195 Class C,<br>FL 195/Alt 6000 ft Class D.<br><br>Scottish Control (Prestwick)<br>Freq: 124.825 (All Levels). |  |
| △                                    | NORBO                     | 553545N 0044543W              |         |     |                                |                                 |                   |                                   | Extremity of Y96.   |  |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |       | Route Usage Notes             |        |     |                                |                                 |                   |                                   |   |   |
|--|-------|-------------------------------|--------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|---|
| Significant Point Name   |       | Significant Point Coordinates |        |     |                                |                                 |                   |                                   |   |   |
| (RNP/RNAV Type)  |       | Track<br>MAG<br>↓↑            | Dist   | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|  |       |                               |        |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |   |
|  |       |                               |        |     |                                |                                 |                   | ↓                                 | ↑ |   |
| Y110<br>(RNP/RNAV)   |       |                               |        |     |                                |                                 |                   |                                   |   |   |
| △  | ORIST | 500000N 0015042W              |        |     |                                |                                 |                   |                                   |   | <b>Eastbound (northbound)<br/>route only.</b><br>Not flight plannable for traffic<br>with RFL below FL 205 be-<br>tween ORIST and VEXEN.<br>FIR Boundary.<br>Extremity of Y110. |
| (RNAV 5)   |       | 006°/-                        | 8.4 nm |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 140        |   | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.825 (Above FL<br>225);<br>Freq: 129.425 (Below FL 225).                          |
| △  | VEXEN | 500822N 0014934W              |        |     |                                |                                 |                   |                                   |   | Intersection with L980.   |
| (RNAV 5)   |       | 006°/-                        | 9.2 nm |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 140        |   | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>London Control (Swanwick)<br>Freq: 127.825 (Above FL<br>225);<br>Freq: 129.425 (Below FL 225).                          |
| △  | ASPEN | 501734N 0014820W              |        |     |                                |                                 |                   |                                   |   | Extremity of Y110.<br>Intersection with Q41.  |
| Route Remarks:   |       |                               |        |     |                                |                                 |                   |                                   |   |   |
| <ul style="list-style-type: none"><li>Due to Brest ACC operational requirements, cruising levels are inappropriate to the MAG TR btn ORIST and ASPEN.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |       |                               |        |     |                                |                                 |                   |                                   |   |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |       | Route Usage Notes             |         |     |                                |                                 |                   |                                   |  |   |
|--|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--|---|
| Significant Point Name   |       | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |  |   |
| (RNP/RNAV Type)  |       | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |  | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|  |       |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |  |   |
|  |       |                               |         |     |                                |                                 |                   | ↓                                 | ↑  |   |
| Y124<br>(RNP/RNAV)   |       |                               |         |     |                                |                                 |                   |                                   |  |   |
| △  | MOGTA | 531008N 0023810W              |         |     |                                |                                 |                   |                                   | Eastbound route only.<br>Available for Jet traffic only.<br>Intersection with Y53. |   |
| (RNAV 5)   |       | -/096°                        | 20.1 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 210  | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 118.780 (All Levels).   |
| △  | AMPIT | 531139N 0031133W              |         |     |                                |                                 |                   |                                   | Intersection with L15.   |   |
| (RNAV 5)   |       | -/096°                        | 15.9 nm |     | FL 245 /<br>FL 195             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 210  | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).   |
| △  | DOLOP | 531251N 0033751W              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)   |       | -/096°                        | 12.9 nm |     | FL 245 /<br>FL 195             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 210  | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).   |
| △  | BAGIT | 531345N 0035918W              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)   |       | -/096°                        | 13.2 nm |     | FL 245 /<br>FL 195             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 210  | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).   |
| △  | PETUK | 531436N 0042114W              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)   |       | -/096°                        | 13.9 nm |     | FL 245 /<br>FL 195             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 210  | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).   |
