

**AD 2 AERODROMES****LPPR AD 2****LPPR AD 2.1 AERODROME LOCATION INDICATOR AND NAME**

LPPR - PORTO (Francisco Sá Carneiro)

**LPPR AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

1	ARP coordinates and site	LAT: 41 14 08N LONG: 008 40 41W Intersection Runway with Taxiway "H "
2	Direction and distance of ARP from city or town	11KM (6NM) BRG 322° from Porto Centre, Clerigos Tower.
3	Elevation/Reference temperature	69M / 227 FT 21° C (AUG)
4	Geoid undulation at aerodrome elevation position	55M
5	MAG VAR/Annual change	03° W (2013) / 0.13° decreasing
6	AD Administration, address, telephone, telefax, telex, AFS, E-mail and WEB URL	Post:ANA Aeroportos de Portugal, SA Aeroporto Francisco Sá Carneiro 4471-095 Moreira da Maia Phone:+351 229400600 and +351 229432400 Fax: +351 229432554 and +351 229413274 AFS:LPPRYDYA SITA:OPOKAXH Email:flyopo@ana.pt URL:http://www.ana.pt
7	Types of traffic permitted (IFR/VFR)	IFR / VFR
8	Remarks	NIL

**LPPR AD 2.3 OPERATIONAL HOURS**

1	AD Administration	H24
2	Customs and immigration	H24
3	Health and sanitation	H24
4	AIS Briefing Office	H24
5	ATS Reporting Office (ARO)	H24
6	MET Briefing Office	H24
7	ATS	H24
8	Fuelling	05:00-23:00 (04:00-22:00) 23:00-05:00 (22:00-04:00) on request.
9	Handling	05:00-01:00 (04:00-24:00) 01:00-05:00 (00:00-04:00) on request.
10	Security	H24
11	De-icing	Not Available
12	Remarks	NIL

**LPPR AD 2.4 HANDLING SERVICES AND FACILITIES**

1	Cargo handling facilities:	All modern facilities handling weights up to 12 tons
2	Fuel/oil types	JET A1 / Mobil JET II, Mobil Jet 254 and Exxon Hyjet V (Hydraulic)
3	Fuelling facilities/capacity	2 Refuellers maximum delivery rate 63 Litres per second each; Capacity 18.000 litres each 5 Refuellers maximum delivery rate 58 Litres per second each; Capacity 18.000 litres each; 1 Refueller maximum delivery rate 50 Litres per second; Capacity 18.500 litres each; 1 Refueller maximum delivery rate 40 Litres per second; Capacity 40.000 litres each; 1 Bowser 30000 litres of capacity; 2 Bowsers 43000 Litres of capacity each;
4	De-icing facilities	Not Available
5	Hangar space available for visiting aircraft	Not Available
6	Repair facilities for visiting aircraft	Minor repairs by arrangement with: TAP – Air Portugal Maintenance Telephone: +351-22.9485794 or Mobile phone: + 351 927052560 FAX: +351.22.9487714 or SITA: OPOMMTP Email:manopo.me@tap.pt  LAS – Louro Aeronaves e Serviços Lda. Telephone / FAX: +351-22.9480568 Mobile Phone: +351.96.3050083 or +351.96.5448759 Email:las.porto@las.pt
7	Remarks	Oxygen and related servicing: Only by request

**LPPR AD 2.5 PASSENGER FACILITIES**

1	Hotels	Near the Aerodrome, Matosinhos and Porto Cities
2	Restaurants	AD Restaurant: 150 meals per hour
3	Transportation	Metropolitan Railway (line E - Violet), Buses, Taxis and Rent-a-Car
4	Medical facilities	First Aid Treatment (Nursing only), 1 Motor Ambulance. Hospital in Porto and Matosinhos at 6KM (3.24NM)
5	Bank and Post Office	Post Office at the terminal. Bank NOT AVBL, only ATM
6	Tourist Office	At the terminal
7	Remarks	NIL

**LPPR AD 2.6 RESCUE AND FIRE FIGHTING SERVICES**

1	AD category for fire fighting	CAT 8
2	Rescue equipment	According to ICAO Annex 14
3	Capability for removal of disabled aircraft	B747 or similar with gear down and operational
4	Remarks	NIL

**LPPR AD 2.7 SEASONAL AVAILABILITY - CLEARING**

1	Type(s) of clearing equipment	Not Applicable
2	Clearance priorities	Not Applicable
3	Remarks	Not Applicable

**LPPR AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA**

1	Apron, Surface and Strength	<b>APRON</b>	<b>SURFACE</b>	<b>STRENGTH</b>	
		S	Concrete	PCN 71/R/B/W/T	
		T		PCN 91/R/B/W/T	
		W	Asphalt	PCN 109/F/B/W/T	
2	Taxiway Width, Surface and Strength	<b>TAXIWAY</b>	<b>WIDTH</b>	<b>SURFACE</b>	<b>STRENGTH</b>
		A1	23M	Asphalt	PCN 150/F/C/W/T
		A2	23M		PCN 150/F/C/W/T
		A3	23M		PCN 150/F/C/W/T
		B	23M		PCN 86/F/C/W/T
		C	23M		PCN 146/F/B/W/T
		D	25M		PCN 150/F/A/W/T
		F	25M		PCN 143/F/B/W/T
		H	23M		PCN 150/F/B/W/T
		J	23M		PCN 150/F/B/W/T
		S1	23M		PCN 86/F/C/W/T
		S2	23M		PCN 86/F/C/W/T
		S3	23M		PCN 131/F/B/W/T
		S4	23M		PCN 131/F/B/W/T
		S5	25M		PCN 131/F/B/W/T
		S6	23M		PCN 131/F/B/W/T
		T	23M		PCN 150/F/B/W/T
		Y	23M		PCN 149/F/B/W/T
		<b>TAXILANE</b>	<b>WIDTH</b>	<b>SURFACE</b>	<b>STRENGTH</b>
3	Altimeter checkpoint location and elevation	In each Stand of Apron "S "			
4	VOR checkpoint locations	Not Applicable			

