

APP	124.300 MHz
TWR	118.300 MHz
GMC	121.700 MHz
ATIS	118.600 MHz

GRAN CANARIA
RNP Z
RWY 21L (LPV ONLY)



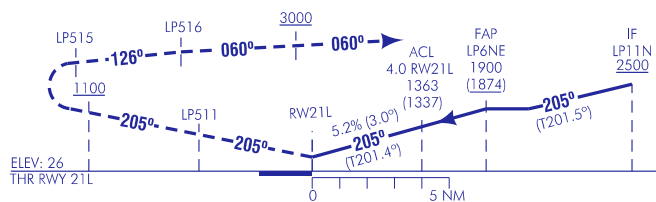
FRUSTRADA: SUBIR EN CURSO MAGNÉTICO 205° HASTA LP511. CONTINUAR EN ASCENSO EN CURSO MAGNÉTICO 205° A 1100 O SUPERIOR. VIRAR A LA IZQUIERDA DIRECTO A LP515. A LP516 (IAS MAX 200 kt). VIRAR A LA IZQUIERDA PARA CONTINUAR EN CURSO MAGNÉTICO 060° (IAS MAX 210 kt) A 3000 O SUPERIOR. CONTINUAR EN CURSO MAGNÉTICO 060° Y ESPERAR VECTORES RADAR.

FRUSTRADA FALLO DE COMUNICACIONES: SUBIR EN CURSO MAGNÉTICO 205° HASTA LP511. CONTINUAR EN ASCENSO EN CURSO MAGNÉTICO 205° A 1100 O SUPERIOR. VIRAR A LA IZQUIERDA DIRECTO A LP515. A LP516 (IAS MAX 200 kt). A LP517 (IAS MAX 210 kt) A 3000. A ENETA (IAS MAX 220 kt) PARA INCORPORARSE A LA ESPERA A 4000.

MISSED APCH: CLIMB ON MAGNETIC COURSE 205° UP TO LP511. CONTINUE CLIMBING ON MAGNETIC COURSE 205° TO 1100 OR ABOVE. TURN LEFT DIRECT TO LP515. TO LP516 (MAX IAS 200 kt). TURN LEFT TO CONTINUE ON MAGNETIC COURSE 060° (MAX IAS 210 kt) TO 3000 OR ABOVE. CONTINUE ON MAGNETIC COURSE 060° AND WAIT FOR RADAR VECTORING.

MISSED APCH COMMUNICATIONS FAILURE: CLIMB ON MAGNETIC COURSE 205° UP TO LP511. CONTINUE CLIMBING ON MAGNETIC COURSE 205° TO 1100 OR ABOVE. TURN LEFT DIRECT TO LP515. TO LP516 (MAX IAS 200 kt). TO LP517 (MAX IAS 210 kt) TO 3000. TO ENETA (MAX IAS 220 kt) TO JOIN THE HOLDING TO 4000.

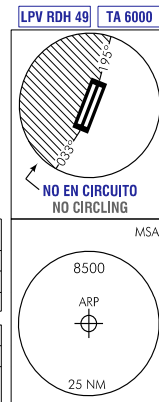
NOTAS:
① BAJO AUTORIZACIÓN ATC Y FRUSTRADA.
NOTES:
① UNDER ATC CLEARANCE AND MISSED APPROACH.

HGT REF ELEV THR RWY 21L

OCA/H		A	B	C	D	
STA	LPV	2.5%	436 (410)	448 (422)	456 (430)	467 (441)
En circuito (H) sobre Circling (H) over 77		990 (920)		1330 (1260)		

GS		kt	80	100	120	140	160	180
FAP-THR: 5.6 NM		min:s	4:14	3:23	2:49	2:25	2:07	1:53
FAF-MAPT:		min:s						
ROD: 5.2 %		ft/min	425	531	637	743	849	955

ALT/HGT RW21L FNA												
13	12	11	10	9	8	7	6	5	4	3	2	1
								1690 (1670)	1370 (1340)	1040 (1020)	720 (690)	



CHANGES:

AERONAUTICAL DATABASE REQUIREMENTS

INSTRUMENT APPROACH PROCEDURES
RNP Z RWY 21L (LPV ONLY)

