

## LETO AD 2 AERODROME DATA

## LETO AD 2.1 AERODROME LOCATION INDICATOR AND NAME

LETO - MADRID/Torrejón

## LETO AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP	402948N 0032645W. See AD 2-LETO ADC.
2	Distance and direction from city	24 km E.
3	Elevation	618 m / 2026 ft.
4	Geoid undulation	51.39 m ± 0.05 m (1).
5	Reference temperature	34°C.
6	Low average temperature	5°C.
7	Magnetic variation	0° (2020).
8	Annual change	8.1'E.
9	AD administration	Ejército del Aire y del Espacio.
10	Address	Base Aérea de Torrejón; Ctra. Madrid-Barcelona km 22.800 28850 Torrejón de Ardoz (Madrid).
11	TEL	+34-916 274 710
12	FAX	+34-916 274 617
13	AFTN	LETO
14	E-mail	<a href="mailto:leto@ea.mde.es">leto@ea.mde.es</a>
15	Approved traffic	IFR/VFR. Technical alternate to Adolfo Suárez Madrid-Barajas AD for civil ACFT duly authorised by Letter of Agreement with the leadership of the base.
16	Remarks	(1) For all AD points.

## LETO AD 2.3 OPERATIONAL HOURS

1	Airport	H24 (1).
2	Customs and Immigration	No.
3	Health and Sanitation	No.
4	AIS/ARO/OPV	HR AD.
5	MET briefing	HR AD.
6	ATS	HR AD.
7	Fuelling	HR AD.

8	Handling	HR AD.
9	Security	HR AD.
10	De-icing	HR AD.
11	Remarks	(1) Foreign state aircraft will request compulsory PPR at least with 72 HR in advance. As a general rule, PPR will not be accepted from: V: FRI: 1200 to MON: 0600. I: FRI: 1300 to MON: 0700. PPR requests may besubmitted in the following ways: <ul style="list-style-type: none"> <li>• AFTN: LETOZPZX</li> <li>• E-mail: <a href="mailto:leto@ea.mde.es">leto@ea.mde.es</a></li> <li>• FAX: +34-916 274 712</li> </ul>

### LETO AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo facilities	SATA CAT I. Auxiliary cargo handling capabilities: <ul style="list-style-type: none"> <li>• Fork-lift trucks up to 16 TM.</li> <li>• Cargo transfer truck up to 16 TM.</li> </ul>
2	Fuel types	F-34.
3	Oil types	O-113, O-133, O-142, O-147, O-148, O-156, O-158, O-190, O-226, O-228, O-237, O-238, O-1236.
4	Refuelling capacity	trucks 40000 L, 22.5 L/s. trucks 20000 L, 16.7 L/s. trucks 5000 L, 18.3 L/s.
5	De-icing facilities	No.
6	Hangar space	No.
7	Repair facilities	No.
8	Remarks	GPU: Unit of AC (up to 100 KVA) and DC(up to 2500 A).

### LETO AD 2.5 PASSENGER FACILITIES

1	Hotels	Yes.
2	Restaurant	Yes.
3	Transportation	Buses and light vehicles on request.
4	Medical facilities	No.
5	Bank / Post office	Yes / No.
6	Tourist Information	No.
7	Remarks	None.

### LETO AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	Fire category	8.
2	Rescue equipment	In accordance with the fire category published.
3	Removal of disabled aircraft	Self-propelled crane for lifting any aircraft weighing no more than 30 TM. Low pressure bags up to 13 TM. Hydraulic jacks up to 15 TM.
4	Remarks	None.

### LETO AD 2.7 RUNWAY SURFACE CONDITION ASSESSMENT AND REPORTING AND SNOW PLAN

1	Equipment	Snow blower sweepers, breakdown truck.
2	Priority	Runways, taxiways and apron.
3	Remarks	None.

### LETO AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron	Surface: Concrete. Strength: PE 1: PCN 67/R/B/W/T. PE 2: PCN 72/R/B/W/T. PE 3, 4: PCN 77/R/B/W/T. PE 5: PCN 80/R/A/W/T. PE 6: PCN 79/R/A/W/T. PE 7: PCN 56/R/B/W/T. PE 8: PCN 136 R/C/W/T. PE 9: PCN 16/F/D/W/T.
2	Taxiways	Width: C1: 37 m; C2, C3, C5, C6: 22 m; C4: 24 m; C7, C8, C61, C62, C63: 23 m. C9: 15 m. C81: 18 m. Surface: Asphalt. Strength: C1: PCN 146/R/B/W/T. C2: PCN 89/F/A/W/T. C3: PCN 146/F/A/W/T. C4: PCN 98/F/A/W/T. C5: PCN 62/R/B/W/T. C6, C61: PCN 74/R/B/W/T. C62, C63: PCN 242/F/A/W/T. C7: PCN 99/R/A/W/T. C8: PCN 57/R/C/W/T. C9: PCN 11/F/D/W/T. C81: INFO NO AVBL.

3	Check locations	<p>Altimeter: Apron: PE 1: 596.96 m / 1958.51 ft. PE 2: 598.11 m / 1962.28 ft. PE 3: 598.28 m / 1962.84 ft. PE 4: 598.17 m / 1962.48 ft. PE 5: 601.03 m / 1971.86 ft. PE 6: 603.12 m / 1978.72 ft. PE 7: 602.77 m / 1977.57 ft. PE 8: 594.99 m / 1952.04 ft. PE 9: 610 m / 2011.29 ft. VOR: No. INS: No. TACAN: THR 22 / 230° 0.88 NM DME.</p>
4	Remarks	None.

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

1	Taxiing guidance system	Boards at RWY/TWY intersections, parking line boards on TWY edge, runway-holding positions, stop bars, apron security line and stands.
2	RWY markings	Designators, threshold, centre line, edge, touchdown zone, aiming point, runway distance remaining sign, side stripe and pre-threshold area.
3	TWY markings	Centre line and edge.
4	Remarks	None.

