LSZA - LUGANO

LSZA AD 2.1 AERODROME LOCATION INDICATOR AND NAME

LSZA - LUGANO

LSZA AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	**ARP coordinates and site at Aerodrome**	46 00 13N 008 54 37E RWY midpoint
2	**Direction and distance from the CITY**	4 km W Lugano
3	**Elevation/Reference temperature**	*915 ft AMSL* - 27.0° C
4	**Geoid undulation at AD ELEV PSN**	166.7 ft
5	**MAG VAR/Annual change**	2° E (2016.5) / 0°10' eastwards
6	**AD Administration, address, telephone, telefax, telex, AFS**	Post: Lugano Airport via Aeroporto CH-6982 Agno Phone: +41 (0) 91 610 11 11 Fax: +41 (0) 91 610 11 00 Email: info@luganoairport.ch URL: www.luganoairport.ch **LSZA-Airport Authority:** Phone: +41 (0) 79 917 68 01 Email: airportauthority@luganoairport.ch
7	**Types of traffic permitted (IFR/VFR)**	IFR/VFR
8	**Remarks**	NIL

LSZA AD 2.3 OPERATIONAL HOURS

1	**Aerodrome Operator**	AD OPR HR: 0700-1100 (0600-1000) and 1230-1900 (1130-1800) from MON to SUN and HOL.
2	**Customs and immigration**	AD OPR HR
3	**Health and sanitation**	NIL
4	**AIS Briefing Office**	AD OPR HR
5	**ATS Reporting Office (ARO)**	CTC ARO Zurich; Phone: +41 (0) 43 931 61 61
6	**MET Briefing Office**	AD OPR HR
7	**ATS**	AD OPR HR
8	**Fuelling**	AD OPR HR
9	**Handling**	AD OPR HR
10	**Security**	AD OPR HR
11	**De-icing**	AD OPR HR
12	**Remarks**	Extension permission O/R allowed for HOSP FLT, SAR FLT, FLT of the Swiss Confederation, members of the Swiss Government or equivalent foreign official. PPR compulsory for all other operators at least 48 hours notice before ETA/ETD and subject to Airport Authority approval. All requests have to be submitted via email to Email: gahandling@luganoairport.ch ONLY FOR URGENT REQUESTS outside opening hours contact directly by phone Airport Authority.

LSZA AD 2.4 HANDLING SERVICES AND FACILITIES

1	**Cargo-handling facilities:**	O/R
2	**Fuel/oil types**	JET A1, AVGAS 100LL
3	**Fuelling facilities/capacity**	JET A1: Tank 28500 litres / Fuel Truck 30000 litres AVGAS 100LL: Tank 26000 litres / Fuel Truck 1500 litres
4	**De-icing facilities**	Service available with Fluid Type II Killfrost ABC K-Plus from 01 NOV to 30 APR
5	**Hangar space for visiting aircraft**	Handled by third parties
6	**Repair facilities for visiting aircraft**	Business aviation major maintenance available in hangar
7	**Remarks**	General and Business Aviation handling: Lugano Airport Phone: +41 (0) 91 610 11 16 FREQ: 131.805 MHz AFS: LSZAYDYH Email: gahandling@luganoairport.ch

LSZA AD 2.5 PASSENGER FACILITIES

1	**Hotels**	Special corporate rates available through General Aviation office
2	**Restaurants**	Available at airport and many others in the surrounding area within walking distance
3	**Transportation**	Airport taxi, Limousine service or public transport URL: https://flpsa.ch
4	**Medical facilities**	Ambulance O/R, Lugano Hospital (8 km)
5	**Bank and Post Office**	Within walking distance (5 min)
6	**Tourist Office**	Caslano (5km) and Lugano (8km)
7	**Remarks**	NIL