WAYPOINTS COORDINATES

WPT	COORD
ENETA (IAF)	275529.6N 0145938.4W
GOPIM	275333.0N 0150349.2W
NINGU	275912.9N 0150310.6W
LALTO (IAF)	274153.2N 0150014.3W
LECOP	280702.3N 0150453.7W
LIFED	275814.5N 0150515.9W
LP11N (IF)	280655.2N 0151811.2W
LP511	275351.2N 0152358.1W
LP515	274657.6N 0152033.9W
LP516	274506.0N 0151713.6W
LP517	274706.0N 0151351.0W
LP6NE (FAP)	280155.2N 0152024.1W
LPC (IAF)	274942.7N 0152556.1W
MADAS (IAF)	281315.5N 0152244.1W
RW21L (LTP)	275639.2N 0152243.9W
SUFEM	280255.9N 0150642.7W
TOCUN	280853.9N 0151013.0W
Precision final approach (APV SBAS) - Slope (Descent angle)	5.24% (3.00°)

CRITICAL DME

FACILITY (ID)	FREQ/CH	COORD
GRAN CANARIA (GDV)	112.90 MHz CH 76X	280437.6297N 0152542.8144W
GRAN CANARIA SUR (LPC)	115.00 MH CH 97X	274943.2149N 0152555.9428W

NOTES APPLICABLE TO ALL APPROACHES:

- RNP APCH.
- Speed control:
 - a. MAX IAS 250 kt to FL100 or below, except military flights on operational or air defence missions or when the operational characteristics do not allow for it.
 - b. If any different instructions are not received by ATC cross:
 - MADAS, ENETA and LALTO at 220 kt,
 - P11N at 210 kt,
 - 9.0 NM RW21L at IAS 190 kt, and
 - 4.0 NM RW21L at IAS 160 kt.
 - c. In the event of being unable to comply with it (b), notify it to ATC at the first communication.

PROCEDURE TABULAR DESCRIPTION



Serial number	Path Terminator	Waypoint identifier	Fly-over	Course/Track °M (°T)	Magnetic variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Navegation specification
ENETA (IAF) Subject to GCD51 activity.											
001	IF	ENETA	-	-	+3.5	-	-	+5000 (1)	-220	-	RNP APCH
002	TF	NINGU	-	323 (319.9)	+3.5	4.9	-	-	-	-	RNP APCH
003	TF	SUFEM	-	323 (319.8)	+3.5	4.9	-	-	-	-	RNP APCH
004	TF	LECOP	-	025 (021.4)	+3.5	4.4	-	-	-	-	RNP APCH
005	TF	TOCUN	-	295 (291.5)	+3.5	5.1	-	-	-	-	RNP APCH
006	TF	LP11N	-	258 (254.4)	+3.5	7.3	-	+2500	-	-	RNP APCH
007	TF	LP6NE	-	205 (201.5)	+3.5	5.4	-	+1900	-	-	RNP APCH
008	TF	RW21L	Y	205 (201.4)	+3.5	5.6	-	+75	-	3.0/49	RNP APCH
009	CF	LP511	Y	205 (201.4)	+3.5	-	-	-	-	-	RNP APCH
010	CA	-	-	205 (201.4)	+3.5	-	-	+1100	-	-	RNP APCH
011	DF	LP515	-	-	+3.5	-	-	-	-	-	RNP APCH
012	TF	LP516	-	126 (122.1)	+3.5	3.5	-	-	-200	-	RNP APCH
013	CA	-	-	060 (056.3)	+3.5	-	-	+3000	-210	-	RNP APCH
014	VM	-	-	060 (056.3)	+3.5	-	-	-	-	-	RNP APCH
MISSED APCH COMMUNICATIONS FAILURE											
009	CF	LP511	Y	205 (201.4)	+3.5	-	-	-	-	-	RNP APCH
010	CA	-	-	205 (201.4)	+3.5	-	-	+1100	-	-	RNP APCH
011	DF	LP515	-	-	+3.5	-	-	-	-	-	RNP APCH
012	TF	LP516	-	126 (122.1)	+3.5	3.5	-	-	-200	-	RNP APCH
013	TF	LP517	-	060 (056.3)	+3.5	3.6	-	@3000	-210	-	RNP APCH
014	TF	ENETA	-	060 (056.3)	+3.5	15.1	-	@4000	-220	-	RNP APCH
Minimum altitude 4000 ft under ATC clearance and missed approach.											

