AD 2 AERODROMES

LPHR AD 2.

LPHR AD 2.1 AERODROME LOCATION INDICATOR AND NAME

LPHR - HORTA

LPHR AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site	LAT: 383112N LONG: 0284259W Intersection RWY 10/28 with TWY “B”. Bearing 089° distance 711M from THR 10
2	Direction and distance of ARP from city or town	SW from Horta City - distance 9.5KM (5.2NM)
3	Elevation/Reference temperature	117FT/ 36M 23.9°C (AUG)
4	Geoid undulation at aerodrome elevation position	58M
5	MAG VAR/Annual change	9ºW (2020) / 0.17º decreasing
6	AD Administration, address, telephone, telefax, telex, AFS	Post: ANA Aeroportos de Portugal, SA Aeroporto da Horta Ilha do Faial 9900-321 HORTA Phone: +351 292202510 Fax: +351 292943519, +351 292943544 AFS: LPHRYDYA Email: horta.airport@ana.pt SITA: BOHBBXH URL: http://www.ana.pt
7	Types of traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	NIL

LPHR AD 2.3 OPERATIONAL HOURS

1	AD Administration	Winter: 09:00-19:30 Summer: 08:00-20:00
2	Customs and immigration	24H hours prior request
3	Health and sanitation	24H hours prior request
4	AIS Briefing Office	AIS available through ARO Portugal (see GEN 3.1)
5	ATS Reporting Office (ARO)	ARO available through ARO Portugal (see GEN 3.1)
6	MET Briefing Office*	06:45-21:15 (05:45-20:15)
7	ATS	HO
8	Fuelling	On Request
9	Handling	On Request
10	Security	H24
11	De-icing	Not available

12	Remarks	Aerodrome operational extension or reopening for non-emergency flights, must be duly justified and submitted to the approval of AD Administration during operational hours. Fees are applicable in accordance with GEN 4.1. Emergency flights shall be granted. *Service assured in accordance with AD operational hours.

LPHR AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities:	Available by SATA Air Açores: 1 - AIRSTARTER 3 - GPU, one of 28 Volts and two of 115 Volts 1 - Loader 1 - Lavatory Unit 1 - Potable Water Unit 2 - Conveyor Belt 2 - Forklift MAX. 2 TONS 4 - Passenger Stairs, 3 Motorized and 1 Non-Motorized 3 - DASH8 (DH8D) Passenger Stairs, Non-Motorized 4 - Tractors 14 - Dollies
2	Fuel/oil types	JET A1 / None
3	Fuelling facilities/capacity	2 Trucks - Capacity 16700 litres. Delivery Rate - 600 litres per minute
4	De-icing facilities	None
5	Hangar space available for visiting aircraft	None
6	Repair facilities for visiting aircraft	None
7	Remarks	Oxygen and related servicing – Not Available

LPHR AD 2.5 PASSENGER FACILITIES

1	Hotels	In city
2	Restaurants	In city
3	Transportation	Buses, Taxis and Rent-a-car from the AD
4	Medical facilities	First aid treatment Hospitals in the city
5	Bank and Post Office	In the vicinity of Aerodrome URL: http://riac.azores.gov.pt
6	Tourist Office	At aerodrome terminal
7	Remarks	NIL

LPHR AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 6
2	Rescue equipment	In accordance with CAT 6 requirements established in the table 5-2 of ICAO DOC. 9137 - AN/898 Part I.
3	Capability for removal of disabled aircraft	High stability pneumatic lifting bags
4	Remarks	NIL

LPHR AD 2.7 RUNWAY SURFACE CONDITION ASSESSEMENT AND REPORTING AND SNOW PLAN

1	Type(s) of clearing equipment	NIL
2	Clearance priorities	NIL
3	Use of material for movement area surface treatment	NIL
4	Specially prepared winter runways	NIL
5	Remarks	For further information, see also Section AD 1.2.2. - RUNWAY SURFACE CONDITIONS ASSESSMENT AND REPORTING AND SNOW PLAN.