LSZA AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	**AD category for fire fighting**	Category 3 Category 4 O/R 3 HR before ETA/ETD Category 5 and 6 O/R preferably 24 HR before ETA/ETD
2	**Rescue equipment**	Rosenbauer Panther Fire Fighting Truck 6x6 Mercedes Benz Fire Fighting Truck 2 rescue boats
3	**Capability for removal of disabled aircraft**	No limitations for all type of ACFT admitted at AD
4	**Remarks**	NIL

LSZA AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	**Type(s) of clearing equipment**	1 snow blower, 4 snow ploughs, 2 jet sweepers, 1 RWY and Apron de-icer, 1 ACFT de-icer
2	**Clearance priorities**	RWY, TWY, then apron
3	**Remarks**	All seasons: RWY / TWY / apron: De-iced / Anti-iced with KFOR (potassium formate fluids)

LSZA AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	**Designation, surface and strength of Aprons**	ASPH - PCR 300/F/B/W/T
2	**Designation, width, surface and strength of Taxiways**	TWY M and N: MNM 18.6 m (DH8D OPS); TWY L: 15 m ASPH - PCR 300/F/B/W/T
3	**ACL location and elevation**	Apron *902 ft (275 m)*
4	**Location of VOR checkpoints**	NIL
5	**Location of INS checkpoints**	NIL
6	**Remarks**	Slopes on Apron partially exceeding 1%

LSZA AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM, MARKINGS

1	**Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands**	ACFT stand identification markings as well as lead-in, stop and lead-out lines. Apron safety lines. Restrictions as well as taxiing and parking procedures: See ACFT PRKG Chart LSZA AD 2.24.2 - 1
2	**RWY/TWY markings and LGT**	RWY markings: DTHR, designation, aiming point, touchdown zone and centre line. Paved TWY markings: Centre line (including on turn pads) and intermediate holding position. Grass TWY markings / markers: Edge markers and intermediate holding position. Markings at intersections with RWY: RWY holding position, mandatory instruction and enhanced TWY centre line. RWY LGT: See LSZA AD 2.14 TWY LGT: See LSZA AD 2.15
3	**Stop bars and RWY guard lights**	Stop bars: NIL RGL: TWY M and N. LIH, Y, no LED.
4	**Other RWY protection measures**	NIL
5	**Remarks**	Mandatory instruction signs at all RWY holding positions. Information signs on the movement area.