### LETO AD 2.10 AERODROME OBSTACLES

In the approach and take-off areas			In the circuit area and at the AD		
RWY area	Obstacle	Coordinates	Obstacle	Coordinates	
04 APCH / 22 TKOF	Mound 670 m / 2198 ft FM THR 04	8.9 km / 219° MAG FM THR 04	Mound 724 m / 2375 ft	4.8 km / 022° MAG FM THR 22	
	Contour line 650 m / 2133 ft FM THR 04	3.3 km / 226° MAG FM THR 04	Plateau 789 m / 2589 ft	5.7 km / 169° MAG FM THR 22	
22 APCH / 04 TKOF	Mound 820 m / 2690 ft FM THR 22	14 km / 036° MAG FM THR 22	Water reservoir 653 m / 2142 ft	2.4 km / 190° MAG FM THR 22	
	Mound 753 m / 2470 ft FM THR 22	9.0 km / 039° MAG FM THR 22	Radio antennas 649 m / 2129 ft	2.1 km / 235° MAG FM THR 22	
	Contour line 644 m / 2113 ft FM THR 22	1.7 km / 049° MAG FM THR 22	Radar antennas 735 m / 2411 ft	7.1 km / 257° MAG FM THR 22	

Remarks: See AD 2-LETO AOC.

**LETO AD 2.11 METEOROLOGICAL INFORMATION PROVIDED**

1	MET office	Torrejón OMD.
2	HR	H24.
3	METAR	Half-hourly.
4	TAF	24 HR.
5	TREND	Yes.
6	Briefing	In person and by phone.
7	Flight documentation / Language	Plain language / Spanish.
8	Charts	Significant, forecasted in altitude (wind and temperature) and maximum wind maps.
9	Supplementary equipment	Cloud imagery, lightning and radar information display.
10	ATS unit served	TWR, APP, OPV.
11	Additional information	<p>Madrid OMAe (LEMC): H24</p> <ul style="list-style-type: none"> <li>• TEL: +34-915 045 807</li> </ul> <p>Torrejón OMD</p> <ul style="list-style-type: none"> <li>• TEL: +34-916 275 209</li> <li>• E-mail: <a href="mailto:omdleto@aemet.es">omdleto@aemet.es</a></li> </ul>
12	Remarks	None.

**LETO AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS**

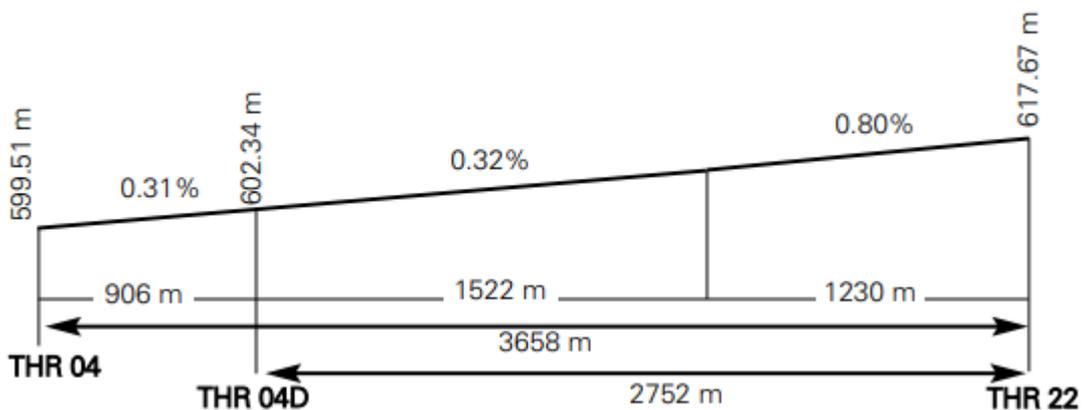
RWY	Direction	DIM (m)	THR PSN	TDZ ELEV	SWY (m)	CWY (m)	Strip (m)	OFZ	RESA (m)	RWY/SWY SFC PCN
04	043.40° GEO 044° MAG	3658 x 60	402905.18N 0032738.52W	THR: 599.5 m / 1967 ft TDZ: 599.9 m / 1968 ft	85 x 60	No	4338 x 150	No	240 x 150	RWY: ASPH PCN 69/R/C/W/T (2) PCN 70/F/A/W/T (3) PCN 79/F/A/W/T (4) PCN 86/R/A/W/T (5) PCN 150/F/A/W/T (6) PCN 97/R/C/W/T (7) SWY: Not AVBL

RWY	Direction	DIM (m)	THR PSN	TDZ ELEV	SWY (m)	CWY (m)	Strip (m)	OFZ	RESA (m)	RWY/SWY SFC PCN
04D (1)	043.40° GEO 044° MAG	2752 x 60	402926.99N 0032711.51W	THR: 602 m / 1976 ft TDZ: No	85 x 60	No	4338 x 150	No	240 x 150	RWY: ASPH PCN 79/F/A/W/T (4) PCN 86/R/A/W/T (5) PCN 150/F/A/W/T (6) PCN 97/R/C/W/T (7) SWY: Not AVBL
22	223.40° GEO 224° MAG	3658 x 60	403031.39N 0032551.77W	THR: 617.7 m / 2026 ft TDZ: 610.3 m / 2002 ft	595 x 60	No	4338 x 150	No	240 x 150	RWY: ASPH PCN 69/R/C/W/T (2) PCN 70/F/A/W/T (3) PCN 79/F/A/W/T (4) PCN 86/R/A/W/T (5) PCN 150/F/A/W/T (6) PCN 97/R/C/W/T (7) SWY: Not AVBL

Remarks:

- (1) RWY 04D only usable by military aircraft making the turn for landing within 2.5 DME TJZ or before R-143 VTZ.
- (2) THR 04 - 149 m; 3509 - 3658 m THR 22.
- (3) 149 - 669 m; 2989 - 3509 m THR 22.
- (4) 669 - 2049 m; 1609 - 2989 m THR 22; THR 04D - 1143 m.
- (5) 2049 - 2309 m; 1349 - 1609 m THR 22; 1143 - 1403 m THR 04D.
- (6) 2309 - 3509 m; 149 - 1349 m THR 22; 1403 - 2603 m THR 04D.
- (7) 3509 - 3658 m; THR 22 - 149 m; 2603 - 2752 m THR 04D.