Serial number	Path Terminator	Waypoint identifier	Fly-over	Course/Track °M (°T)	Magnetic variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Navegation specification
LALTO (IAF) Subject to GCD54 activity.											
001	IF	LALTO	-	-	+3.5	-	-	+5000	-220	-	RNP APCH
002	TF	GOPIM	-	348 (344.7)	+3.5	12.1	-	-	-	-	RNP APCH
003	TF	LIFED	-	348 (344.7)	+3.5	4.9	-	-	-	-	RNP APCH
004	TF	SUFEM	-	348 (344.7)	+3.5	4.8	-	-	-	-	RNP APCH
005	TF	LECOP	-	025 (021.4)	+3.5	4.4	-	-	-	-	RNP APCH
006	TF	TOCUN	-	295 (291.5)	+3.5	5.1	-	-	-	-	RNP APCH
007	TF	LP11N	-	258 (254.4)	+3.5	7.3	-	+2500	-	-	RNP APCH
008	TF	LP6NE	-	205 (201.5)	+3.5	5.4	-	+1900	-	-	RNP APCH
009	TF	RW21L	Y	205 (201.4)	+3.5	5.6	-	+75	-	3.0/49	RNP APCH
010	CF	LP511	Y	205 (201.4)	+3.5	-	-	-	-	-	RNP APCH
011	CA	-	-	205 (201.4)	+3.5	-	-	+1100	-	-	RNP APCH
012	DF	LP515	-	-	+3.5	-	-	-	-	-	RNP APCH
013	TF	LP516	-	126 (122.1)	+3.5	3.5	-	-	-200	-	RNP APCH
014	CA	-	-	060 (056.3)	+3.5	-	-	+3000	-210	-	RNP APCH
015	VM	-	-	060 (056.3)	+3.5	-	-	-	-	-	RNP APCH
MISSED APCH COMMUNICATIONS FAILURE											
010	CF	LP511	Y	205 (201.4)	+3.5	-	-	-	-	-	RNP APCH
011	CA	-	-	205 (201.4)	+3.5	-	-	+1100	-	-	RNP APCH
012	DF	LP515	-	-	+3.5	-	-	-	-	-	RNP APCH
013	TF	LP516	-	126 (122.1)	+3.5	3.5	-	-	-200	-	RNP APCH
014	TF	LP517	-	060 (056.3)	+3.5	3.6	-	@3000	-210	-	RNP APCH
015	TF	ENETA	-	060 (056.3)	+3.5	15.1	-	@4000	-220	-	RNP APCH





Serial number	Path Terminator	Waypoint identifier	Fly-over	Course/Track °M (°T)	Magnetic variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Navigation specification
LPC (IAF) Subject to GCD51 and GCD54 activity.											
001	IF	LPC	-	-	+3.5	-	-	+FL075	-210	-	RNP APCH
002	TF	SUFEM	-	056 (052.2)	+3.5	21.5	-	-	-	-	RNP APCH
003	TF	LECOP	-	025 (021.4)	+3.5	4.4	-	-	-	-	RNP APCH
004	TF	TOCUN	-	295 (291.5)	+3.5	5.1	-	-	-	-	RNP APCH
005	TF	LP11N	-	258 (254.4)	+3.5	7.3	-	+2500	-	-	RNP APCH
006	TF	LP6NE	-	205 (201.5)	+3.5	5.4	-	+1900	-	-	RNP APCH
007	TF	RW21L	Y	205 (201.4)	+3.5	5.6	-	+75	-	3.0/49	RNP APCH
008	CF	LP511	Y	205 (201.4)	+3.5	-	-	-	-	-	RNP APCH
009	CA	-	-	205 (201.4)	+3.5	-	-	+1100	-	-	RNP APCH
010	DF	LP515	-	-	+3.5	-	-	-	-	-	RNP APCH
011	TF	LP516	-	126 (122.1)	+3.5	3.5	-	-	-200	-	RNP APCH
012	CA	-	-	060 (056.3)	+3.5	-	-	+3000	-210	-	RNP APCH
013	VM	-	-	060 (056.3)	+3.5	-	-	-	-	-	RNP APCH
MISSED APCH COMMUNICATIONS FAILURE											
008	CF	LP511	Y	205 (201.4)	+3.5	-	-	-	-	-	RNP APCH
009	CA	-	-	205 (201.4)	+3.5	-	-	+1100	-	-	RNP APCH
010	DF	LP515	-	-	+3.5	-	-	-	-	-	RNP APCH
011	TF	LP516	-	126 (122.1)	+3.5	3.5	-	-	-200	-	RNP APCH
012	TF	LP517	-	060 (056.3)	+3.5	3.6	-	@3000	-210	-	RNP APCH
013	TF	ENETA	-	060 (056.3)	+3.5	15.1	-	@4000	-220	-	RNP APCH