LSZA AD 2.10 AERODROME OBSTACLES

In approach/TKOF areas				In circling area and at aerodrome			
1				2			3
RWY/Area affected	Obstacle type Elevation Markings/LGT		Co-ordinates	Obstacle type Elevation Markings/LGT		Co-ordinates	RMK
a	b		c	a		b	c
		ft			*ft*		
AOC 01 (1)	Building	*950*	46 00 37 N 008 54 45 E	Antenna LGTD	*1020*	46 00 09 N 008 54 23 E	
AOC 01 (2)	Pole	*951*	46 00 38 N 008 54 45 E	Crane/Cranes marked/LGTD	*989*	46 00 18 N 008 54 48 E	B1216/21
AOC 01 (3)	Tree/Trees	*965*	46 00 38 N 008 54 54 E	Tower/Mast LGTD	*945*	46 00 03 N 008 54 36 E	
AOC 01 (4)	Tree/Trees	*977*	46 00 39 N 008 54 54 E	Antenna LGTD	*1529*	46 02 15 N 008 56 20 E	
AOC 01 (5)	Building	*981*	46 00 44 N 008 54 47 E	Antenna LGTD	*1526*	46 00 39 N 008 55 32 E	B0555/01
AOC 01 (6)	Pole	*985*	46 00 47 N 008 54 49 E	Telephone line	45 m AGL	45 59 36 N 008 50 13 E - 45 59 36 N 008 50 06 E	B0016/02
AOC 01 (7)	Building	*986*	46 00 48 N 008 54 48 E	Tower marked/LGTD	*998*	46 00 16 N 008 54 31 E	B0121/02
AOC 01 (8)	Building	*996*	46 00 49 N 008 54 49 E	Tower LGTD	*974*	46 00 43 N 008 54 54 E	B0043/04
AOC 01 (9)	Building	*1040*	46 01 19 N 008 55 12 E	Silo	*965*	46 00 53 N 008 54 59 E	B0480/05
AOC 01 (10)	Tree/Trees	*1061*	46 01 27 N 008 55 00 E	Power line	72 m AGL	45 59 18 N 008 52 23 E - 45 59 18 N 008 52 38 E	B0617/05
AOC 01 (11)	Tree/Trees	*1081*	46 01 38 N 008 55 03 E	Pole LGTD	*2366*	46 02 43 N 008 57 44 E	B0471/07
AOC 01 (12)	Power line	*1100*	46 01 37 N 008 55 22 E	Pole LGTD	*1752*	45 57 49 N 008 52 56 E	B0470/07
AOC 01 (13)	Power line	*1113*	46 01 40 N 008 55 16 E	Pole LGTD	*1886*	46 02 58 N 008 55 54 E	B0469/07
AOC 01 (14)	Power line	*1137*	46 01 45 N 008 55 12 E				
AOC 01 (15)	Power line	*1155*	46 01 42 N 008 55 24 E	Pole marked/LGTD	*989*	46 00 13 N 008 54 28 E	B0099/09
AOC 01 (16)	Tree/Trees	*1209*	46 01 55 N 008 56 12 E	Pole LGTD	*1825*	46 01 28 N 008 56 46 E	B1145/09
AOC 01 (17)	Tree/Trees	*1215*	46 01 56 N 008 56 13 E	Pole LGTD	*1914*	45 58 27 N 008 54 48 E	B1144/09
AOC 01 (18)	Tree/Trees	*1246*	46 02 05 N 008 56 11 E	Power line marked	90 m AGL	46 05 32 N 009 03 11 E - 46 05 33 N 009 02 51 E	C0366/05
AOC 01 (19)	Tree/Trees	*1256*	46 02 05 N 008 56 11 E	Cable CW	80 m AGL	46 03 52 N 008 55 12 E - 46 03 43 N 008 54 43 E	B0054/06
AOC 01 (20)	Tree/Trees	*1259*	46 02 06 N 008 56 12 E	Building	3m AGL	46 00 41 N 008 54 49 E	B0131/07
AOC 01 (21)	Tree/Trees	*1277*	46 01 56 N 008 56 16 E	Chimney LGTD	25 m AGL	46 01 15 N 008 55 00 E	B0130/07
AOC 01 (22)	Tree/Trees	*1281*	46 02 20 N 008 56 11 E	Antenna marked, LGTD	*5414*	45 55 35 N 009 00 54 E	B0733/08