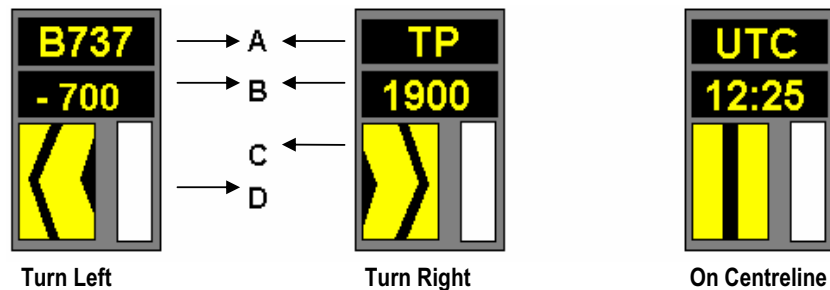
5	INS Checkpoint positions	<b>RAMP / STAND</b>	<b>INS COORDINATES</b>	<b>ELEVATION (M/AMSL)</b>	<b>ACFT TYPE (CRITICAL)</b>	<b>REMARKS</b>
		S08	411401.59N 0084017.17W	71.90	B738	Nose IN
		S09	411403.30N 0084018.64W	71.63	A332	Nose IN
		S10	411401.58N 0084016.71W	72.01	B738	Nose IN
		S11	411403.34N 0084018.49W	71.70	B767	Nose IN
		S12	411404.05N 0084021.17W	71.14	A330	Nose IN
		S20	411401.87N 0084029.05W	68.89	A321	Nose IN
		S21	411403.17N 0084029.39W	68.90	A321	Nose IN
		S22	411404.46N 0084029.73W	68.89	A321	Nose IN
		S23	411405.76N 0084030.06W	68.89	A321	Nose IN
		S24	411407.05N 0084030.40W	68.90	A321	Nose IN
		S25	411408.35N 0084030.74W	68.90	A321	Nose IN
		S30	411406.22N 0084021.79W	71.27	A332	Nose IN
		S31	411407.64N 0084019.81W	71.82	B738	Nose IN
		S32	411409.35N 0084019.42W	72.01	B757	Nose IN
		S33	411411.13N 0084019.97W	71.99	B767	Nose IN
		S34	411412.80N 0084020.49W	71.98	B757	Nose IN
		S35	411414.58N 0084020.93W	71.97	B767	Nose IN
		S36	411416.25N 0084022.14W	71.82	B738	Nose IN
		S37	411416.87N 0084024.68W	71.11	MD11	Nose IN
		S38	411417.98N 0084025.21W	71.00	B738	Nose IN
		S40	411412.64N 0084032.11W	68.84	B763	Nose IN
		S41	411414.48N 0084032.58W	68.84	B763	Nose IN
		S42	411416.31N 0084033.06W	68.82	A332	Nose IN
		S43	411418.57N 0084033.66W	68.64	B763	Nose IN
		S50	411419.39N 0084025.29W	71.02	B738	Nose IN
		S51	411419.43N 0084025.11W	71.16	B744	Nose IN
		S52	411420.21N 0084025.42W	71.14	B738	Nose IN
		S53	411420.94N 0084022.96W	71.93	MD11	Nose IN
		S54	411422.94N 0084021.98W	72.10	B738	Nose IN
		S55	411424.66N 0084022.46W	72.03	B744	Nose IN
		S56	411423.10N 0084021.67W	72.01	B738	Nose IN
		S57	411426.18N 0084022.87W	72.03	B738	Nose IN
		S60	411423.47N 0084035.15W	68.74	A321	Nose IN
		S61	411424.70N 0084035.47W	68.72	A321	Nose IN
		S62	411425.93N 0084035.80W	68.72	A321	Nose IN
		S63	411427.16N 0084036.12W	68.70	A321	Nose IN
		S64	411428.39N 0084036.44W	68.73	A321	Nose IN
		S65	411429.62N 0084036.76W	68.74	A321	Nose IN
		S66	411430.85N 0084037.09W	68.73	A321	Nose IN
		S70	411427.84N 0084023.46W	71.90	MD11	Nose IN
		S71	411429.46N 0084024.11W	71.75	B757	Nose IN
		S72	411430.32N 0084023.96W	72.00	A380	Nose IN
		S73	411430.93N 0084024.49W	72.00	B757	Nose IN
		T01	411410.48N 0084105.58W	62.04	B764	Nose IN
		T02	411412.62N 0084106.21W	61.69	B744	Nose IN
		T03	411415.03N 0084106.65W	61.35	B744	Nose IN
		T04	411417.20N 0084107.30W	60.99	B764	Nose IN
		W	411406.92N 0084056.09W	64.88	B762	Nose OUT
6	Remarks	NIL				

## LPPR AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system at aircraft stands

## AIRCRAFT PARKING AND INFORMATION SYSTEM

## APIS DISPLAY



Stands S10, S11, S12, S30, S31, S32, S33, S34, S35, S36, S37, S51, S53, S54 and S55 provided with APIS

## DESCRIPTION

- A – Display indicating: COMPANY, "ETD", "UTC", AIRCRAFT TYPE, "SLOW", "STOP", "OK", "CHCK" and "TOO/FAR" information;
- B – Display indicating: FLIGHT NUMBER, TIME, AIRCRAFT SERIES, "STOP", "ON", (Chocks) and "DOWN" information;
- C – Centreline beacon side-in-guidance;
- D – Closing-rate information. Full closing rate thermometer indicates at least 14 meters to stop position.

## PILOT INSTRUCTIONS

- 1 – Follow taxi lead-in line and adjust according to the directions of centreline beacon side-in guidance;
- 2 – Check correct ACFT type is flashing and that centreline guidance and closing rate thermometer is activated. The flight number may also be presented;
- 3 – Do not enter the stand if display presents STOP or wrong ACFT– type;
- 4 – Approx. 14 metres before STOP, flight number will disappear if this is presented;
- 5 – 19 M before STOP, ACFT type goes steady. If speed is too high, SLOW DOWN can be shown;
- 6 – Full closing rate thermometer indicates at least 14 metres to STOP. When ACFT has less than 14 metres to STOP thermometer starts to move from bottom to top;
- 7 – When stop position reached, display indicates STOP and if aircraft parks correctly, display indicates also OK;
- 8 – If aircraft overshoots the limit for correct parking, display indicates TOO/FAR. Push back might be necessary;
- 9 – Displays and indicators automatically shut down after some seconds. After ON BLOCK, display can indicate UTC time and CHCK ON (chocks on).
- 10 – After CHOCKS ON, displays departure flight number...

Stopping at Parking Positions (see table below):

S70 - A, B, C, D, E

S40, S41, S42, S43, S71, S73 - A, B, C, D

S20, S21, S22, S23, S24, S25, S56, S60, S61, S62, S63, S64, S65, S66, S72 - A, B, C

S38, S57 - A

Stop Bar Markings are located to the left with 90 degrees angle to the Guide Lines

Aircraft has to be stopped with the Pilot seat abeam the Stopping Point.