12.1 PROFILE



LETO AD 2.13 DECLARED DISTANCES

RWY	TORA (m)	TODA (m)	ASDA (m)	LDA (m)
04	3658	3658	3743	3658

RWY	TORA (m)	TODA (m)	ASDA (m)	LDA (m)
04D (1)	2752	2752	2837	2752
22	3658	3658	4253	3658
04 INT C2,C8	3198	3198	3283	–
04 INT C3	2605	2605	2690	–
22 INT C4	2347	2347	2942	–
22 INT C7	3247	3247	3842	–
22 INT C9	2347	2347	2960	–
Remarks	(1) RWY 04D only usable by military aircraft making the turn for landing within 2.5 DME TJZ or before R-143 VTZ.			

## LETO AD 2.14 APPROACH AND RUNWAY LIGHTING

1	Runway	04
2	Approach	Precision CAT I 900 m. LIH (1). Threshold identification lights.
3	PAPI (MEHT)	3° (17.97 m / 59 ft).
4	Threshold	Green.
5	Touchdown zone	No.
6	Runway centre line	3658 m: 2758 m white + 600 m red and white + 300 m red. LIH (1). Distance between lights: 30 m.
7	Runway edge	3658 m: 3058 m white + 600 m yellow. LIH (1). Distance between lights: 50 m.
8	Runway end	Red.
9	Stopway	Red.
10	Remarks	(1) Adjustable light intensity.

1	Runway	04D
2	Approach	Simple 420 m. Threshold identification lights.
3	PAPI (MEHT)	3° (13.91 m / 46 ft).
4	Threshold	Green.
5	Touchdown zone	No.
6	Runway centre line	2752 m: 1852 m white + 600 m red and white + 300 m red. LIH (1). Distance between lights: 30 m.
7	Runway edge	2752 m: 2152 m white + 600 m yellow. LIH (1). Distance between lights: 50 m.
8	Runway end	Red.
9	Stopway	Red.
10	Remarks	(1) Adjustable light intensity.

1	Runway	22
2	Approach	Precision CAT I 900 m. LIH (1). Threshold identification lights.
3	PAPI (MEHT)	3° (16.25 m / 53 ft).
4	Threshold	Green with wing bar.
5	Touchdown zone	No.
6	Runway centre line	3658 m: 2758 m white + 600 m red and white + 300 m red. LIH (1). Distance between lights: 30 m.
7	Runway edge	3658 m: 3058 m white + 600 m yellow. LIH (1). Distance between lights: 50 m.
8	Runway end	Red.
9	Stopway	Red.
10	Remarks	(1) Adjustable light intensity.

### LETO AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN	402921N 0032608W. See AD 2-LETO ADC. ALTN FLG W/G EV 1.5 SEC.
2	WDI/LDI	1 near THR 04, 1 near THR 22, 1 near TWY C8.
3	TWY lighting	Edge.
4	Apron lighting	PE 1, PE 7 and PE 8: 2 Floodlighting poles. PE 2 and PE 3: 1 Floodlighting poles. PE 4: 3 Floodlighting poles. PE 5: 4 Floodlighting poles. PE 6: 5 Floodlighting poles. PE 9: 2 Floodlighting turrets.
5	Secondary power supply	Engine generators that provide a maximum switchover time (light) of 15 seconds for all the lighting systems.
6	Remarks	None.

### LETO AD 2.16 HELICOPTER LANDING AREA

1	Position	NE of ARP: 40°30'02.550"N 003°27'02.600"W (1)(2).
2	Elevation	610 m (2011.29 ft).
3	Dimensions, surface, maximum weight, marking	- Main apron: 24.5 m x 24.5 m, base concrete. - Parking apron: 95.9 m x 199.7 m, base concrete. - Yellow lines of TWY marking to the parking areas, security apron line and parking signal.
4	Direction	No.
5	Declared distances	No.
6	Lighting	Edge marking and two floodlighting poles.

7	Remarks	(1) See AD 2-LETO ADC. (2) Only use by the Guardia Civil air service.
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## LETO AD 2.17 AIR TRAFFIC SERVICES AIRSPACE

1	Designation	CTR MADRID.
2	Lateral limits	403301.53N 0034658.39W; arc centred on DVOR/DME BRA (402808.9N 0033327.1W), radius 11.4 NM; 402158.81N 0032053.71W; 401544.73N 0031457.24W; 400611.28N 0032929.16W; 401222.89N 0033746.85W; 400809.08N 0034614.61W; 401320.10N 0035258.35W; 401642.37N 0034856.17W; arc centred on MADRID/Getafe AD (401738.6N 0034325.4W), radius 8.0 km; 402038.71N 0034729.48W; arc centred on MADRID/Cuatro Vientos AD (402214.4N 0034706.5W), radius 3.0 km; 402146.76N 0034504.54W; arc centred on MADRID/Getafe AD (401738.6N 0034325.4W), radius 8.0 km; 402154.86N 0034232.04W; 402308.24N 0034112.60W; 403301.53N 0034658.39W.
3	Vertical limits	SFC-1000 ft AGL.
4	Airspace class	D (1).
5	Unit	MADRID APP.
6	Language	ES/EN.
7	Transition altitude	3962 m / 13000 ft.
8	Hours of applicability	-
9	Remarks	(1) Visual flights only allowed to Spanish military aircraft from/to Ministerio de Defensa facilities.

1	Designation	ATZ MADRID/TORREJÓN.
2	Lateral limits	8 km radius circle centred on 402956N 0032644W (2).
3	Vertical limits	SFC-3000 ft AGL (3).
4	Airspace class	D.
5	Responsible unit	TORREJÓN TWR.
6	Language	ES/EN.
7	Transition altitude	-
8	Hours of applicability	-
9	Remarks	(2) Or the ground visibility, whichever is lower (3) Or up to the cloud ceiling, whichever is lower.