In approach/TKOF areas				In circling area and at aerodrome			
1				2			3
RWY/Area affected	Obstacle type Elevation Markings/LGT		Co-ordinates	Obstacle type Elevation Markings/LGT		Co-ordinates	RMK
a	b		c	a		b	c
		ft			*ft*		
AOC 01 (23)	Tree/Trees	*1507*	46 02 17 N 008 56 19 E	Pole LGTD	*1931*	46 01 52 N 008 54 48 E	B1143/09
AOC 01 (24)	Antenna	*1520*	46 02 15 N 008 56 20 E	Pole LGTD	1518	46 01 13 N 008 57 03 E	B1331/11
AOC 01 (25)	Tree/Trees	*1555*	46 02 24 N 008 56 52 E				
AOC 01 (26)	Tree/Trees	*1631*	46 02 24 N 008 56 58 E				
AOC 01 (27)	Tree/Trees	*1637*	46 02 20 N 008 56 57 E				
AOC 01 (28)	Tree/Trees	*1660*	46 02 21 N 008 56 58 E				
AOC 01 (29)	Building	*1672*	46 02 21 N 008 57 05 E				
AOC 01 (30)	Building	*1705*	46 02 19 N 008 57 04 E				
AOC 01 (31)	Tree/Trees	*1723*	46 02 21 N 008 57 07 E				
AOC 01 (32)	Tree/Trees	*1815*	46 02 19 N 008 57 11 E				
AOC 01 (33)	Tree/Trees	*1828*	46 02 15 N 008 57 29 E				
AOC 19 (1)	Pole	*913*	45 59 54 N 008 54 24 E				
AOC 19 (2)	Pole	*943*	45 59 52 N 008 54 30 E				
AOC 19 (3)	Tree/Trees	*953*	45 59 48 N 008 54 29 E				
AOC 19 (4)	Tree/Trees	*955*	45 59 43 N 008 54 17 E				
AOC 19 (5)	Tree/Trees	*979*	45 59 40 N 008 54 16 E				
AOC 19 (6)	Tree/Trees	*1079*	45 58 23 N 008 54 04 E				
AOC 19 (7)	Tree/Trees	*1164*	45 58 15 N 008 54 02 E				
AOC 19 (8)	Tree/Trees	*1234*	45 57 47 N 008 53 12 E				
AOC 19 (9)	Tree/Trees	*1289*	45 57 47 N 008 53 11 E				
AOC 19 (10)	Tree/Trees	*1353*	45 57 12 N 008 53 06 E				
AOC 19 (11)	Tree/Trees	*1573*	45 57 09 N 008 53 05 E				
AOC 19 (12)	Tree/Trees	*1628*	45 56 32 N 008 54 22 E				
AOC 19 (13	Tree/Trees	*2121*	45 56 21 N 008 54 23 E				
AOC 19 (14)	Tree/Trees	*2130*	45 56 17 N 008 54 23 E				
AOC 19 (15)	Tree/Trees	*2161*	45 56 17 N 008 54 23 E				
Refer also to LSZA AOC 01/19, LSZA AD 2.24.4							

LSZA AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	**Associated MET Office**	MeteoSwiss
2	**Hours of service**	H24
3	**Office responsible for TAF preparation** **Periods of validity**	MeteoSwiss, Zurich 9 hours
4	**Type of landing forecast**	NIL
5	**Briefing/consultation provided**	Self Briefing Service (www.skybriefing.com)
6	**Flight documentation** **Language(s) used**	Digital and hard copy En, Ge, Fr, It
7	**Charts and other information available for briefing or consultation**	All area forecast charts available worldwide
8	**Supplementary equipment available for providing information**	Internet connection in the briefing room
9	**ATS units provided with information**	Lugano TWR
10	**Additional information (limitation of service, etc.)**	TEL: Weather briefing: 0900 162 737 (Ge), 0900 162 767 (Fr); accessible within Switzerland

LSZA AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE & MAG BRG	Dimensions of RWY (m)	Strength (PCR) and surface of RWY and SWY	THR COORD	THR elevation and highest elevation of TDZ of precision APP RWY	Slope of RWY-SWY
1	2	3	4	5	6	7
01 [1)]	019° 017°	1415 x 30	PCR 400/F/B/W/T ASPH	45 59 58.17N 008 54 29.68E	*900 ft*	Refer to: LSZA AOC 01/19
19 [1)]	199° 197°			46 00 29.60N 008 54 45.07E	*915 ft*	

1) MAG VAR tolerance for RWY designators exceeded.

Designations RWY NR	SWY dimensions (m)	CWY dimensions (m)	Strip dimensions (m)	OFZ	Remarks
1	8	9	10	11	12
01 [1)]	NIL	NIL	1535 x 80	NIL	Runway strip and RESA dimensions according to non-instrument runway criteria Grooved 1415 m RESA: 30 m
19 [1)]		60			Runway strip and RESA dimensions according to non-instrument runway criteria Grooved 1415 m RESA: 30 m

1) MAG VAR tolerance for RWY designators exceeded.

LSZA AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
01	1345	1345	1415	1305	No turn pad at the beginning of RWY
	1025	1025	1095	Not applicable	Intersection MIKE
19	1415	1475	1415	1135	Turn pad at the beginning of RWY
	940	1000	940	Not applicable	Intersection ZULU
	695	755	695	Not applicable	Intersection NOVEMBER

DER RWY 01 is located 70 m before runway end respective RENL 01 due to obstacles in the immediate departure area.