STOPPING AT PARK POSITIONS - COCKPIT										
ICAO	S20 to S25	S38	S40 to S43	S56	S57	S60 to S66	S70	S71	S72	S73
	stop position	stop position	stop position	stop position	stop position	stop position	stop position	stop position	stop position	stop position
F100	B	A	C	B	A	B	D	C		C
B462	C	A	D	C	A	C	E	D		D
B463	C	A	D	C	A	C	E	D		D
A310			B				C		C	
A319	B	A	C	B	A	B	D	C		C
A320	B	A	C	B	A	B	D	C		C
A321	A	A	B	A	A	A	C	B		B
A332									B	
A343									B	
A380									A	
B733	B	A	C	B	A	B	D	C		C
B734	B	A	C	B	A	B	D	C		C
B735	B	A	C	B	A	B	D	C		C
B736	B	A	C	B	A	B	D	C		C
B737	A	A	B	A	A	A	C	B		B
B738	A	A	B	A	A	A	C	B		B
B739	A	A	B	A	A	A	C	B		B
B744									A	
B752			B				C	B		B
B753			A				B	A		A
B763			A				B		B	
B772									A	
A306			A	A			B		B	
AT42	B	A	C	B	A	B	D	C		C
AT72	B	A	C	B	A	B	D	C		C
CRJ2	B	A	C	B	A	B	D	C		C
CRJ9	A	A	B	A	A	A	C	B		B
E135	B	A	C	B	A	C	E	D		D
E145	B	A	C	B	A	C	D	C		C
MD11							A		A	
MD80	A	A	B	A	A	A	C	B		B
MD87	A	A	B	A	A	A	C	B		B

2	RWY/TWY markings and lights	Runway Marking Aids: Runway Designation, Runway Centre Line, Aiming Point, Displaced Threshold, Touchdown Zone Markings, Runway Side Stripe, and Runway Turn Pad Markings. Runway Lights: RWY 17: Threshold, Runway Edge, Centre Line, Runway End and Touchdown Zone RWY 35: Threshold, Runway Edge, Centre Line, Runway End, Threshold Identification and Runway Turn Pad Lights. Wing Bar Lights Taxiway Marking Aids: Taxiway Centre Line, Taxiway Side Stripe, Runway Holding Positions, and Intermediate Holding Positions. Taxiway Lights: All Taxiways with Centre Line
3	Stop bars	Stop Bar: All CAT II / III Holding Positions with Stop Bars associated and vertical sign; at Taxiway "F" Intermediate Holding Position.
4	Remarks	NIL

### LPPR AD 2.10 AERODROME OBSTACLES

In Area 2					
Obst. ID Designation	Obst. Type	Obst. Position	Elevation / HGT	Markings Type, Colour	Remarks
a	b	c	d	e	f
LPPR 01	TOWER	411346.44N 0084037.69W	75M		RWY 17 OBST 01 Ref Chart LPPR AD 2.24.04-1
LPPR 02	TREE	411346.79N 0084031.75W	78M		RWY 17 OBST 02 Ref Chart LPPR AD 2.24.04-1
LPPR 03	TREE	411342.26N 0084034.75W	76M		RWY 17 OBST 03 Ref Chart LPPR AD 2.24.04-1
LPPR 04	TREE	411340.26N 0084036.96W	78M		RWY 17 OBST 04 Ref Chart LPPR AD 2.24.04-1
LPPR 05	TREE	411336.47N 0084026.45W	78M		RWY 17 OBST 05 Ref Chart LPPR AD 2.24.04-1
LPPR 06	TREE	411334.64N 0084024.54W	88M		RWY 17 OBST 06 Ref Chart LPPR AD 2.24.04-1
LPPR 07	TREE	411333.10N 0084023.95W	87M		RWY 17 OBST 07 Ref Chart LPPR AD 2.24.04-1
LPPR 08	TREE	411330.67N 0084026.53W	81M		RWY 17 OBST 08 Ref Chart LPPR AD 2.24.04-1
LPPR 09	TOWER	411551.51N 0084111.49W	45M		RWY 35 OBST 01 Ref Chart LPPR AD 2.24.04-1
LPPR 10	TREE	411600.35N 0084116.01W	53M		RWY 35 OBST 02 Ref Chart LPPR AD 2.24.04-1
LPPR 11	ANTENNA	411620.89N 0084113.26W	58M	Fixed Red Light	RWY 35 OBST 03 Ref Chart LPPR AD 2.24.04-1
LPPR 12	NAVAID	411622.74N 0084116.27W	59M	Fixed Red Light	RWY 35 OBST 04 Ref Chart LPPR AD 2.24.04-1
LPPR 13	TREE	411626.26N 0084121.15W	78M		RWY 35 OBST 05 Ref Chart LPPR AD 2.24.04-1
LPPR 14	TREE	411626.95N 0084120.60W	80M		RWY 35 OBST 06 Ref Chart LPPR AD 2.24.04-1

LPPR 15	TREE	411633.45N 0084115.32W	76M		RWY 35 OBST 07 Ref Chart LPPR AD 2.24.04-1
LPPR 16	TREE	411635.90N 0084131.03W	74M		RWY 35 OBST 08 Ref Chart LPPR AD 2.24.04-1
LPPR 17	TREE	411637.69N 0084123.19W	72M		RWY 35 OBST 09 Ref Chart LPPR AD 2.24.04-1
LPPR 18	ANTENNA	411824.06N 0084147.65W	105M	Fixed Red Light	RWY 35 OBST 10 Ref Chart LPPR AD 2.24.04-1
LPPR 19	TOWER	411232.70N 0084237.93W	118M / 101M	Red and White Stripes and Fixed Red Light	
LPPR 20	TOWER	411240.29N 0084237.51W	118M / 101M	Red and White Stripes and Fixed Red Light	
LPPR 21	TOWER	411240.41N 0084238.83W	117M / 101M	Red and White Stripes and Fixed Red Light	
LPPR 22	TOWER	411246.78N 0084239.27W	116M / 100M	Red and White Stripes and Fixed Red Light	
LPPR 23	TOWER	411248.22N 0084243.39W	115M / 101M	Red and White Stripes and Fixed Red Light	
LPPR 24	TOWER	411251.12N 0084238.54W	117M / 101M	Red and White Stripes and Fixed Red Light	
LPPR 25	TOWER	411256.84N 0084230.95W	98M / 81M	Red and White Stripes and Fixed Red Light	
LPPR 26	TOWER	411257.22N 0084235.77W	109M / 92M	Red and White Stripes and Fixed Red Light	
LPPR 27	TOWER	411308.57N 0084234.67W	118M / 100M	Red and White Stripes and Fixed Red Light	
LPPR 28	TOWER	411314.96N 0084227.30W	137M / 116M	Red and White Stripes	
LPPR 29	BUILDING	411307.94N 0084236.49W	100M / 82M	Flashing Red Light	
LPPR 30	BUILDING	411307.97N 0084236.95W	96M / 78M	Flashing Red Light	
LPPR 31	NATURAL _HIGHPOINT	411456.01N 0084101.56W	63M		
LPPR 32	TOWER	411402.91N 0083719.45W	187M / 87M	Flashing Red Light	

In Area 3					
Obst. ID Designation	Obst. Type	Obst. Position	Elevation / HGT	Markings Type, Colour	Remarks
a	b	c	d	e	f

LPPR AD 2.11 METEOROLOGICAL INFORMATION PROVIDED



Abbreviations used in following table:

C	-	Charts	SATEL	-	Satellite Image
CMA	-	Centro de Meteorologia Aeronáutica	SWH	-	Significant Weather High (chart)
CPVM	-	Centro de Previsão e Vigilância Meteorológica	SWM	-	Significant Weather Medium (chart)
CR	-	Cross sections	T	-	Telephone
P	-	Prognostic Upper Air Chart	W	-	Significant Weather Chart
S	-	Surface Analysis (Current chart)	WXR	-	Weather Radar

1	Associated MET Office	PORTO CMA
2	Hours of service	H24
3	Office responsible for TAF preparation Periods of validity	CPVM Aeronautical Section 24 HR - Issuance every 6 Hours
4	Type of landing forecast	NIL
5	Briefing/consultation provided	T
6	Flight documentation Language(s) used	C, CR English
7	Charts and other information available for briefing or consultation	P, S, SWH, SWM, W
8	Supplementary equipment available for providing information	Flightbriefing
9	ATS units provided with information	TWR, APP
10	Additional information (limitation of service, etc.)	OPS: Phone: +351 229 484 527 Fax: +351 229 411 955 Email: lppr@ipma.pt AFS: LPPRYMYM

## LPPR AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations	TRUE BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR COORD, RWY END, Geoid Undulation	THR elevation and highest elevation of TDZ of precision APP RWY	Slope of RWY/SWY
1	2	3	4	5	6	7
17	168.83°	3480x45	PCN80/F/C/W/T * ASPH.	THR 411538.45N 0084104.42W RWY END 411357.19N 0084037.87W GEOID UNDULATION 54.93M	THR Elevation 46.0M Highest Elevation of TDZ 411509.82N 0084056.96W 55.1M	i = 0.8%
35	348.83°			THR 411401.99N 0084039.13W RWY END 411547.94N 0084106.92W GEOID UNDULATION 55M	THR Elevation 69.2M	i = 0.2%

Designations	SWY dimensions (M)	CW dimensions (M)	Strip dimensions (M)	RESA	OFZ	Remark
1	8	9	10	11	12	13
17	Not Applicable	Not Applicable	3600x300	90x90		Threshold Runway 17 permanently displaced 300M and Threshold Runway 35 permanently displaced 150M. RWY FCT CLBR: 0.86
35						

# LPPR AD 2.13 DECLARED DISTANCES

FULL RUNWAY DECLARED DISTANCES						
RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks	
1	2	3	4	5	6	
17	3480	3480	3480	3180		
35	3480	3480	3480	3330		
REDUCED RUNWAY DECLARED DISTANCES						
RWY Designator	Intersections	TORA (M)	TODA (M)	ASDA (M)	Required Minimum Visibility / RVR	Associated Aids signs and Provisions
17	A3	1800	1800	1800	> 1500 M	
17	F	1900	1900	1900	> 1500 M	
35	C	3120	3120	3120	> 800 M	
35	D	2780	2780	2780	> 800 M	
35	H	3120	3120	3120	> 800 M	
35	J	2950	2950	2950	>800 M	

# LPPR AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH light Type / Length / Intensity	THR Light colour/W BAR	VASIS type	TDZ length	RWY Centre Line Lights Length / spacing / colour/ Intensity	RWY edge Lights Length / spacing / colour/ Intensity	RWY End Lights Colour / WBAR	SWY Light Length / Colour	Remarks
1	2	3	4	5	6	7	8	9	10
17	Precision Approach CAT II Lighting system / (distance coded centre line) / LIH	Green / 1,6M spacing / WBAR	PAPI -Slope 2.7° left side. MEHT - 65FT	900M	2280 white + 600M white/red + 300M red / 15 M spacing / LIH	300M red + 2580M white + 600M yellow / 60M spacing / LIH	RED	Not Applicable	
35	Precision Approach CAT I Lighting system / (distance coded centre line) / LIH	Green / 3M spacing / WBAR/ RTIL	PAPI -Slope 3° left side. MEHT - 48FT	Not Applicable	2430M white + 600M white/red + 300M red / 15 M spacing / LIH	150M red + 2730M white + 600M yellow / 60M spacing / LIH	RED	Not Applicable	

**LPPR AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY**

1	ABN/IBN location, characteristics and hours of operation	None
2	LDI location and lighting Anemometer location and lighting	LDI: NIL Anemometers: RWY 35: Left Side, 490M THR, 110M RWY Centreline. Lighted. RWY 17: Right Side, 340M THR, 110M RWY Centreline. Lighted. Middle Point: 1850M THR RWY35, 110M Left Side RWY35 Centreline. Lighted
3	TWY edge and centre line lighting	All taxiways, only centre line
4	Secondary power supply/switch-over time	Secondary Power Supply conforms requirements of Annex 14.
5	Remarks	Emergency lights available for Runway, Taxiways and Aprons.

**LPPR AD 2.16 HELICOPTER LANDING AREA**

1	Coordinates TLOF or THR of FATO	Not established
2	TLOF and/or FATO elevation	Not established
3	TLOF and FATO area dimensions, surface, strength, marking	Not established
4	True BRG of FATO	Not established
5	Declared distance available	Not established
6	and FATO lighting APP	Not established
7	Remarks	NIL

**LPPR AD 2.17 ATS AIRSPACE**

1	Designation and lateral limits	PORTO CTR 412300N 0085100W - 412300N 0083501W - 410400N 0083005W - 410400N 0084559W - 412300N 0085100W
2	Vertical limits	2000FT ALT (600M)
3	Airspace classification	C
4	ATS unit call sign / Language(s)	Porto Approach Porto Tower EN, PT
5	Transition altitude	4000FT
6	Remarks	NIL

**LPPR AD 2.18 ATS COMMUNICATION FACILITIES**

Service designation	Call sign	Frequency	Hours of Operation	Remarks
1	2	3	4	5
APP	PORTO Approach	121.100 MHZ 277.800 MHZ 118.850MHZ 121.500 MHZ 243.000 MHZ	H24	Primary  Secondary  Emergency  Emergency
TWR	PORTO Tower	118.000 MHZ 277.800 MHZ 118.850 MHZ 121.500 MHZ 243.000 MHZ	H24	Primary  Secondary  Emergency  Emergency
Clearance Delivery	Porto Delivery	118.925 MHZ 118.850 MHZ	Broadcast by ATIS	Primary Secondary
ATIS	Porto Information	124.300 MHZ	H24	ATIS Service also available by ACARS for aircraft equipped with ACARS Management Unit. Providers are SITA for datalink communications and PORTO Control for ATIS Services. Telephone Service: +.351 229408074 or 2174 of NAV Portugal E.P.E. internal network.