| △  | LUTIP | 531522N 0044416W              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)   |       | -/096°                        | 15.9 nm |     | FL 245 /<br>FL 145             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 150  | Class C.<br><br>Scottish Control (Prestwick)<br>Freq: 133.050 (All Levels).   |
| △  | LOMVO | 531616N 0051046W              |         |     |                                |                                 |                   |                                   |  |   |
| (RNAV 5)   |       | -/095°                        | 11.6 nm |     | FL 245 /<br>FL 115             |                                 | 12 nm             |                                   | odd<br>FL 230 /<br>FL 130  | Class C.<br><br>Dublin ACC (All Levels)<br>Freq: 129.175.<br><br>The area of ATS delegation to<br>Dublin is defined as follows:<br>Western extremity - FIR<br>boundary.<br>Eastern extremity - 5 nm east<br>of LUTIP. |
| △  | DEXEN | 531649N 0053000W              |         |     |                                |                                 |                   |                                   | FIR Boundary.<br>Extremity of Y124.  |   |
| Route Remarks:   |       |                               |         |     |                                |                                 |                   |                                   |  |   |
| <ul style="list-style-type: none"><li>CDR Category One, Two and Three (CDR 1, 2 and 3) (ENR 1.1, paragraph 1.1.7 refers).<br/>CDR 1 Mon-Thu 1800-0800 Winter (Summer 1 hr earlier) and from 1700 (Winter and Summer) on Friday or the day preceding a PH to 0800 (Winter), 0700 (Summer) on Monday or the day following a PH.<br/>CDR 2 Mon-Thu 0800-1800, Fri 0800-1700 (Winter); Mon-Fri 0700-1700 (Summer).<br/>The route may be closed tactically with 2 hrs notice in which case routings will be via LIFFY L975.</li><li>That portion of Y124 west of LUTIP below FL 195 is permanently established for tactical use by Dublin ATC.</li><li>Between DEXEN and AMPIT AWY is 12 nm wide with 7 nm north of the CL and 5 nm south of the CL.</li><li>See also ENR 1.1, paragraph 1.1.3.</li></ul> |       |                               |         |     |                                |                                 |                   |                                   |  |   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |   |  |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---|--|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |   |  |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|                                      |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |   |  |
|                                      |                              | ↓                             |         |     |                                |                                 |                   | ↑                                 |   |  |
| Y250<br>(RNP/RNAV)                   |                              |                               |         |     |                                |                                 |                   |                                   |   |  |
| △                                    | DAVENTRY<br>VOR/DME<br>(DTY) | 521048.51N 0010649.64W        |         |     |                                |                                 |                   |                                   | Northbound route only btn<br>DTY and MAMUL.<br>Extremity of Y250. |  |
| (RNAV 5)                             |                              | 004°/-                        | 18.4 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Due to ATC operational re-<br>quirements, the cruising level<br>allocation between DTY and<br>LESTA is inappropriate to the<br>MAG Track.<br><br>London Control (Swanwick)<br>Freq: 131.130 (Above FL<br>195);<br>Freq: 130.925 (FL 195 and<br>below). |
| △                                    | AKUPA                        | 522912N 0010528W              |         |     |                                |                                 |                   |                                   | Intersection with T420.   |  |
| (RNAV 5)                             |                              | 004°/-                        | 15.3 nm |     | FL 245 /<br>FL 105             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120        |   | FL 245/FL 195 Class C,<br>FL 195/FL 105 Class A.<br><br>Due to ATC operational re-<br>quirements, the cruising level<br>allocation between DTY and<br>LESTA is inappropriate to the<br>MAG Track.<br><br>London Control (Swanwick)<br>Freq: 131.130 (Above FL<br>195);<br>Freq: 130.925 (FL 195 and<br>below). |
| △                                    | LESTA                        | 524427N 0010419W              |         |     |                                |                                 |                   |                                   | Intersection with N601.   |  |
| (RNAV 5)                             |                              | 351°/-                        | 41.4 nm |     | FL 245 /<br>FL 195             |                                 | 10 nm             | even<br>FL 240 /<br>FL 200        |   | Class C.<br><br>London Control (Swanwick)<br>Freq: 131.130 (Above FL<br>195).  |
| △                                    | MAMUL                        | 532505N 0011648W              |         |     |                                |                                 |                   |                                   | Intersection with L60 and<br>L603.                                |  |
| (RNAV 5)                             |                              | 357°/<br>177°                 | 10.2 nm |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 140        | odd<br>FL 230 /<br>FL 130   | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).  |
| △                                    | UPTON                        | 533513N 0011803W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                              | 330°/<br>150°                 | 4.1 nm  |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 140        | odd<br>FL 230 /<br>FL 130   | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).  |