LPHR AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	Apron Surface and Strength		**APRON**	**SURFACE**	**STRENGTH**	
			A	Asphalt	PCN 35/F/C/X/T	
2	Taxiway width, surface and strength		**TAXIWAY**	**WIDTH**	**SURFACE**	**STRENGTH**
			A and B	23M	Asphalt	PCN 35/F/C/X/T
			TAXILANE	**WIDTH**	**SURFACE**	**STRENGTH**
			NIL			
3	Altimeter Checkpoint and elevation		Apron - 29M			
4	VOR Checkpoint locations		Not established			
5	INS Checkpoint positions	**RAMP / STAND**	INS **COORDINATES**	**ELEVATION (M/AMSL)**	ACFT **TYPE (CRITICAL)**	**PUSH BACK TO TWY / TAXILANE**
		01	383115.59N 0284 58.29W	29,09M	DH8D	
		02	383115.60N 0284256.17W	29,10M	A320	
		03	383115.64N 0284254.00W	29,16M	DH8D	
6	Remarks		NIL			

LPHR AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system at aircraft stands	Taxiway guide lines. Apron guidelines and Stands ID
2	RWY/TWY markings and lights	**RWY Markings:** Runway Designation, Runway Centre Line, Threshold, Runway Edge (side strip), aiming points, Runway turn pad. **TWY Markings:** TWY Centreline, TWY Edge (side strip) and RWY Holding positions. **RWY Lights:** Runway Edge, THR light, Runway End, Runway Turn Pads and RTIL. **TWY Lights**: Taxiway Edge
3	Stop bars	NIL
4	Remarks	NIL

LPHR AD 2.10 AERODROME OBSTACLES

In approach/TKOF areas

Obst. ID Designation	Obst. Type	Obst. Position	Elevation / HGT	Markings Type, Colour	Remarks
a	b	c	d	e	f
LPHR 01	NATURAL_HIGHPOINT	383129.1N 0284504.2W	148M/	Day markings and Fixed Red Light	RWY 10
LPHR 02	NATURAL_HIGHPOINT	383117.5N 0284119.7W	62M/	Day markings and Fixed Red Light	RWY 28
LPHR 03	NATURAL_HIGHPOINT	383111.5N 0283725.4W	145M/	Day markings and Fixed Red Light	RWY 28

In circling area and at aerodrome					
Obst. ID Designation	Obst. Type	Obst. Position	Elevation / HGT	Markings Type, Colour	Remarks
a	b	c	d	e	f
LPHR 04	CONTROL TOWER	383116.3N 0284248.6W	58M/	Top with red stripes. Fixed red light	
LPHR 05	BUILDING	383117.4N 0284256.9W	44M/	Top with red stripes. Fixed red light	
LPHR 06	BUILDING	383116.2N 0284242.3W	43M/	Top with red stripes. Fixed red light	
LPHR 07	ANTENNA	383118.3N 0284246.1W	69M/	Top with red stripes. Fixed red light	
LPHR 08	FENCE (1/5)	383114.0N 0284330.3W	26M/2M	Day markings	Aerodrome peripheral fence
LPHR 09	FENCE (2/5)	383109.0N 0284330.3W	23M/2M	Day markings	
LPHR 10	FENCE (3/5)	383109.1N 0284259.0W	26M/2M	Day markings	
LPHR 11	FENCE (4/5)	383114.3N 0284224.4W	36M/2M	Day markings	
LPHR 12	FENCE (5/5)	383109.3N 0284224.4W	33M/2M	Day markings	

LPHR AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	HORTA AMS
2	Hours of service	06:45-21:15 (05:45-20:15)
3	Office responsible for TAF preparation Periods of validity	CPVM-AERO MWO/AMO 9 HR - issuance every 3 hours during operational hours (see GEN 3.5.4)
4	Trend forecast Interval of issuance	NIL
5	Briefing/consultation provided	Briefing on observed meteorological conditions: personal or by phone. Briefing on expected meteorological conditions: by phone provided by the CPVM-AERO MWO/AMO (see GEN 3.5.4).
6	Flight documentation Language(s) used	C, CR English, Portuguese
7	Charts and other information available for briefing or consultation	P, S, SWH, SWM, W
8	Supplementary equipment available for providing information	Self-briefing
9	ATS units provided with information	Horta TWR and APP