**LPPR AD 2.19 RADIO NAVIGATION AND LANDING AIDS**

Type Category (MAG Variation)	ID	Frequency	Hours of operation	Site of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
DVOR/DME (03° W - 2013)	PRT	114.100 MHZ DME: CH 88X	H24	411622.8N 0084116.2W	200FT	Coverage: 225°/315° - 200NM FL500 315°/225° - 80NM FL500 Not usable: 340°/360° BYD 35NM
NDB (03° W - 2013)	POR	327 KHZ	H24	412053.3N 0084229.3W		Coverage: 200NM Not usable: 100°/130° BYD 40NM BLW 9000FT
L (03° W - 2013)	PG	367 KHZ	H24	410441.1N 0083811.6W		Coverage: 25NM Not usable: 030°/150° BYD 20NM BLW 7000FT
ILS RWY 17 (CAT II)						
LOC (03° W - 2013)	PR	109.900 MHZ	H24	411348.2N 0084035.5W		Front course sector: Angle 3.52°
GP/DME	PR	333.800 MHZ DME: CH 36X	H24	411529.4N 0084057.2W	200FT	GP: Angle 2.72° Zero range is indicated at THR RWY 17 only.

Type Category (MAG Variation)	ID	Frequency	Hours of operation	Site of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
OM	Dashes	75 MHZ	H24	412052.8N 0084227.1W		5.35NM from THR RWY 17 Intersect HGT: 1586FT

## LPPR AD 2.20 LOCAL AERODROME REGULATIONS

### 1. Limitations on use of aerodrome

Restricted to ACFT capable of maintaining two way communications with Porto TWR.

For Aerodrome Slot request see GEN 1.2 Mandatory for all flights.

### 2. Radio communication

Continuous two way as prescribed in airspace classification C possessions (see ENR 1.4 paragraph [CLASS C - CONTROLLED AIRSPACE](#)).

Immediately after Take-off all aircraft shall contact Porto APP, unless otherwise instructed by Porto Tower.

### 3. Push-Back, Engine start-up and Taxi procedures

#### 3.1 Pilots shall contact Porto Control Tower, for Departure Approval, 10 minutes before Start-up, and shall provide the following information:

1. CALL SIGN
2. STAND NUMBER
3. CRUISING LEVEL
4. ATIS ACK

#### 3.2 Pilots shall advise ATC, as soon as possible, if able for departure from a runway intersection (A3 or F for RWY 17; C,D,H or J for RWY 35).

### 3.3 Push-Back and Start-up

Aircraft parked in a nose position only allowed outgoing with push-back. Use of reverse thrust for manoeuvring to and from a stand is not permitted.

Aircraft in contiguous stans are not allowed to move simultaneously.

Engine start-up is only permitted after push-back manoeuvre with Aircraft positioned in proper breakaway area (see table below). Breakaway areas markings are white triangles painted near the Taxiway Centre Line.

Whenever an ACFT APU is inoperative or not available, one engine start-up is permitted on a nose in stand before starting push-back manoeuvring; in these circumstances Porto Control Tower must be advised and the start-up procedures will be assisted by Follow-Me.

STAND	RWY 17 EXIT BY TWY "F"		RWY 35 EXIT BY TWY "B"	
	BREAKAWAY AREA/ POINT	ACFT NOSE	BREAKAWAY AREA/ POINT	ACFT NOSE
S08	S1	North	S1	North
S09	S1 ACFT Code C	North	S1 ACFT Code C	North
	S2 ACFT Code D and E	North	S2 ACFT Code D and E	South
S10	S1	North	S1	North
S11	S1 ACFT code C	North	S1 ACFT Code C	North
	S2 ACFT Code D and E	North	S2 ACFT Code D and E	South
S12	S2	North	S2	South
S20	S2	North	S2	South
S21	S2	North	S2	South
S22	S2	North	S2	South
S23	S2	North	S2	South
S24	S2	North	S2	South
S25	S2	North	S2	South
S30	S2	North	S3	South
S31	S3	North	S3	South
S32	S3	North	S3	South
S33	S3	North	S3	South
S34	S3	North	S3	South
S35	S3	North	S3	South
S36	S3	North	S3	South
S37	S3	North	S4	South
S38	S3	North	S4	South
S40	S4	North	S4	South
S41	S4	North	S4	South
S42	S4	North	S4	South
S43	S4	North	S4	South
S50	S4	North	S4	South
S51	S4	North	S5	South
S52	S4	North	S5	South
S53	S5	North	S5	South
S54	S5	North	S5	South
S55	S5	North	S5	South
S56	S5	North	S5	South
S57	S5	North	S5	South
S60	S6	North	S6	South
S61	S6	North	S6	South
S62	S6	North	S6	South

S63	S6	North	S6	South
S64	S6	North	S6	South
S65	S6	North	S6	South
S66	S6	North	S6	South
S70	S5	North	S5	South
S71	S5	North	S5	South
S72	S5	North	S5	South
S73	S5	North	S5	South
T01	T	South	T	South
T02	T	South	T	South
T03	T	South	T	South
T04	T	South	T	South

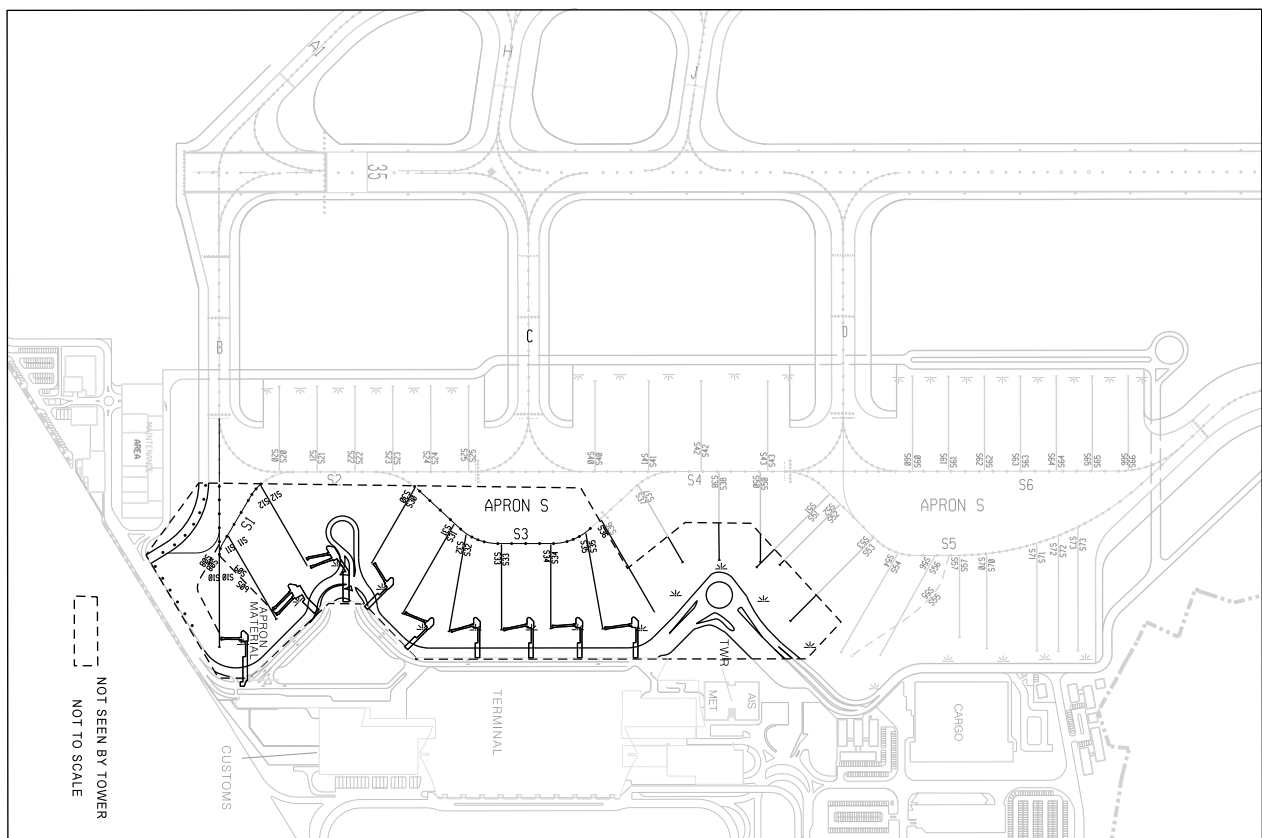
Anti-collision lights must be activated whenever engines are operating and during push-back manoeuvre.