Serial number	Path Terminator	Waypoint identifier	Fly-over	Course/Track °M (°T)	Magnetic variation	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	VPA/TCH (°/ft)	Navigation specification
MADAS (IAF) Subject to GCD53 and GCD54 activity.											
001	IF	MADAS	-	-	+3.5	-	-	+6000	-220	-	RNP APCH
002	TF	LP11N	-	151 (147.5)	+3.5	7.5	-	+2500	-	-	RNP APCH
003	TF	LP6NE	-	205 (201.5)	+3.5	5.4	-	+1900	-	-	RNP APCH
004	TF	RW21L	Y	205 (201.4)	+3.5	5.6	-	+75	-	3.0/49	RNP APCH
005	CF	LP511	Y	205 (201.4)	+3.5	-	-	-	-	-	RNP APCH
006	CA	-	-	205 (201.4)	+3.5	-	-	+1100	-	-	RNP APCH
007	DF	LP515	-	-	+3.5	-	-	-	-	-	RNP APCH
008	TF	LP516	-	126 (122.1)	+3.5	3.5	-	-	-200	-	RNP APCH
009	CA	-	-	060 (056.3)	+3.5	-	-	+3000	-210	-	RNP APCH
010	VM	-	-	060 (056.3)	+3.5	-	-	-	-	-	RNP APCH
MISSED APCH COMMUNICATIONS FAILURE											
005	CF	LP511	Y	205 (201.4)	+3.5	-	-	-	-	-	RNP APCH
006	CA	-	-	205 (201.4)	+3.5	-	-	+1100	-	-	RNP APCH
007	DF	LP515	-	-	+3.5	-	-	-	-	-	RNP APCH
008	TF	LP516	-	126 (122.1)	+3.5	3.5	-	-	-200	-	RNP APCH
009	TF	LP517	-	060 (056.3)	+3.5	3.6	-	@3000	-210	-	RNP APCH
010	TF	ENETA	-	060 (056.3)	+3.5	15.1	-	@4000	-220	-	RNP APCH

HOLDING PATTERN

Path terminator	Waypoint identifier	Course/Track °M (°T)	Magnetic variation	Distance/ Outbound time	Turn direction	MNM altitude (ft)	MAX altitude (ft)	Speed (kt)	Navigation specification
HM	ENETA (1)	260 (256.4)	+3.5	1	R	5000 (2)	-	-220	RNAV1
HM	LALTO (3)	230 (226.4)	+3.5	1	L	5000	-	-220	RNAV1



Path terminator	Waypoint identifier	Course/Track °M (°T)	Magnetic variation	Distance/ Outbound time	Turn direction	MNM altitude (ft)	MAX altitude (ft)	Speed (kt)	Navigation specification
HM	LPC (4)	024 (020.9)	+3.5	1	R	FL075	-	-210	RNAV1
HM	MADAS	201 (197.3)	+3.5	1	R	6000	-	-220	RNAV1

(1) GNSS or (DME/DME) or (DME/DME/IRU) required;
- DME LPC, GDV must be operational for (DME/DME).
- DME LPC must be operational for (DME/DME/IRU).
(2) Minimum altitude 4000 ft under ATC clearance and missed APCH.
(3) GNSS required.
(4) GNSS o (DME/DME) required;
- DME LPC must be operational for (DME/DME).

SBAS LPV FAS DATA BLOCK

FAS DATA BLOCK		
1	OPERATION MODE	00
2	SERVICE PROVIDER IDENTIFIER	1
3	AIRPORT IDENTIFIER	GCLP
4	RUNWAY	21L
5	APPROACH PERFORMANCE DESIGNATOR	0*
6	ROUTE INDICATOR	Z
7	REFERENCE PATH DATA SELECTOR (RPDS)	00
8	REFERENCE PATH IDENTIFIER	E21B**
9	LANDING THRESHOLD POINT (LTP) – LATITUDE	275639.1985N
10	LANDING THRESHOLD POINT (LTP) – LONGITUDE	0152243.8575W
11	LTP HEIGHT ABOVE ELLIPSOID (HAE)	+00517 (0051.7m)
12	FLIGHT PATH ALIGNMENT POINT (FPAP) – LATITUDE	275505.4630N
13	FLIGHT PATH ALIGNMENT POINT (FPAP) – LONGITUDE	0152325.2725W
14	THRESHOLD CROSSING HEIGHT (TCH)	0015.0
15	TCH UNIT SELECTOR	1
16	GLIDE PATH ANGLE	03.00
17	COURSEWIDTH AT THRESHOLD	105.00
18	LENGTH OFFSET	0
19	HORIZONTAL ALERT LIMIT (HAL)	40.0
20	VERTICAL ALERT LIMIT (VAL)	50.0
21	PRECISION APPROACH PATH POINT CRC REMINDER	6B61A6A2
-		
NON FAS DATA BLOCK		
22	ICAO CODE	GC
23	LTP ORTHOMETRIC HEIGHT	+00078 (7.8m)
NOTES: *: LPV E refers to EGNOS.		