10	Additional information (limitation of service, etc.)	HORTA AMS: Phone: +351 292 943 570 Email: lphr@ipma.pt CPVM-AERO MWO/AMO: Phone: +351 218 474 583 Fax: +351 218 402 370 Email: met.aero@ipma.pt

LPHR 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 COORD THR Geoid Undulation**	THR **elevation and highest elevation of TDZ of precision APCH RWY**	**Slope of RWY/SWY**
1	**2**	**3**	**4**	**5**	**6**	**7**
10	89.71	1595x45	PCN 39 /F/C/X/T Asph	THR 383111.51N 0284330.27W GUND 58M	THR 10: 25M	0,7
28	269.72			THR 383111.76N 0284224.43W GUND 58M	THR 28: 36M	

Designations	SWY **dimensions (M)**	CWY **dimensions (M)**	**Strip dimensions (M)**	**RESA**	**OFZ**	**Remarks**
1	**8**	**9**	**10**	**11**	**12**	**13**
10	NIL	200X150	1715x150	NIL	NIL	Surface: RWY 10/28 Grooved in all extension Protection area: No RESA. Horta AD is not compliant with RESA as specified in ICAO Annex 14 Vol. 1
28		300X150				

LPHR AD 2.13 DECLARED DISTANCES

RWY **Designator**	TORA **(M)**	TODA **(M)**	ASDA **(M)**	LDA **(M)**	**Remarks**
1	**2**	**3**	**4**	**5**	**6**
10	1647 *	1847	1647 *	1595	* Including 52,5 meters of pavement before THR
28	1647 *	1947	1647 *	1595	

LPHR AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY **Designator**	APCH **light Type / Length / Intensity**	THR **Light colour/WBAR**	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**
10	Simple no Standard 202M	Green	PAPI 3° MEHT - 48FT	NIL	NIL	White, spacing 30M, Last 600 Yellow	Red	NIL	NIL
28	Simple no Standard 243,5M	Green		NIL	NIL		Red	NIL	

LPHR AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN at Control Tower, (383118.03N 0284250.57W) FLG W/G ev 4s, HO - IMC
2	LDI location and lighting Anemometer location and lighting	LDI: NIL Anemometers: RWY10: Right Side, 300M THR. Lighted RWY28: Left Side, 300M THR. Lighted
3	TWY edge and centre line lighting	TWY Edge Light
4	Secondary power supply/switch-over time	Secondary power supply conforms with requirements of Annex 14 for CAT I
5	Remarks	Emergency lights available

LPHR 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	APCH and FATO lighting	Not established
7	Remarks	NIL

LPHR AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	HORTA CTR 383600N 0285551W - 383612N 0284306W - 383834N 0283230W - 383004N 0283106W - 382611N 0284252W - 382559N 0285535W - 383600N 0285551W
2	Vertical limits	SFC / 2000FT ALT (600M)
3	Airspace classification	C
4	ATS unit call sign / Language(s)	Horta Approach, Horta Tower EN, PT
5	Transition altitude	5000FT
6	Remarks	NIL

LPHR AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of Operation	Remarks
1	2	3	4	5
APP	HORTA Approach	120.600MHZ	HO	Primary
		121.500 MHZ	HO	Emergency
TWR	HORTA Tower	118.000 MHZ	HO	Primary
		121.500 MHZ	HO	Emergency