### 3.4 Areas not seen by Tower

First 1500M of RWY 35 and Last 1500M of RWY 17 not clearly visible from TWR. AD circuit - right Base Leg RWY 35 not visible by TWR.

Stands not seen by Tower are S08 up to S12, and S30 up to S35.

Apron Taxiways S1 and S3



### 3.5 Taxiing

Aircraft landing on RWY 17 must not vacate the runway by taxiway F or A3, unless cleared by ATC.

Taxiing in Apron and adjacent Taxiways/Taxilanes must be done with engines on IDLE.

Standard Taxi Routes (see table below):

ARR / DEP	STANDS								
	S08 to S12	S20 to S25	S30 to S37	S40 to S43 S38 and S50	S51 to S57	S60 to S66	S70 to S73	W	T01 to T04
	Standard Taxi Routes								
ARR 17	B / S1	B / S2	B / S2 / S3	C / S4	C / S4 / S5	C / S4 / S6	C / S4 / S5	H	J / Y / T
ARR 35	F / S6 / S4 / S2 / S1	F / S6 / S4 / S2	F / S6 / S4 / S3	F / S6 / S4	F / S5	F / S6	F / S5	A3 / A2	A3 / Y / T
DEP 17	S2 / S4 / S6 / F	S4 / S6 / F	S4 / S6 / F	S6 / F	F	F	F	A2 / A3	Y / A3
DEP 35	B	B	S2 / B	S2 / B	S4 / S2 / B	S4 / S2 / B	S4 / S2 / B	A1	Y / A2 / A1

Taxiways B, C, D, F, Y, Apron TWY T and Apron W are crossed by service roads

### 3.6 Follow-Me and Marshaller assistance

Follow-Me and Marshaller assistance is compulsory during:

1. Push-back movement under CAT II operations;
2. Parking (Only Marshaller).

## 4. Use of Ground Power Unit (GPU), use of Auxiliary Power Unit (APU)

### 4.1 Use of GPU

The use of mobile autonomous GPU is not allowed when ACFT's are using Apron Drive Loading Bridges, except if GPU system is unserviceable.

### 4.2 Use of APU

Start-up or shut-down of the APU is forbidden while the Aircraft is being refuelled.

The use of APU must be limited as much as possible.

Narrow-Body ACFT's are allowed to use APU until 5 minutes after "chocks on" and 10 minutes before ETD.

Wide-Body ACFT's are allowed to use APU until 10 minutes after "chocks on" and 20 minutes before ETD

EXEMPTIONS: If air conditioning system at the Loading Bridge is unserviceable.

## 5. ILS CAT I/II operations

### 5.1 Final approach procedures

#### ILS approach

In principle final approaches will be conducted on RWY 17 ILS.

#### ILS operations

##### Facilities

The following facilities serving ILS operations are available:

- CAT II lighting system on RWY 17. See LPPR AD 2.14.
- RVR assessment system, comprising transmissometers at TDZ, mid-point and stop-end, indicated as position A, B and C respectively. See LPPR AD 2.24.01-1
- Secondary PWR supply (See LPPR AD 2.15).

A change in operation, if caused by a failure expected to last more than one hour, will be notified by NOTAM. Pilots will be notified of shorter-term deficiencies by ATC.



Precision Approach Terrain Profile Chart. See LPPR AD 2.24.06-1

Obstacle Clearance Altitudes / Heights (OCA/H). See relevant Instrument Approach Charts.

#### **ATC Procedures**

- a. ATC will apply safeguards and procedures for ILS operations that will become effective in relation to WX conditions as specified below.
- b. When the visibility is less than 2500M and / or the cloud base is below 400 FT, ATC will instruct TFC to perform ILS approaches to RWY 17.
- c. When the TDZ RVR is 800M or less and / or the cloud base is at 200FT or below, ATC will ensure that the ILS protection area is clear of (known) TFC before issuing the LDG clearance (normally at OM).
- d. RVR Information

ATC will always give the RVR value for position ALPHA (TDZ). As for either of the two other positions, BRAVO and CHARLIE, ATC will only give their RVR value if they are:

- less than the TDZ and less than 800M; or
- less than 350M, or
- requested by the pilot

#### **Clearances**

The above weather conditions and related safeguards are chosen so as to facilitate CAT I and CAT II operations respectively.

During approach, pilots will be informed of:

- any known unserviceability of aids, or facilities referred on this paragraph above and/or downgrading, when applicable.
- significant changes in surface wind (speed and direction).
- changes in RVR

#### **CAT II Standard Taxi Routes**

See table on paragraph 3.4

#### **Practice ILS Approaches**

Pilots who wish to practice ILS CAT II approaches are to use the phrase "REQUEST PRACTICE CAT II APPROACH", on initial CTC with PORTO APP.

The measures mentioned above on paragraph "ATC Procedures", Item c and Item b, will not be applied. Item d will be applied only when TFC permits.

#### **Holding awaiting weather improvement**

ACFT awaiting WX improvement in HLDG area will be stacked FM FL60 upward.

When approaches are possible again, new slots will be assigned, based on the original sequence of arrival

The sequence may be adjusted in order to provide for differences in LDGS criteria e.g. ILS CAT II approaches against ILS CAT I approaches.

ATC may initially allocate more favourable (higher) HLDG levels when the number and type of ACFT involved in HLDG allows this procedure.