## LETO AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Service	Call sign	FREQ	HR	Remarks
APP	Madrid APP	124.230 C	H24	APP/L, DEP W
		127.100 MHz	H24	
		127.505 C	H24	

Service	Call sign	FREQ	HR	Remarks
		131.175 MHz	H24	DEP E
		376.250 MHz	H24	MIL
APP	Torrejón APP	119.950 MHz	H24	MIL
		258.925 MHz	H24	MIL
		254.975 MHz	H24	MIL
TWR	Torrejón TWR	118.300 MHz	H24	GMC
		121.500 MHz	H24	EMERG
		122.100 MHz	H24	MIL
		136.275 MHz	H24	BACK-UP
		139.300 MHz	H24	MIL
		243.000 MHz	H24	EMERG
		257.800 MHz	H24	MIL
		339.600 MHz	H24	MIL
		396.900 MHz	H24	GMC MIL
GCA	Torrejón GCA	118.900 MHz	H24	MIL. HR MAINT PAR/ASR: MON 1530-1900 LT
		123.300 MHz	H24	MIL
		125.300 MHz	H24	MIL
		343.875 MHz	H24	MIL
		356.150 MHz	H24	MIL
		374.525 MHz	H24	MIL

## LETO AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Facility (VAR)	ID	FREQ	HR	Coordinates	DME ELEV	Remarks
DVOR (1° W)	VTZ	115.100 MHz	H24	402832.2N 0032819.3W	-	HR MAINT: MON 1530-1830 LT.
DME	VTZ	CH 98X	H24	402832.2N 0032819.3W	660 m	HR MAINT: MON 1530-1830 LT.
LOC 22 (1° W) ILS CAT I	ITJA	109.500 MHz	H24	402843.1N 0032805.8W	-	224° MAG / 935 m FM THR 04; COV 25 NM at 9900 ft AMSL and 17 NM at 7400 ft AMSL within 35° to the left and to the right. HR MAINT: WED 1530-1830 LT.
GP 22		332.600 MHz	H24	403024.3N 0032607.1W	-	3°; RDH 16.8 m; at 404 m FM THR 22 & 110 m FM RCL to the right in APCH direction. COV 10 NM at 5200 ft AMSL within 10° to the left and to the right. HR MAINT: WED 1530-1830 LT.
ILS/DME	ITJA	CH 32X	H24	403024.3N 0032607.1W	622 m	REF DME THR 22.
TACAN (1° W)	TJZ	CH 72X	H24	402956.0N 0032643.8W	600 m	R-090/R-170: possible loss of signal BTN 20 NM & 25 NM BLW 6000 ft AMSL. HR MAINT: MON 1530-1830 LT.

## LETO AD 2.20 LOCAL AERODROME REGULATIONS

## 20.1 ATC PROCEDURES

REDUCED RUNWAY SEPARATION MINIMA ON THE SAME RUNWAY

Although the runway may temporarily be occupied by an aircraft landing or taking off, clearance to land may be granted to a subsequent aircraft, provided that:

- There is a distance between aircraft of at least 2000 m from the THR, and
- The aerodrome ATC is certain that, when an aircraft cleared in this way will cross the threshold, there will be appropriate separation from the preceding one

This procedure may be used notwithstanding to the requirements established in the Reglamento de la Circulación Aérea regarding the use of conditional phrases for movements affecting the active runway or runways.

These minima shall apply between sunrise and sunset only, and under the following conditions:

- a. Wake turbulence separation minima shall be maintained.
- b. While Visual Meteorological Conditions (VMC) prevail at the aerodrome.
- c. When braking action is not adversely affected by precipitants on the runway (slush, water, etc.).
- d. When the aircraft involved operate normally.

When issuing the landing clearance in accordance with this procedure, the following instructions shall be used:" ... (Call sign) BEHIND LANDING / DEPARTING (aircraft type), CLEARED TO LAND RUNWAY (number)"

## 20.2 AIR/GROUND COMMUNICATION FAILURE PROCEDURES

### AIR COMMUNICATION FAILURE

Any aircraft experiencing a communication failure shall immediately respond on SSR mode 7600.

#### 20.2.1 VFR FLIGHT IN VMC

- Jet aircraft shall proceed through one of the two published visual corridors and overfly the apron at 500 ft AGL while rocking its wings and maintaining a heading of 219°. When over the TWR, pilots shall check the runway in use. If RWY 22 is in use, they shall break to the left and enter the traffic pattern tailwind, and if RWY 04 is in use, they shall take the opposite heading, conducting an offset entry, entering the traffic pattern tailwind while waiting for light signals from TWR.

- Conventional aircraft proceeding through the North visual corridor, over Daganzo, shall descend to 500 ft AGL and fly "ABEAM" downwind, rocking its wings heading for TWR. Once the runway in use has been determined, they shall await light signals from TWR. If proceeding through the South visual corridor, over Meseta de San Juan, they shall descend to 500 ft AGL and overfly the apron while rocking their wings heading 219°. When over the TWR, pilots shall check the runway in use. If the runway in use is 22, they shall break to the left and enter the traffic pattern downwind leg; if RWY 04 is in use, they shall take the opposite heading conducting an offset entry, entering the traffic pattern downwind leg while awaiting light signals from TWR.

Note: Neither the runway nor its centreline extension shall be over flown in any case.

#### 20.2.2 VFR FLIGHTS (CHANGE IN THE METEOROLOGICAL CONDITIONS FROM VMCTO IMC)

When the meteorological conditions deteriorate progressively, making it impossible to maintain uninterrupted visual contact with the ground, aircraft shall climb to the last cleared level acknowledged or to the minimum safety altitude, whichever is higher, and maintain this level until reaching one of the entry points (STAR's), and head to DUKKE (IAF). At this point, the holding pattern at 6000 ft must be abandoned and a descent started in order to shoot one of the published IFR approaches on RWY 22. If RWY 04 is in use, the procedure shall be carried out in the same way and when the airfield is in sight, a "circling" manoeuvre must be executed to land on RWY 04.

#### 20.2.3 IFR FLIGHTS

- When the communication failure occurs during the STAR procedure before reaching the IAF:

Proceed to the designated IAF (DUKKE) from the cleared STAR (in accordance with the FPL), maintaining the last assigned level or altitude acknowledged, and enter the holding pattern. Begin the descent after completing one holding pattern turn (leaving the holding pattern at 6000 ft), or at the EAT whichever occurs later, in order to shoot one of the IFR approaches published for the RWY in service and land in the following 30 minutes.

- When the failure occurs during radar vectoring before the IAF:

The aircraft will proceed through the most direct way to intercept the STAR until reaching the IAF, and must follow the communication failure procedure during the STAR manoeuvre.

- When the failure occurs during radar vectoring after crossing the IAF:

The aircraft will proceed through the most direct way to intercept the STAR until reaching the IAF, and must follow the communication failure procedure during the STAR manoeuvre.