| △                                    | BATLI                        | 533845N 0012137W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                              | 330°/<br>150°                 | 5.0 nm  |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 140        | odd<br>FL 230 /<br>FL 130   | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).  |
| △                                    | RIMTO                        | 534303N 0012559W              |         |     |                                |                                 |                   |                                   |   |  |
| (RNAV 5)                             |                              | 330°/<br>150°                 | 32.3 nm |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 140        | odd<br>FL 230 /<br>FL 130   | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels).  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |       | Route Usage Notes             |        |     |                                |                                 |                   |                                   |                           |   |
|---|-------|-------------------------------|--------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|---------------------------|---|
| Significant Point Name  |       | Significant Point Coordinates |        |     |                                |                                 |                   |                                   |                           |   |
| (RNP/RNAV Type)   |       | Track<br>MAG<br>↓/↑           | Dist   | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                           | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|   |       |                               |        |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                           |   |
| Δ   | OBOXA | 541036N 0015420W              |        |     |                                |                                 |                   |                                   |                           |   |
| (RNAV 5)  |       | 330°/<br>150°                 | 3.4 nm |     | FL 245 /<br>FL 125             |                                 | 10 nm             | even<br>FL 240 /<br>FL 140        | odd<br>FL 230 /<br>FL 130 | FL 245/FL 195 Class C,<br>FL 195/FL 125 Class A.<br><br>Scottish Control (Prestwick)<br>Freq: 133.800 (All Levels). |
| Δ   | GASKO | 541329N 0015721W              |        |     |                                |                                 |                   |                                   |                           | Extremity of Y250.<br>Intersection with P18.  |
| Route Remarks:  |       |                               |        |     |                                |                                 |                   |                                   |                           |   |
| <ul style="list-style-type: none"><li>Lower limit reduced to FL 85 above the lateral limits of Leeds Bradford CTA.</li><li>The portion of airspace formed by joining positions:<ul style="list-style-type: none"><li>(i) <b>Camphill Box</b><br/><br/>532719N 0014617W - 533017N 0011641W -<br/>531938N 0011532W - 532012N 0011840W -<br/>532110N 0012901W - 532002.91N 0013042.10W -<br/>531418.31N 0012448.84W - 531137N 0013631W -<br/>532719N 0014617W,<br/>from AWY base level to an upper limit of FL 100, occasionally to FL 190 on request;</li><li>(ii) <b>L975 Crossing Area</b><br/><br/>533835N 0013503W - 534007N 0011937W -<br/>534626.98N 0011937.00W - 534308.41N 0011615.09W -<br/>534127.82N 0010357.97W - 533059N 0010932W -<br/>532845N 0013215W - 533835N 0013503W,<br/>from AWY base level to an upper limit of FL 120, occasionally to FL 190 on request;</li></ul></li></ul> <p>is notified for the purposes of SERA.6001(a) Classification of Airspaces in accordance with the conditions established in the Letter of Agreement (LOA) b/n the Derbyshire and Lancashire (Camphill) Gliding Club, British Gliding Association (BGA), Leeds Bradford International Airport, and Scottish Control (Prestwick).</p> <ul style="list-style-type: none"><li>An area of controlled airspace, Class C above FL 195 and Class A below FL 195, base FL 85, bounded by straight lines joining:<br/>535710N 0015020W - 534612N 0013902W -<br/>534803N 0015310W - 535710N 0015020W,<br/>is part of Y250.</li></ul> |       |                               |        |     |                                |                                 |                   |                                   |                           |   |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                           | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |   |
|--------------------------------------|---------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|---|
| Significant Point Name               |                           | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |   |
| (RNP/RNAV Type)                      |                           | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                           |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |   |
|                                      |                           | ↓                             |         |     |                                |                                 |                   |                                   | ↑                        |   |
| Y311<br>(RNP/RNAV)                   |                           |                               |         |     |                                |                                 |                   |                                   |                          |   |
| △                                    | DOVER<br>VOR/DME<br>(DVR) | 510945.44N 0012132.72E        |         |     |                                |                                 |                   |                                   |                          | Eastbound route only.<br>Extremity of Y311.<br>Intersection with L9, L10 and<br>M140.                           |
| (RNAV 5)                             |                           | -/090°                        | 33.0 nm |     | FL 245 /<br>FL 85              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 85 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (All Levels). |