**6. Handling services**

All general aviation aircraft are parked in remote stands, which require transportation to terminal building and ARO/METEO offices.

The only entities authorized to provide transportation are the handling agents mentioned below.

All commercial aircraft operating in Porto Aerodrome must be represented by one of the agents mentioned on the list below:

Authorized Full Handling Agents:

Groundforce

Telephone (Station Manager): +351.22.943 2564

Telephone (HOC): +351.22.943.2565

FAX (Station Manager): +351.22.943.2423

FAX (HOC): +351.22.943.2421

SITA Address: OPOKOTP

Email: cce.opo@groundforce.pt

Email: stationmanager.opo@groundforce.pt

VHF: 131.900

Groundforce ONE

Telephone: +351.22. 943 24 35

Mobile Phone: +351.96.134 20 38

Fax: +351.22.943 2436

SITA Address: OPOGOTP

Email: opo@groundforceone.com

URL: <http://www.groundforceone.com>

VHF: 131.900

Portway – Handling de Portugal, SA

Telephone: +351.22.943 25 41 FAX: +351.22.943.24.87

SITA Address: OPOKLXH and OPOKOXH

Email: operacoes.opo@portway.pt

VHF: 131.875

Authorized Handling Supervising Agents:

PTS – Portugal Tourism Services

Phone: +351 229 432 400 Ext.: 46063

Phone: +351 911 919 187 (mobile)

Fax: +351 229 415 925

Email: ptsporto@mail.telepac.pt

Servisair

Telephone: +351.22.948 93 83

Mobile Phone: +351.93.949 53 66 or +351.93.949 53 67

FAX: +351.22.941 17 10

SITA Address: OPOSAXH

Email: porto@servisair.com

VHF: 122.575

Jet Base

Phone: +351 229 432 400 Ext: 46075

Mobile Phone: +351 93.506 46 61

Fax: +351 22.942 4460

Email: handling@jetbase.biz

Authorized Handling Passenger Assistance and Supervising Agents:

LGSP - Lufthansa Ground Services Portugal

Phone: +351 229 437 900

Phone: +351 961 447 436 (mobile)

Fax: +351 229 410 520

Email: handling@lufthansa-lgsp.com

SITA: OPOSTLH

## 7. Engine test runs

Engine test runs in idle power may take place on stands.

Engine test runs above idle power will take place in a location designated by Airport Operations Service. Test runs are allowed from 0600 to 2400 (0500 to 2300) on the condition that a previous authorization was obtained from Airport Operations Service. Operators shall indicate the real time of start and duration of the test.

## LPPR AD 2.21 NOISE ABATEMENT PROCEDURES

### 1. GENERAL

Landing and/or take-off is forbidden by law between 00:00 (23:00) and 06:00 (05:00), except in cases of force majeure. However, according to governmental deliberation, exception regime has been granted for Porto Airport in which landing and/or take-off of aircraft engaged in commercial aviation or aerial work are allowed in a limited number.

**The authorisation for air movements during this period is conditioned to:**

1. The maximum number of movements allowed (11 daily, 70 weekly, 2.100 yearly)
2. The noise level of the aircraft concerned, in compliance with ICAO:

Level 0	below 87 EPNdB
Level 0,5	between 87 EPNdB and 89,9 EPNdB
Level 1	between 90 EPNdB and 92,9 EPNdB
Level 2	between 93 EPNdB and 95,9 EPNdB
Level 4	between 96 EPNdB and 98,9 EPNdB
Level 8	between 99 EPNdB and 101,9 EPNdB
Level 16	above 101,9 EPNdB

- a. Aircraft classified Level 16, cannot be scheduled between 00:00 (23:00) and 06:00 (05:00);
- b. Aircraft classified Levels 4 and 8, cannot be scheduled between 02:00 (01:00) and 05:00 (04:00);
3. Aircraft authorised to land during the night period are strictly forbidden to reverse thrust right after landing;
4. The operating restrictions set out in Item 1 shall not apply to the following cases of force majeure:
  - a. Aircraft operating humanitarian, emergency or evacuation missions;
  - b. Aircraft to come across urgent situations, taking in account weather, technical failure or flight safety reasons;
  - c. Air movements subject to an unforeseen schedule alteration due to abnormal disturbance within Air Traffic Control;
  - d. Air movements operated up to 01:00 (00:00) which were actually scheduled for periods up to 00:00 (23:00), due to delays for which neither the Airport Management Company nor the Operator were to blame;
  - e. Air movements from/to Autonomous Regions of Madeira and Azores, due to meteorological conditions;
  - f. Landings operated during the period comprised between 05:00 (04:00) and 06:00 (05:00), due to weather reasons, as far as the arrival had been scheduled for a time after 06:00 (05:00).
5. For the purpose of compliance with provision of Item 2 above, the operator shall, when applying for a slot provide the information contained in the aircraft manufacturer's noise certificate.

6. Noise abatement procedures during approach, landing and take-off shall comply with standards and procedures set in ICAO PANSOPS Volume I and Portuguese AIP.
7. Aircraft authorised to land and take-off shall comply with technical characteristics according to ICAO Annex 16 Volume I, Chapter 3 and Portuguese AIP:
  - a. For landing: Approach to landing MS 9 equal X EPNdB
  - b. For Take-off: (take-off PS side-line) / 2 equal X EPNdB

**Note:** Information contained in the ACFT manufacturer's noise data, except for aircraft registered in EU Member-States, in which applies the data contained in the EASA Form 45 Noise Certificate issued by the competent Authority of the respective Member-State.

**2. Penalties for non-compliance with slot allocation rules during the night period.**

Penalties for these offences are specified in f) and g), paragraph 2, article 28 of Decree Law 9/2007.

**LPPR AD 2.22 FLIGHT PROCEDURES**

**1. STANDARD INSTRUMENT DEPARTURES FROM PORTO (FRANCISCO SA CARNEIRO) AERODROME**

GENERAL REMARKS:

NIL

NOISE ABATEMENT PROCEDURES:

In accordance with Item LPPR AD 2.21.

RADAR VECTORING:

Radar Vectoring involving deviation from SID may be used by Porto Approach to expedite traffic.

RADIO COMMUNICATIONS FAILURE:

In the event of RCF squawk A7600;

1. Fly at/to the last assigned and acknowledged level or to the level of SID if is higher than the last assigned level until passing 30 NM DME PRT DVOR/DME;
2. Thereafter adjust level and speed in accordance with the filed flight plan;
3. If being radar vectored or proceeding offset, when passing 30 NM DME PRT DVOR/DME, rejoin the current flight plan route and proceed in accordance with § 2 above.
4. If cleared DCT to..., fly at/to the assigned and acknowledged level or to FL070, whichever is higher, until passing 30 NM DME PRT DVOR/DME, maintain the current flight plan route and proceed in accordance with § 2 above.