LPHR AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type Category (Variation)	ID	Frequency	Hours of operation	Site of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
NDB (09ºW-2020)	FIL	380KHZ	H24	383121.0N 0284109.2W		Coverage: 250NM
L (09ºW-2020)	HT	360KHZ	H24	383111.5N 0283746.2W		Coverage: 25NM
DVORTAC (09ºW-2020)	VFL	112.700MHZ TACAN: CH74X	H24	383109.9N 0283724.8W	500FT	Coverage: 240NM - FL600 DVOR not usable: 010º/020º BYD 10NM BLW 10000FT 080º/140º BYD 15NM BLW 10000FT 280º/010º BYD 10NM BLW 10000FT DVOR not usable below 5000FT TACAN not usable: 010º/020º BYD 10NM BLW 10000FT 045º/080º BYD 30NM BLW 5000FT 080º/100º BYD 28NM BLW 5500FT 100º/140º BYD 15NM BLW 10000FT 140º/150º BYD 40NM BLW 3000FT 280º/010º BYD 10NM BLW 10000FT DME not usable: 110º/120º BYD 15NM BLW 5000FT 305º BYD 17NM BLW 5000FT

Type Category (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 (12ºW-2020)	FRS	113.300MHZ	H24	392712.9N 0311237.5W		Coverage: 250NM FL300 Not usable: 325°/345° BYD 40NM BLW 16000FT VOR: RDL126 BYD 35NM BLW 5000FT RDL296 BYD 25NM BLW 5000FT RDL316 BYD 35NM BLW 5000FT
DME	FRS	CH80X	H24	392712.9N 0311237.6W	2800FT	Coverage: 250NM FL300 Not usable: 325º/345º BLW 16000FT BYD 40NM
VOR	LM	112.300MHZ	H24	384702.1N 0270615.8W		Coverage: 100NM Not usable: R215/R275 BYD 15NM Maintenance: WED 08:00/12:00
DVOR/DME (07ºW-2020)	VSM	112.000MHZ CH 57X	H24	365746.5N 0250959.0W	300FT	Coverage: 200NM FL500 Do not usable: 065º/130º BYD 20NM BLW 6000FT
DVOR/DME (06ºW-2020)	VMG	111.200MHZ CH 49X	H24	DVOR 375045.6N 0254529.3W DME 375045.3N 0254528.7W	2800FT	Coverage: 150NM- FL500 DVOR: Not usable: 090°/120° BYD 30NM BLW 8000FT. RDL062 BYD 40NM BLW 8000FT. RDL094 excessive VOR needle fluctuations at 12-13NM and 19-24NM BLW 8000FT. DME: Not usable: 170°/190° BYD 40NM BLW 6000FT. DME false ranges and unlocks may occur beyond 92NM at 5500FT.

LPHR AD 2.20 LOCAL AERODROME REGULATIONS

1. Local flying restrictions

- Ground rises rapidly very close to the aerodrome. (This fact may generate windshear and / or turbulence).
- Due to high terrain flight is not permitted North of Runway 10/28.
- On the EAST Sector of the Aerodrome, a very high mountain (on Pico Island) with it's highest point at 2351 metres and 23 KM ESE of the Aerodrome, is the main restriction for the IFR Procedures in the region. This geographical environment imposes the need to strictly comply with published procedures for arrival, approach and departure.
- Aircraft without two way radio communications are not accepted.
- Aerodrome qualified for night operations.
- Aerodrome and obstructions lighted.
- Danger of collision with birds during taxiing, landing and take-off.
- Back-track operations forbidden on Runway 10/28. These operations must be done only on turning bay of each runway.

LPHR AD 2.21 NOISE ABATEMENT PROCEDURES

NIL

LPHR AD 2.22 FLIGHT PROCEDURES

1. STANDARD INSTRUMENT DEPARTURE FROM HORTA AERODROME

1.1 RUNWAY 10

GENERAL REMARKS:

Strict compliance with SID required.

STANDARD INSTRUMENT DEPARTURE (SID) DESCRIPTION: See back of the SID chart.

1.2 RUNWAY 28

GENERAL REMARKS:

Strict compliance with SID required.

Refer to LPHR AD 2.10 section for information on obstacles in approach and take-off areas.

SID

1. After take-off turn left 15º climbing to 790FT QNH
2. Maintain minimum climb gradient of 6.2% until passing 550FT QNH
3. When passing 790FT QNH proceed in accordance with cleared SID

STANDARD INSTRUMENT DEPARTURE (SID) DESCRIPTION: See back of the SID chart.