| △                                    | ODVIK                     | 510957N 0002909E              |         |     |                                |                                 |                   |                                   |                          | Extremity of Y311.  |
| Route Designator/<br>(RNP/RNAV Type) |                           | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |   |
| Significant Point Name               |                           | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |   |
| (RNP/RNAV Type)                      |                           | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                           |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |   |
|                                      |                           | ↓                             |         |     |                                |                                 |                   |                                   | ↑                        |   |
| Y312<br>(RNP/RNAV)                   |                           |                               |         |     |                                |                                 |                   |                                   |                          |   |
| △                                    | DOVER<br>VOR/DME<br>(DVR) | 510945.44N 0012132.72E        |         |     |                                |                                 |                   |                                   |                          | Eastbound route only.<br>Extremity of Y312.<br>Intersection with L9, L10 and<br>M140.                           |
| (RNAV 5)                             |                           | -/097°                        | 33.0 nm |     | FL 245 /<br>FL 75              |                                 | 10 nm             |                                   | odd<br>FL 230 /<br>FL 90 | FL 245/FL 195 Class C,<br>FL 195/FL 75 Class A.<br><br>London Control (Swanwick)<br>Freq: 134.900 (All Levels). |
| △                                    | ADMAG                     | 511402N 0002934E              |         |     |                                |                                 |                   |                                   |                          | Extremity of Y312.  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                          |   |
|--|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|--------------------------|---|
| Significant Point Name   |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                          |   |
| (RNP/RNAV Type)  |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                          | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|  |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                          |   |
|  |                              |                               |         |     |                                |                                 |                   | ↓                                 | ↑                        |   |
| Y904<br>(RNP/RNAV)   |                              |                               |         |     |                                |                                 |                   |                                   |                          |   |
| Δ  | ABERDEEN<br>VOR/DME<br>(ADN) | 571837.62N 0021601.95W        |         |     |                                |                                 |                   |                                   |                          | Extremity of Y904.  |
| (RNAV 5)   |                              | 341°/<br>161°                 | 17.0 nm |     | FL 195 /<br>4500 ft<br>ALT     |                                 | 10 nm             | even<br>FL 180 /<br>FL 60         | odd<br>FL 190 /<br>FL 50 | Class E and TMZ.<br><b>(See Note)</b><br><br>Within the confines of the<br>Aberdeen CTR/CTA, Y904 as-<br>sumes the airspace classifi-<br>cation of the Aberdeen CTR/<br>CTA.<br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels). |
| Δ  | NANEV                        | 573429N 0022714W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)   |                              | 341°/<br>161°                 | 13.0 nm |     | FL 155 /<br>FL 75              |                                 | 10 nm             | even<br>FL 140 /<br>FL 80         | odd<br>FL 150 /<br>FL 90 | Class E and TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels).  |
| Δ  | SMOKI                        | 574637N 0023556W              |         |     |                                |                                 |                   |                                   |                          |   |
| (RNAV 5)   |                              | 341°/<br>161°                 | 44.0 nm |     | FL 155 /<br>FL 75              |                                 | 10 nm             | even<br>FL 140 /<br>FL 80         | odd<br>FL 150 /<br>FL 90 | Class E and TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels).  |
| Δ  | WICK<br>VOR/DME<br>(WIK)     | 582731.74N 0030601.33W        |         |     |                                |                                 |                   |                                   |                          | Extremity of Y904.  |
| Route Remarks:   |                              |                               |         |     |                                |                                 |                   |                                   |                          |   |
| <ul style="list-style-type: none"><li>The areas of controlled airspace, Class E and TMZ, base level Alt 4500 ft and an upper limit of FL 195, bounded by:<br/>573240.63N 0023553.96W - 572452.78N 0023019.93W<br/>thence anti-clockwise by the arc of a circle radius 10 nm centred on 571834N 0021602W to<br/>572100.00N 0023356.00W - 573240.63N 0023553.96W<br/>and<br/>573613.16N 0021832.25W - 573705.88N 0015736.32W -<br/>573549.60N 0015753.00W - 572815.24N 0021136.39W<br/>thence anti-clockwise by the arc of a circle radius 10 nm centred on 571834N 0021602W to<br/>572824.68N 0021301.47W - 573613.16N 0021832.25W,<br/>are part of Y904 <b>(See Note)</b>.</li><li><b>Note:</b> Transponder carriage and operation required.</li></ul> |                              |                               |         |     |                                |                                 |                   |                                   |                          |   |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type) |                              | Route Usage Notes             |         |     |                                |                                 |                   |                                   |                            |   |