- When the failure occurs during radar vectoring after crossing the IAF:

The aircraft shall maintain the last cleared altitude acknowledged, and proceed to intercept the final approach course and complete the landing manoeuvre. If this is not possible, aircraft shall conduct the communication failure missed approach procedure.

- If the failure occurs during the missed approach, aircraft:

Shall not begin the missed approach before the MAPT. Shall begin the missed approach procedure according to the corresponding IAC. Complete at least one holding pattern turn over the IAF, in order to shoot the approach and land.

- When the failure occurs during the SID:

The aircraft shall continue with the SID up to the TMA exit point, climbing to the last cleared level acknowledged or to the minimum safety altitude, whichever is higher, and maintain this altitude during 7 minutes, in accordance with the maximum levels in the departure charts and continuing the flight with respect to the filed FPL. In case the aircraft is in the Torrejón Delegated Airspace, if the Pilot in Command decides to return to the departure aerodrome, they shall follow the appropriate procedure, as described above.

- When the failure occurs during the departure under radar vectoring: The aircraft shall proceed by the most direct route to intercept the last SID procedure received from ATC, continue with the communication failure procedure during the SID. If SID authorisation is not received, proceed to intercept the appropriate SID to TMA exit point and in accordance with the type of navigation expressed in the updated FPL.

**GROUND COMMUNICATION FAILURE**

If an aircraft or vehicle operating in the manoeuvring area experiences a communication failure, proceed as follows:

- a. If the aircraft is on departure: continue on the assigned route and stop at an intermediate holding position or clearance limit, taking extreme care to avoid detours . Once there, hold position and wait for the arrival of a "FOLLOW ME" vehicle which will lead you to the parking position.
- b. In the case of a vehicle: remain in position and await the arrival of a "FOLLOW ME" vehicle which will assist as appropriate.

VFR FLIGHTS IN VMC CONDITIONS (CHECK RWY IN USE AND WAIT FOR LIGHT SIGNALS)		
	RWY 22	RWY 04
JET AIRCRAFT: Entry through corridor, overfly apron 500 ft and heading 219°	Break to the left and enter downwind	Reverse to the opposite heading (offset entry). Enter downwind
CONVENTIONAL AIRCRAFT: Entry through north corridor, Daganzo at 500 ft AGL	Enter downwind while rocking	Enter downwind while rocking
CONVENTIONAL AIRCRAFT: Entry through south corridor, Meseta San Juan at 500 ft AGL	Break to the left and enter downwind	Reverse to the opposite heading (offset entry). Enter downwind
VFR FLIGHTS IN IMC CONDITIONS		
ACTIONS Proceed to last cleared level or minimum safety altitude (whichever is higher), maintaining level to STAR entry point	RWY 22: DUKKE 6000 ft and carry out IAC	RWY 04: DUKKE 6000 ft and carry out IAC and subsequent circling

IFR FLIGHT	
FAILURE MOMENT	ACTIONS
STAR BEFORE IAF	Proceed to IAF (DUKKE) maintain the last cleared level and enter in holding pattern. Complete and abandon the holding pattern at 6000 ft, or before 30 MIN of the EAT, whichever occurs later. Carry out approach.
RADAR VECTORING BEFORE IAF	As for STAR failure before IAF.
RADAR VECTORING AFTER IAF	Maintain cleared altitude. Intercept the final APP and complete. If this is not possible, carry out missed approach procedure.
MISSED APPROACH	Do not begin missed approach before MAPT. Follow missed approach procedure APP according to IAC. Complete holding pattern to shoot the approach.
DURING SID	Continue SID to TMA exit point. Climb to the last cleared level or the minimum safety altitude, maintain for 7 MIN to continue climb. Respect maximum specified levels. Continue according FPL. If it occurs inside the Torrejón delegated airspace, the pilot in command decides the appropriate procedure to follow.
DEPARTURE UNDER RADAR VECTOR	Proceed directly and intercept the SID procedure received from ATC. Continue SID communication failure procedure.

## LETO AD 2.21 NOISE ABATEMENT PROCEDURES

No.

## LETO AD 2.22 FLIGHT PROCEDURES

### 22.1 ADJUSTMENT OF VERTICAL SPEED IN MADRID TMA

Aircraft in evolution shall adjust their vertical speed when approaching the assigned altitude or flight level. In those circumstances, vertical speed shall be reduced to 1500 ft per minute when approaching a vertical distance of 1000 ft above or below the assigned altitude or flight level.

All aircraft flying under RCAO rules take-off from RWY 22 or in south visual circuit, shall not exceed 2.5 DME TJZ or R-143 VTZ on the southwest side of the aerodrome. If such is not possible, the aircraft shall notify this event to LETO TWR-APP/GCA before take-off or before entering the visual circuit.