1.3 RUNWAY 10 - 28

RADIO COMMUNICATION FAILURE

In the event of RCF squawk A7600:

1. Fly at/to the last assigned and acknowledged level or to FL100 if higher than the last assigned level until passing 25NM DME VFL DVORTAC;
2. Thereafter adjust level and speed in accordance with the filed flight plan;
3. If being radar vectored or proceeding offset, when passing 25NM DME VFL DVORTAC, rejoin the current flight plan route and proceed in accordance with item 2 above;
4. If cleared DCT to..., fly at/to the assigned and acknowledged level or to FL100, whichever is higher, until passing 25NM DME VFL DVORTAC, maintain the current flight plan route and proceed in accordance with item 2 above.

Note – Avoid to fly on the sector between radials 078/158 from VFL DVORTAC, until reaching FL100 or 25NM DME, due to Pico Mountain.

2. STANDARD INSTRUMENT ARRIVAL TO HORTA AERODROME

2.1 RUNWAY 10 - 28

GENERAL REMARKS:

1. Above Minimum Flight Altitude non-standard Instrument Arrival Routes and procedures may be assigned by ATC.
2. See local flying restrictions in LPHR AD 2 paragraph 2.20.1.
3. Radio Failure Procedure (only for aircraft with clearance limit holding VFL / HT):

In the event of RCF, aircraft shall proceed to VFL or HT Holding at last assigned level.
At ETA, according to current flight plan, when established on the holding pattern, descend to 5000FT QNH; at 5000FT QNH leave HT to carry out a standard IFR approach according to IAC.

STANDARD INSTRUMENT ARRIVAL (STAR) DESCRIPTION: See back of the STAR chart.

3. FMS RNAV ARRIVAL ROUTES TO HORTA AERODROME

3.1 RUNWAY 10

GENERAL REMARKS

NIL

RADIO COMMUNICATIONS FAILURE:

In the event of RCF squawk 7600. Proceed to the holding XOGRA and descend to MNM holding level and/or descend to initial approach ALT to carry out a standard instrument approach according IAC. For ACFT equipped with on-board telephone, dial +351 292208212.

FMS RNAV ARRIVAL ROUTES DESCRIPTION: See back of the STAR charts.

4. RNP AR APCH

4.1 Authorization Required Details

To obtain from ANAC (Portuguese competent Authority) an “Authorization Required” to fly RNP AR APCH procedure in LPHR, for which a procedure-specific approval is required, Operator has to provide its flight crew members an additional ground training and FSTD training, as appropriate, to cope with the mitigations procedures that were described in its FOSA.

For a correct sequence to obtain the “Authorization Required” from ANAC, the operator shall send an e-mail to ops@anac.pt with its request, and:

i. Operator has to show evidence to ANAC (via its AOC- Appendix II “Opspecs” or, a LoA from its Competent Authority), that is Approved for “Generic” RNP AR APCH (with “RF” leg capability), before an application for an Authorization can be accepted.

ii. A FOSA (Flight Operational Safety Assessment) taking into account, at least, that some bank angle requirements as per ICAO Doc. 9905 may be higher than 20º, but are not higher than 25º, for extreme wind situations, which are manageable by eligible aircraft; and some small VSS penetrations not producing any EGPWS/TAWS advisories during validation flights

iii. Evidence of operational procedures for normal (SOPs), abnormal and contingency situations and specific for LPHR RNP AR APCHs taking into account what point (ii) states.