|--------------------------------------|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|-----------------------------------|----------------------------|---|
| Significant Point Name               |                              | Significant Point Coordinates |         |     |                                |                                 |                   |                                   |                            |   |
| (RNP/RNAV Type)                      |                              | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series                         |                            | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|                                      |                              |                               |         |     |                                |                                 |                   | IFR cruising<br>levels<br>max/min |                            |   |
|                                      |                              | ↓                             |         |     |                                |                                 |                   |                                   | ↑                          |   |
| Y905<br>(RNP/RNAV)                   |                              |                               |         |     |                                |                                 |                   |                                   |                            |   |
| △                                    | ABERDEEN<br>VOR/DME<br>(ADN) | 571837.62N 0021601.95W        |         |     |                                |                                 |                   |                                   |                            | Extremity of Y905.  |
| (RNAV 5)                             |                              | 046°/<br>226°                 | 20.9 nm |     | FL 195 /<br>4500 ft<br>ALT     |                                 | 10 nm             | odd<br>FL 190 /<br>FL 50          | even<br>FL 180 /<br>FL 60  | Class E and TMZ.<br><b>(See Note)</b><br><br>Within the confines of the<br>Aberdeen CTR/CTA, Y905 as-<br>sumes the airspace classifi-<br>cation of the Aberdeen CTR/<br>CTA.<br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels). |
| △                                    | PETOX                        | 573333N 0014902W              |         |     |                                |                                 |                   |                                   |                            | The section btn PETOX and<br>SUM passes close to EG<br>D809.  |
| (RNAV 5)                             |                              | 009°/<br>189°                 | 3 nm    |     | FL 195 /<br>4500 ft<br>ALT     |                                 | 10 nm             | odd<br>FL 190 /<br>FL 50          | even<br>FL 180 /<br>FL 60  | Class E and TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels).  |
| △                                    | RISDU                        | 573631N 0014824W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)                             |                              | 009°/<br>189°                 | 77.4 nm |     | FL 195 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 190 /<br>FL 110         | even<br>FL 180 /<br>FL 120 | Class E and TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels).  |
| △                                    | BEKET                        | 585313N 0013120W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)                             |                              | 009°/<br>189°                 | 27.1 nm |     | FL 195 /<br>FL 105             |                                 | 10 nm             | odd<br>FL 190 /<br>FL 110         | even<br>FL 180 /<br>FL 120 | Class E and TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels).  |
| △                                    | ERDOG                        | 592003N 0012504W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)                             |                              | 009°/<br>189°                 | 3.0 nm  |     | FL 195 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 190 /<br>FL 90          | even<br>FL 180 /<br>FL 80  | Class E and TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels).  |
| △                                    | GAVEL                        | 592300N 0012422W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)                             |                              | 009°/<br>189°                 | 7.0 nm  |     | FL 195 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 190 /<br>FL 110         | even<br>FL 180 /<br>FL 120 | Class E and TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels).  |
| △                                    | RAVDI                        | 592957N 0012242W              |         |     |                                |                                 |                   |                                   |                            |   |
| (RNAV 5)                             |                              | 009°/<br>189°                 | 3.0 nm  |     | FL 195 /<br>FL 45              |                                 | 10 nm             | odd<br>FL 190 /<br>FL 110         | even<br>FL 180 /<br>FL 120 | Class E and TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels).  |



## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)  |                              | Route Usage Notes             |         |     |                                |                                 |                   |  |   |  |
|---|------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|---|--|
| Significant Point Name  |                              | Significant Point Coordinates |         |     |                                |                                 |                   |  |   |  |
| (RNP/RNAV Type)   |                              | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |   | Controlling Unit/<br>Airspace Class/<br>Remarks  |