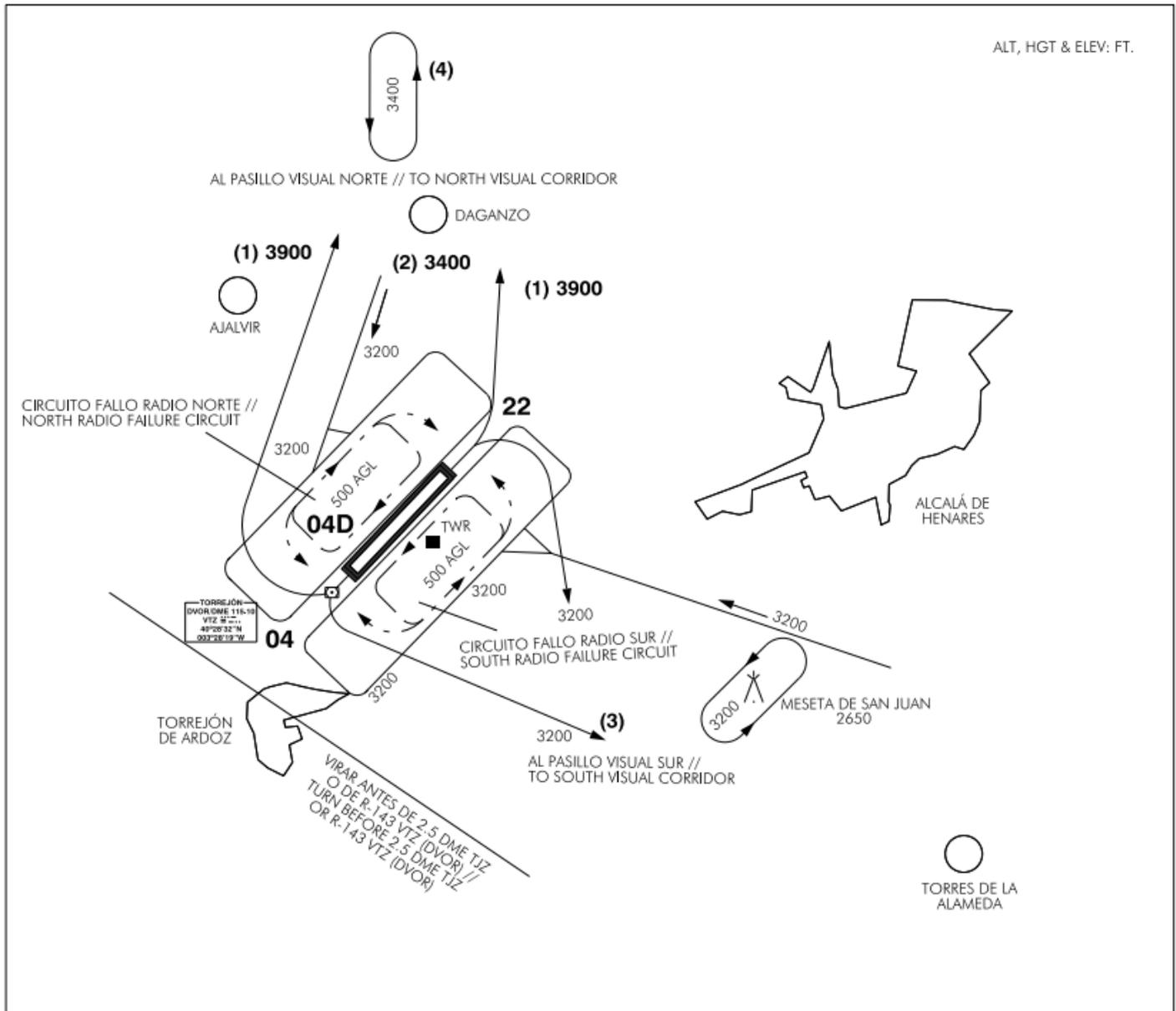
Caution, traffic in approach or departure close to airport Adolfo Suárez Madrid-Barajas

### 22.2 VFR CORRIDORS SPEED LIMIT

The maximum speed in conventional VFR corridors is limited to 220 Kt. The maximum speed in VFR jet corridors is limited to 350 Kt, unless authorized by the Control Agency.

22.3 MILITARY AD TRAFFIC CIRCUIT

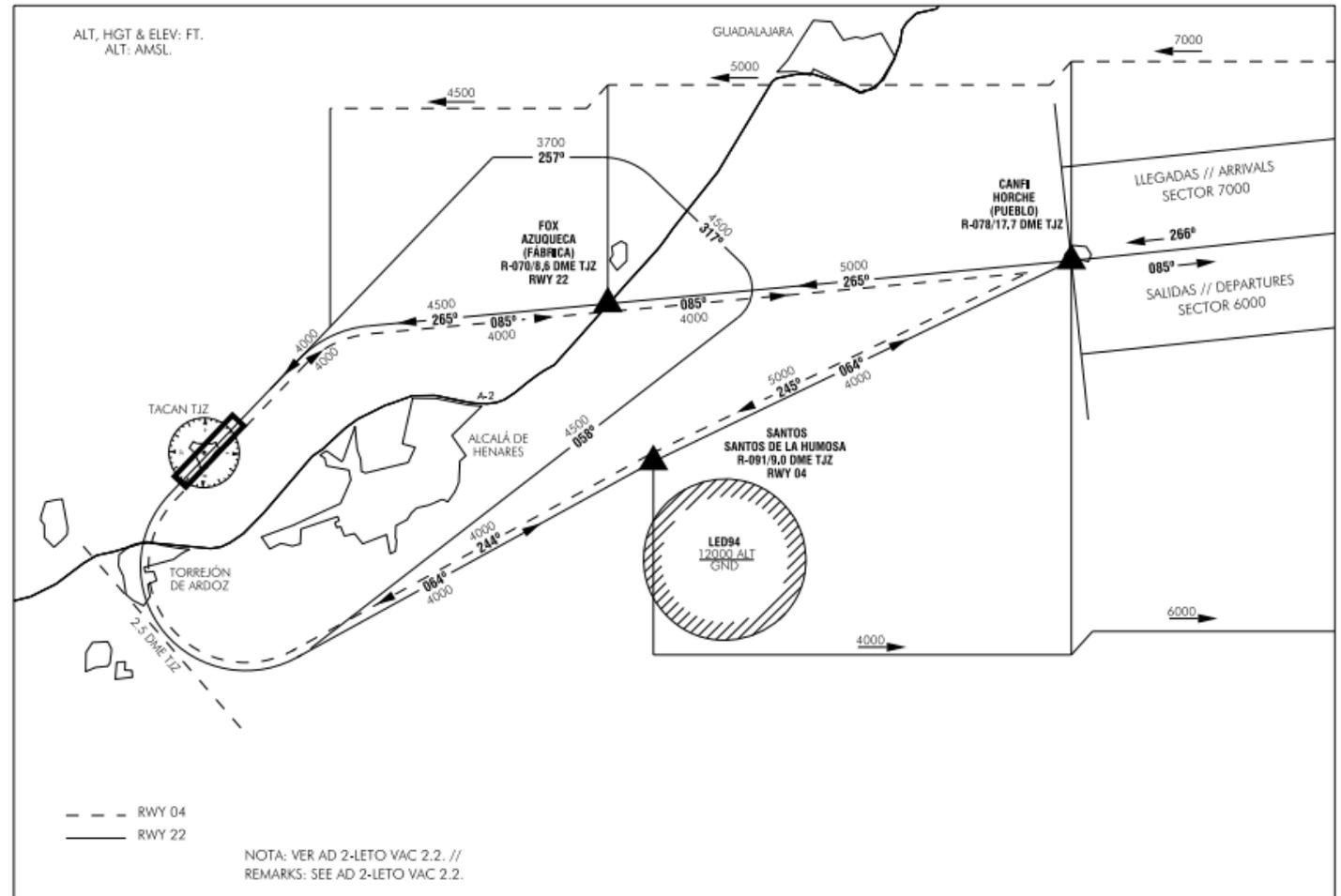
CONVENTIONAL AIRCRAFT



- (1) Aircraft departing from RWY 04/22 destination the North visual corridor, shall climb to reach 3900 ft altitude unless otherwise instructed by TWR. Caution due to possible traffic in holding pattern at 3400 ft North of Daganzo.
- (2) Aircraft coming from the North visual corridor descending to reach the traffic pattern altitude
- (3) Aircraft departing from RWY 04/22 destination the South visual corridor, shall always leave Meseta de San Juan to the left.
- (4) Holding pattern North of Daganzo, turning left at 3400 ft, without overflying the village of Daganzo.