TRAFFIC UNABLE TO PASS ABEAM "PG "LOCATOR AT 3000FT OR ABOVE SHALL ADVISE ATS

STANDARD INSTRUMENT DEPARTURE (SID) DESCRIPTION: See back of charts LPPR AD 2.24.08-1 and LPPR AD 2.24.10-3

**2. FMS RNAV DEPARTURE ROUTES FROM PORTO (FRANCISCO SA CARNEIRO) AERODROME**

GENERAL PROCEDURES:

If unable do comply with these FMS RNAV Departure Routes, advise ATC.

NOISE ABATEMENT PROCEDURES:

In accordance with Item LPPR AD 2.21.

RADAR VECTORING:

Radar Vectoring involving deviation from SID may be used by Porto Approach to expedite traffic.

**RADIO COMMUNICATIONS FAILURE:**

In the event of RCF squawk A7600:

1. Fly at/to the last assigned and acknowledged level or to the level of SID if is higher than the last assigned level until passing 30 NM DME PRT DVOR/DME;
2. Thereafter adjust level and speed in accordance with the filed flight plan;
3. If being radar vectored or proceeding offset, when passing 30 NM DME PRT DVOR/DME, rejoin the current flight plan route and proceed in accordance with § 2 above.
4. If cleared DCT to..., fly at/to the assigned and acknowledged level or to FL070, whichever is higher, until passing 30 NM DME PRT DVOR/DME, maintain the current flight plan route and proceed in accordance with § 2 above.

TRAFFIC UNABLE TO PASS OVER or ABEAM "XAPIM" AT 3000FT OR ABOVE SHALL ADVISE ATS

FMS RNAV DEPARTURE ROUTES (SID) DESCRIPTION: See back of charts LPPR AD 2.24.08-5 and LPPR AD 2.24.08-7

**3.STANDARD INSTRUMENT ARRIVALS TO PORTO (FRANCISCO SA CARNEIRO) AERODROME**

NIL

**4.FMS RNAV ARRIVAL ROUTES TO PORTO (FRANCISCO SA CARNEIRO) AERODROME****4.1RUNWAY 17****GENERAL REMARKS:**

To shorten these FMS RNAV Arrival Procedures, radar vectors or instructions to follow specific way points shall be expected.

**SPEED ADJUSTMENT:**

See ENR Section 1.5, Sub-section 1.5.4 paragraph 2a).

**RADIO COMMUNICATIONS FAILURE:**

In the event of RCF squawk 7600, fly at/to the last assigned level to POR NDB holding pattern and at ETA according to CPL or at EAT (when received and acknowledged) start descent to initial approach altitude to carry out a standard IFR Approach according to IAC.

In the event of RCF after the clearance for the Final Approach, proceed for landing

FMS RNAV ARRIVAL ROUTES (STAR) DESCRIPTION: See back of chart LPPR AD 2.24.10-1

**4.2RUNWAY 35****GENERAL REMARKS:**

To shorten these FMS RNAV Arrival Procedures, radar vectors or instructions to follow specific way points shall be expected.

**SPEED ADJUSTMENT:**

See ENR Section 1.5, Sub-section 1.5.4 paragraph 2a).

**RADIO COMMUNICATIONS FAILURE:**

In the event of RCF squawk 7600, fly at/to the last assigned level and:

1. Above FL 120 proceed to "POR NDB" and over holding pattern descend to FL 80 and then proceed to "XAPIM HOLDING" via PRT and proceed in accordance with § 2 below.
2. At/below FL 120 proceed to "XAPIM HOLDING" and at ETA according to CPL or at EAT (when received and acknowledged) start descent to initial approach altitude to carry out a standard IFR approach according to IAC.

In the event of RCF after the clearance for the Final Approach, proceed for landing.

FMS RNAV ARRIVAL ROUTES (STAR) DESCRIPTION: See Back of chart LPPR AD 2.24.10-3

5. **EAT Calculation Method**

Expected Approach Time (EAT) to Porto AD is calculated to the Holding Fix associated with the IAF of the procedure to be used, regardless of Holding Pattern used. This means EAT is calculated for RWY35 at PG NDB/XAPIM and for RWY17 at POR NDB.

**LPPR AD 2.23 ADDITIONAL INFORMATION**

1. **Bird hazard warning**

Bird scaring is accomplished by use of gas cannon units and scarecrow devices installed along runway strip. The gas cannon are activated whenever birds are detected. The scarecrow devices installed, are permanently On and exist a portable unit that is used whenever is required.

Pilots are advised that bird may not always be promptly detected. Caution requested during approach and take-off.

**LPPR AD 2.24 CHARTS RELATED TO THE AERODROME**

Name	Page
AERODROME CHART- ICAO	LPPR AD 2.24.01-1
AIRCRAFT PARKING/DOCKING CHART-ICAO (APRON S)	LPPR AD 2.24.02-1
AIRCRAFT PARKING/DOCKING CHART-ICAO (APRON T and W)	LPPR AD 2.24.02-3
AERODROME OBSTACLE CHART-ICAO – RWY17/35	LPPR AD 2.24.04-1
PRECISION APPROACH TERRAIN CHART-ICAO – RWY17	LPPR AD 2.24.06-1
STANDARD DEPARTURE INSTRUMENT (SID) – RWY17	LPPR AD 2.24.08-1
STANDARD DEPARTURE INSTRUMENT (SID) – RWY35	LPPR AD 2.24.08-3
STANDARD DEPARTURE INSTRUMENT CHART (SID) RNAV RWY 17	LPPR AD 2.24.08-5
STANDARD DEPARTURE INSTRUMENT CHART (SID) RNAV RWY 35	LPPR AD 2.24.08-7
STANDARD ARRIVAL INSTRUMENT (STAR) - RNAV RWY 17	LPPR AD 2.24.10-1
STANDARD ARRIVAL INSTRUMENT (STAR) - RNAV RWY 35	LPPR AD 2.24.10-3
INSTRUMENT APPROACH CHART-ICAO – ILS RWY17 CAT A-B	LPPR AD 2.24.12-1
INSTRUMENT APPROACH CHART-ICAO – ILS RWY17 CAT C-D	LPPR AD 2.24.12-3
INSTRUMENT APPROACH CHART-ICAO – DVOR/DME RWY17 CAT A-B-C-D	LPPR AD 2.24.12-5
INSTRUMENT APPROACH CHART - ICAO DVOR/DME RWY 35 CAT A-B-C-D	LPPR AD 2.24.12-7
INSTRUMENT APPROACH CHART-ICAO – NDB RWY 17 CAT A-B-C-D	LPPR AD 2.24.12-9
INSTRUMENT APPROACH CHART-ICAO – L RWY35 CAT A-B-C-D	LPPR AD 2.24.12-11
VISUAL APPROACH CHART-ICAO	LPPR AD 2.24.13-1