|   |                              |                               |         |     |                                |                                 |                   | ↓  | ↑   |  |
| △   | MOCHA                        | 593256N 0012159W              |         |     |                                |                                 |                   |  | Acft in communication with Sumburgh ATC must report OHD MOCHA unless otherwise authorized by that Unit. |  |
| (RNAV 5)  |                              | 009°/<br>189°                 | 20.0 nm |     | FL 195 /<br>FL 45              |                                 | 10 nm             | odd<br>FL 190 /<br>FL 110                      | even<br>FL 180 /<br>FL 120  | Class E and TMZ.<br><b>(See Note)</b><br><br>Within the confines of the Sumburgh CTR/CTA, Y905 assumes the airspace classification of the Sumburgh CTR/CTA.<br><br>Scottish Control (Prestwick)<br>Freq: 134.850 (All Levels). |
| △   | SUMBURGH<br>VOR/DME<br>(SUM) | 595243.52N 0011711.52W        |         |     |                                |                                 |                   |  | Extremity of Y905.  |  |
| Route Remarks:  |                              |                               |         |     |                                |                                 |                   |  |   |  |
| <ul style="list-style-type: none"><li>Although coverage of SUM VOR meets ICAO criteria, it is nevertheless deficient along the alignment of Y905 at low level in view of the distance btn SUM and PETOX. During commissioning flight inspection ICAO mnm field strength at FL 70 occurred to 90 nm and it is estimated it would occur above approximately FL 100 overhead PETOX. Therefore in line VOR navigation beyond SUM VOR 50D to PETOX may not comply with RNP 5.</li><li>The area of controlled airspace, Class E and TMZ, base level Alt 4500 ft and upper limit of FL 195, bounded by straight lines joining: 573556.19N 0013910.07W - 573332.59N 0013539.66W - 573234.17N 0013954.16W - 573556.19N 0013910.07W, is part of Y905 <b>(See Note)</b>.</li><li><b>Note:</b> Transponder carriage and operation required.</li></ul> |                              |                               |         |     |                                |                                 |                   |  |   |  |

ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                               | Route Usage Notes             |         |                                |                                 |                                     |  |                            |   |  |
|--|-------------------------------|-------------------------------|---------|--------------------------------|---------------------------------|-------------------------------------|--|----------------------------|---|--|
| Significant Point Name   |                               | Significant Point Coordinates |         |                                |                                 |                                     |  |                            |   |  |
| (RNP/RNAV Type)  | Track<br>MAG<br>↓↑            | Dist                          | COP     | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits                   | FL series<br><br>IFR cruising<br>levels<br>max/min |                            | Controlling Unit/<br>Airspace Class/<br>Remarks |  |
|  |                               |                               |         |                                |                                 |                                     | ↓  | ↑                          |   |  |
| Y906<br>(RNP/RNAV)   |                               |                               |         |                                |                                 |                                     |  |                            |   |  |
| △  | RIMOL                         | 573233N 0040230W              |         |                                |                                 |                                     |  |                            | Extremity of Y906.                              |  |
| (RNAV 5)   |                               | 304°/<br>124°                 | 17.1 nm |                                | FL 195 /<br>FL 95               |                                     | 10 nm  | even<br>FL 180 /<br>FL 100 | odd<br>FL 190 /<br>FL 110                       | Class E and TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels). |
| △  | GARVA                         | 574118N 0042941W              |         |                                |                                 |                                     |  |                            |   |  |
| (RNAV 5)   |                               | 304°/<br>124°                 | 25.1 nm |                                | FL 195 /<br>FL 95               |                                     | 10 nm  | even<br>FL 180 /<br>FL 100 | odd<br>FL 190 /<br>FL 110                       | Class E and TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels). |
| △  | ULLAP                         | 575400N 0051009W              |         |                                |                                 |                                     |  |                            |   |  |
| (RNAV 5)   |                               | 304°/<br>123°                 | 37.2 nm |                                | FL 195 /<br>FL 55               | Minimum<br>limit:<br>5200 ft<br>ALT | 10 nm  | even<br>FL 180 /<br>FL 60  | odd<br>FL 190 /<br>FL 70                        | Class E and TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels). |
| △  | STORNOWAY<br>VOR/DME<br>(STN) | 581225.01N 0061058.97W        |         |                                |                                 |                                     |  |                            |   | Extremity of Y906.   |
| Route Remarks:   |                               |                               |         |                                |                                 |                                     |  |                            |   |  |