22.5 VISUAL APPROACH ROUTES DETAILS



LETO AD 2.23 ADDITIONAL INFORMATION

23.1 ARRESTING SYSTEMS

1	Nomenclature	LETO-01-R-U
2	Type	NET BARRIER UNIDIRECTIONAL.
3	Location on	RWY 22 THR +3758 m / 12329 ft.
4	Readiness status	Permanently available, on pilot request.
1	Nomenclature	LETO-02-C-B
2	Type	RETRACTABLE CABLE BARRIER BIDIRECTIONAL.
3	Location on	RWY 04 THR +550 m / 1804 ft. RWY 22 THR +3108 m / 10197 ft.
4	Readiness status	Permanently available, on pilot request.
1	Nomenclature	LETO-03-C-B
2	Type	RETRACTABLE CABLE BARRIER BIDIRECTIONAL

3	Location on	RWY 04 THR +1829 m / 6001 ft. RWY 22 THR +1829 m / 6001 ft.
4	Readiness status	Permanently available, on pilot request.

1	Nomenclature	LETO-04-C-B
2	Type	RETRACTABLE CABLE BARRIER BIDIRECTIONAL.
3	Location on	RWY 04 THR +3098 m / 10164 ft. RWY 22 THR +560 m / 1837 ft.
4	Readiness status	Permanently available, on pilot request.

1	Nomenclature	LETO-05-R-U
2	Type	NET BARRIER UNIDIRECTIONAL.
3	Location on	RWY 04 THR +3698 m / 12133 ft.
4	Readiness status	Permanently available, on pilot request.

### 23.2 RADAR INSTRUMENT APPROACH MINIMA (EXCLUSIVE MILITARY USE)

	RWY	GP/TCH/RPI	CAT	DH/MDA - VIS	HAT/HAA	CEIL - VIS
PAR (3)	22	3° / 49 / 1033	A B C D E	2226 - 800 m	200	200 - 800 m
SRE	22		A B	2680 - 800 m (1)	682	700 - 800 m (1)
			C	2680 - 2000 m	682	700 - 2000 m (1)
			D HPMA	2680 - 2400 m	682	700 - 2400 m (1)
SRE	04		A B	2330 - 800 m (1)	363	400 - 800 m (1)
			C	2330 - 1200 m (2)	363	400 - 1200 m (2)
			D HPMA	2330 - 1200 m	363	400 - 1200 m (1)
CIR			A	2580 - 1600 m	554	600 - 1600 m
			B	2900 - 2000 m	874	900 - 2000 m
			C	3060 - 4800 m	1034	1100 - 4800 m
			D	3140 - 4800 m	1114	1200 - 4800 m
			HPMA	2900 - 4400 m	874	900 - 4400 m

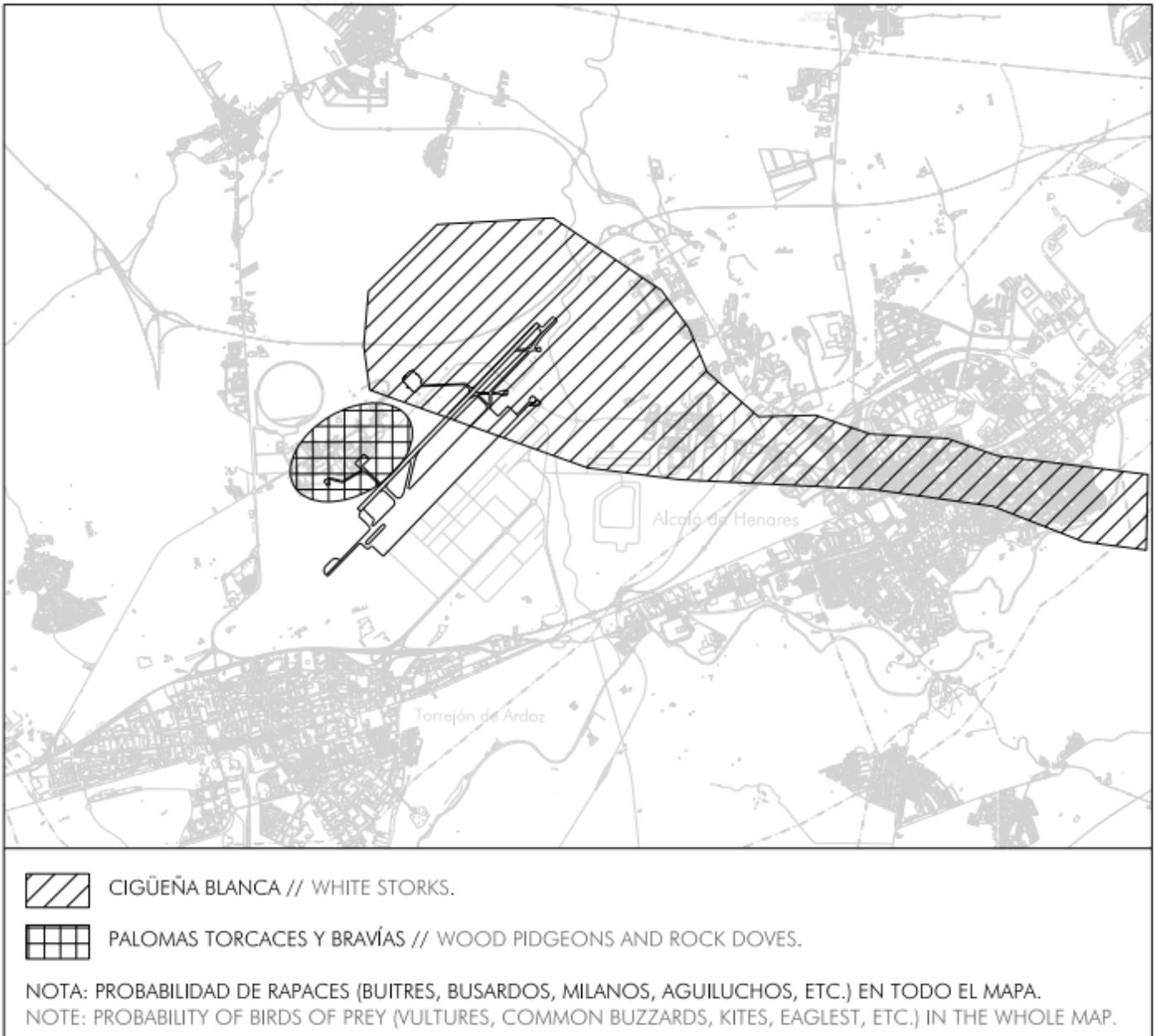
Remarks:

(1) When ALS U/S increase VIS 800 m.

(2) When ALS U/S increase VIS 400 m.

(3) For the PAR approach, the missed approach instructions shall be: "Climb on RWY heading to 2600 ft, turn left inside 2.5 DME TJZ or coordinates 402956.0N 0032643.8W on track 045°, to intercept and follow R-075 TJZ direct to DUKKE climbing to 6000 ft."

23.3 BIRD CONCENTRATION AREAS AROUND THE TORREJÓN AIR BASE



**BIRD CONCENTRATION AREAS**

Area 1: concentration of starlings and lapwings.

Area 2: concentration of wood pigeons and rock doves.

**FEEDING AND WATERING AREAS**

Area I: grasses and grain crops.

Area II: invertebrates, amphibians, fish and water.

**BIRD MOVEMENT AREAS**

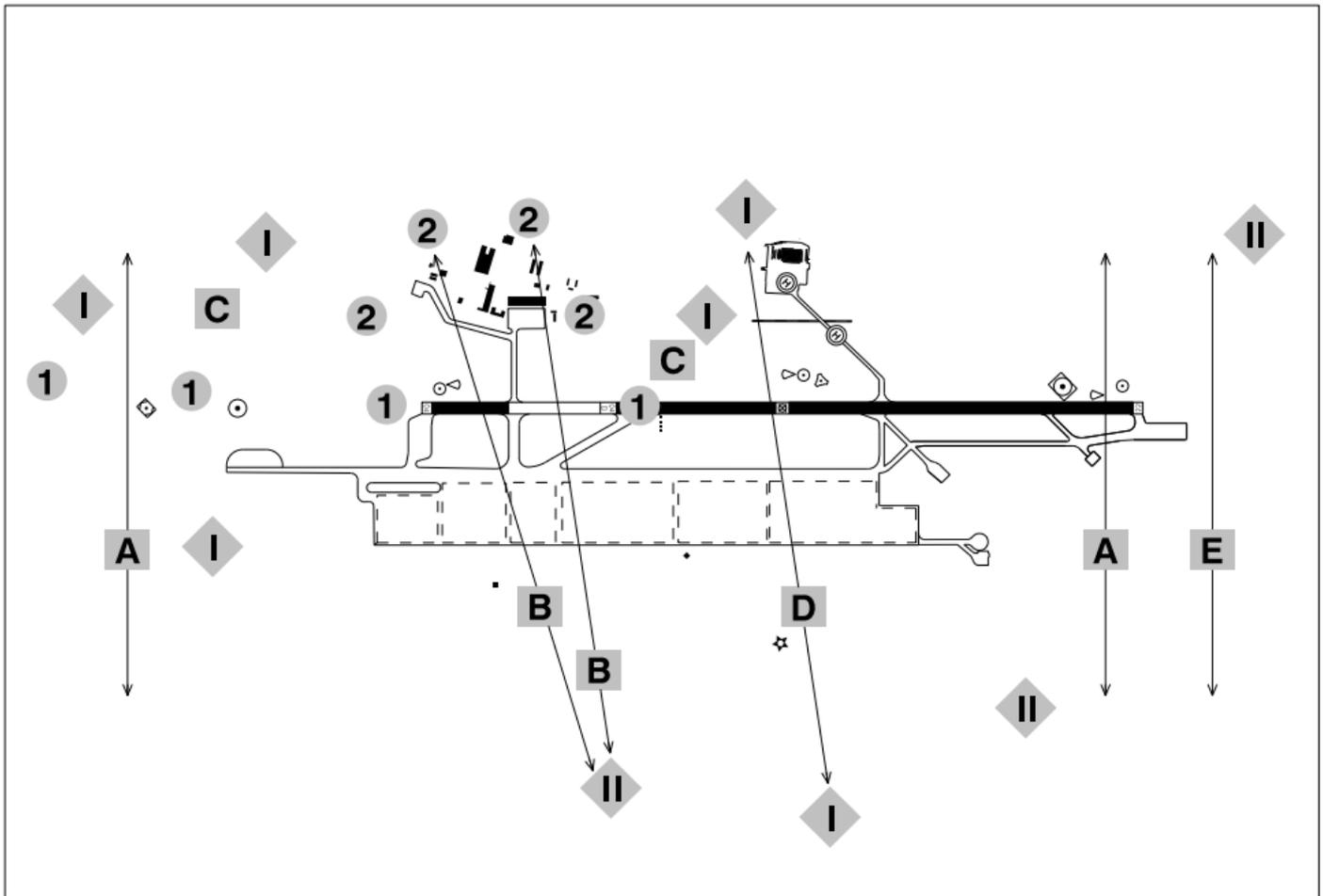
Movement A: movement of vultures and other birds of prey.

Movement B: movement of pigeons.

Movement C: movement of starlings and lapwings (winter months).

Movement D: movement of lesser black-backed gulls (winter months).

Movement E: movement of white storks.



**LETO AD 2.24 AERONAUTICAL CHARTS RELATED TO AN AERODROME**

The list of charts related to the aerodrome can be found at the following link:

<https://aip.enaire.es/AIP/#LETO>

**LETO AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION**

Not applicable.