4.2 Criteria Deviations

a) Bank Angle

Referring to Document 9905 – AAN/471 Required Navigation Performance Authorization Required (RNP AR)

Procedure Manual, the maximum bank angle for Approach is 20º and 15º for Missed Approach. All bank angles

above these values are listed below:

Phase	RWY	Procedure IDENT	Segment	Procedure Bank Angle
INITIAL	10	HR401	HR400 HR409	22.7º
INITIAL	10	VELAS	HR436 HR434	23.9º
INITIAL	10	VELAS	HR422 HR420	24.1º
INTERMEDIATE	10	HR401	HR409 HR408	20.2º
INTERMEDIATE	10	VELAS	HR420 HR408	24.9º
INITIAL	28	HR512	HR512 HR510	24.4º

Phase	RWY	Procedure IDENT	Segment	Procedure Bank Angle
INITIAL	28	HR550	HR548 HR546	25.0º
INITIAL	28	HR560	HR558 HR556	21.8º
INITIAL	28	HR560	HR554 HR546	25.0º
INTERMEDIATE	28	HR540	HR536 HR508	22.9º
INTERMEDIATE	28	HR512	HR510 HR508	20.3º
INTERMEDIATE	28	HR550 HR560	HR546 HR508	23.2º

b) VSS (Visual Segment Surface) Penetrations

Referring to Document 8168 – OPS/611 – Procedures for Air Navigation Services – Aircraft Operations – Volume

II (Seventh Edition): Surveyed obstacles (man-made obstacles or natural obstacles) penetrate the VSS of both runways:

RWY 10

Type	Coordinates	Top Altitude	Amount of Penetration	RNP Value
Light	383116.07N 0284356.658W	47.26 M 155 FT	3.28 M	All values
Light	383116.842N 0284359.015W	51.05 M 167.5 FT	5.20 M	All values
Post	383114.495N 0284335.166W	33.69 M 110.5 FT	6.79 M*	All values
Power Pole	383115.195N 0284335.103W	38.83 M 127.4 FT	11.99 M*	All values
Cliff	383122.881N 0284502.927W	137.79 M 452.1 FT	41.16 M	All values
Light	383123.748N 0284502.862W	145.37 M 476.9 FT	48.80 M	0.3 0.2
***Obstacles with a height less than 15m above THR10 may be disregarded according to the referred above document.**				

5. HOLDING PROCEDURES

HLDG ID/FIX/WPT Coordinates	INBD TR (MAG)	Direction of PTN	MAX IAS (KT)	MNM-MAX HLDG LVL FL/FT (MSL)	TIME (MIN) or DIST OUBD
HORTA/HT HORTA L 383112N0283746W	055°	LEFT	230	5000 FT ALT FL 140	1 MIN
HORTA/HT HORTA L 383112N0283746W	055°	LEFT	280	FL 150 FL 999	1.5 MIN
HORTA/VFL HORTA DVORTAC 383110N0283725W	055°	LEFT	230	5000 FT ALT FL 140	1 MIN
HR401 HR401 382323N0284826W	309°	LEFT	230	FL 140 2100 FT ALT	1 MIN
HR456 HR456 383522N0290021W	154°	RIGHT	230	FL 140 2100 FT ALT	1 MIN
HR560 HR560 382146N0284650W	099°	RIGHT	230	FL 140 2100 FT ALT	1 MIN

HLDG ID/FIX/WPT Coordinates	INBD TR (MAG)	Direction of PTN	MAX IAS (KT)	MNM-MAX HLDG LVL FL/FT (MSL)	TIME (MIN) or DIST OUBD
SOLGI SOLGI 383730N0280158W	266°	RIGHT	230	5000 FT ALT FL 140	1 MIN
VELAS VELAS 383932N0282131W RDL065-DME15 VFL DVORTAC	245°	RIGHT	230	5000 FT ALT FL 140	5 NM
VELAS VELAS 383932N0282131W	245°	RIGHT	220	5000 FT ALT FL 140	1 MIN
XOGRA XOGRA 382412N0290117W RDL259-DME20 VFL DVORTAC	079°	RIGHT	230	5000 FT ALT FL 140	5 NM

LPHR AD 2.23 ADDITIONAL INFORMATION

1. DISTANCE TO GO SIGNS

Four vertical panels placed 46 meters from runway centreline, measuring 1,25 meters high by 1.22 meters wide, white numbers on black background. The panels are spaced 300 meters apart.

LPHR AD 2.24 CHARTS RELATED TO AN AERODROME