| <ul style="list-style-type: none"><li>Inverness Radar provide a radar service for tfc inbound to and outbound from Inverness via Y906 during the promulgated hours of Inverness Radar as published in UK AIP AD 2. EGPE AD 2.18 (and as amended by NOTAM). Outside the hours of Inverness Radar an approach procedural service is provided by Inverness Approach.</li><li>Tfc inbound to Inverness via Y906 has a clearance limit of GARVA, descent clearance will be issued by Scottish Control to be level by GARVA unless otherwise instructed by ATC. Scottish Control will instruct t/c when to contact Inverness Approach or Inverness Radar (122.600 MHz), this will normally be at or before 40 nm from RIMOL.</li><li><b>Note:</b> Transponder carriage and operation required.</li></ul> |                               |                               |         |                                |                                 |                                     |  |                            |   |  |

## ENR 3.1 LOWER ATS ROUTES (continued)

| Route Designator/<br>(RNP/RNAV Type)   |                                 | Route Usage Notes             |         |     |                                |                                 |                   |  |                                     |   |
|--|---------------------------------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|-------------------------------------|---|
| Significant Point Name   |                                 | Significant Point Coordinates |         |     |                                |                                 |                   |  |                                     |   |
| (RNP/RNAV Type)  |                                 | Track<br>MAG<br>↓↑            | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |                                     | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|  |                                 |                               |         |     |                                |                                 |                   | ↓  | ↑                                   |   |
| Y911<br>(RNP/RNAV)   |                                 |                               |         |     |                                |                                 |                   |  |                                     |   |
| △  | BOYNE                           | 534602N 0053000W              |         |     |                                |                                 |                   |  | FIR Boundary.<br>Extremity of Y911. |   |
| (RNAV 5)   |                                 | 058°/<br>238°                 | 31.7 nm |     | FL 195 /<br>FL 75              |                                 | 10 nm             | odd<br>FL 190 /<br>FL 90                       | even<br>FL 180 /<br>FL 80           | Class E and TMZ.<br><b>(See Note)</b><br><br>Within the confines of airways<br>L10 and L15 and Strangford<br>CTA in the vicinity of the Isle<br>of Man, Y911 assumes the<br>airspace classification of air-<br>ways L10 and L15 and the<br>Strangford CTA.<br><br>Scottish Control (Prestwick)<br>Freq: 123.775 (All Levels). |
| △  | ISLE OF MAN<br>VOR/DME<br>(IOM) | 540400.72N 0044548.51W        |         |     |                                |                                 |                   |  | Extremity of Y911.                  |   |
| Route Remarks:   |                                 |                               |         |     |                                |                                 |                   |  |                                     |   |
| <ul style="list-style-type: none"><li>See also ENR 1.1, paragraph 1.1.3.</li><li><b>Note:</b> Transponder carriage and operation required.</li></ul> |                                 |                               |         |     |                                |                                 |                   |  |                                     |   |

| Route Designator/<br>(RNP/RNAV Type)  |       | Route Usage Notes             |         |     |                                |                                 |                   |  |   |   |
|---|-------|-------------------------------|---------|-----|--------------------------------|---------------------------------|-------------------|--|---|---|
| Significant Point Name  |       | Significant Point Coordinates |         |     |                                |                                 |                   |  |   |   |
| (RNP/RNAV Type)   |       | Track<br>MAG<br>↓/↑           | Dist    | COP | Upper<br>limit/<br>lower limit | Minimum<br>flight alti-<br>tude | Lateral<br>limits | FL series<br>IFR cruising<br>levels<br>max/min |   | Controlling Unit/<br>Airspace Class/<br>Remarks   |
|   |       |                               |         |     |                                |                                 |                   | ↓  | ↑   |   |
| Y958<br>(RNP/RNAV)  |       |                               |         |     |                                |                                 |                   |  |   |   |
| △   | BRUCE | 561411N 0055028W              |         |     |                                |                                 |                   |  | DRA Arrival and Departure<br>Transition Fix.<br>Extremity of Y958.<br>Intersection with N580. |   |
| (RNAV 5)  |       | 330°/<br>150°                 | 37.8 nm |     | FL 255 /<br>FL 115             |                                 | 10 nm             | even<br>FL 240 /<br>FL 120                     | odd<br>FL 250 /<br>FL 130   | FL 255/FL 195 Class C,<br>FL 195/FL 115 Class E and<br>TMZ.<br><b>(See Note)</b><br><br>Scottish Control (Prestwick)<br>Freq: 127.275 (All Levels). |
| △   | TOBMO | 564538N 0062811W              |         |     |                                |                                 |                   |  | Extremity of Y958.  |   |
| Route Remarks:  |       |                               |         |     |                                |                                 |                   |  |   |   |
| <ul style="list-style-type: none"><li>For use by t/c climbing to or descending from the Shanwick OCA Boundary.</li><li><b>Note:</b> Transponder carriage and operation required within that part of Y958 notified as Class E and TMZ.</li></ul> |       |                               |         |     |                                |                                 |                   |  |   |   |

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