LSZA AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	ALS type, LEN, INTST	THR LGT colour, INTST, WBAR	VASIS type, PSN, MEHT	RTZL LEN, colour, INTST	RCLL LEN, spacing, colour, INTST	REDL LEN, spacing, colour, INTST	RENL colour, INTST	SWY LGT LEN, colour, INTST	RMK
1	2	3	4	5	6	7	8	9	10
01	NIL	RTHL G, LIH, WBAR, no LED; RTIL FLG W, no LED	PAPI 4.17°, L, 6.27 m, no LED; PAPI 6.00°, L, 15.54 m, no LED	Simple TZL* 323 m FM THR 01, W, LIH, no LED	740 m, 30 m, W, LIH; 375 m, 30 m, R/W, LIH; 300 m, 30 m, R, LIH. All LED	110 m, 60 m, R, LIH; 830 m, 60 m, W, LIH; 475 m, 60 m, Y, LIH. All LED	R, LIH, LED	NIL	PAPI 6.00° only switched on for IGS RWY 01 approaches
19	RLLS Seq. FLG LGT W, LIH, no LED; SALS 360m, LIH, no LED	RTHL G, LIH, WBAR, no LED; RTIL FLG W, no LED	PAPI 4.17°, L, 6.71 m, no LED	Simple TZL*, 323 m FM THR 19, W, LIH, no LED		280 m, 60 m, R, LIH; 660 m, 60 m, W, LIH; 475 m, 60 m, Y, LIH. All LED	R, LIH, LED	NIL	RLLS follows circling Charlie track

* TZL: The purpose of simple touchdown zone lights is to provide pilots with enhanced situational awareness in all visibility conditions and to help enable pilots to decide whether to commence a go-around if the aircraft has not landed by a certain point on the runway.

LSZA AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	**ABN/IBN location, characteristics and hours of operation**	NIL
2	**LDI location and LGT** **Anemometer location and LGT**	No LDI Anemometer: RWY 01/19: 180 m NE of THR 01 resp. 860 m S of THR 19, not LGTD.
3	**TWY edge and centre line lighting**	Edge: TWY L, M and N (no LED). Turn pads 01 and 19 (LED). LIL, B. CL: NIL
4	**Secondary power supply/switch-over time**	AVBL / MAX 1 sec.
5	**Remarks**	OBST: Marked and lighted (see LSZA AD 2.24.1 - 1)

LSZA AD 2.16 HELICOPTER LANDING AREA

1	**Coordinates TLOF or THR of FATO**	FATO: 46 00 12.87 N / 008 54 36.86 E
	Geoid undulation	NIL
2	**TLOF and/or FATO elevation**	*276 m / 907 ft*
3	**TLOF and FATO area dimensions, surface, strength, marking**	TLOF HEL stands 1 and 2: MAX Overall LEN 17 m, Rotor Diameter 14 m, ASPH, marked and numbered circles with diameter 6.5 m. TLOF HEL stands 3 and 4: MAX Overall LEN 13 m, Rotor Diameter 11 m, ASPH, marked and numbered circles with diameter 6.5 m. FATO: paved RWY 01-19.
4	**True BRG of FATO**	RWY 01: 019° RWY 19: 199°
5	**Declared distance available**	See: LSZA AD 2.13 for RWY 01/19
6	**APP and FATO lighting**	RWY LGT
7	**Remarks**	Simultaneous hover operations on HEL stands are not allowed

LSZA AD 2.17 ATS AIRSPACE

1	**Designation and lateral limits**	**Lugano CTR** 45 55 51 N 008 46 22 E - 46 03 43 N 008 54 41 E Arc of circle centred on 46 02 26 N 008 57 10 E, Radius 2.16 NM, clockwise 46 01 21 N 008 59 51 E - 45 52 54 N 008 52 50 E Arc of circle centred on 45 54 15 N 008 49 29 E, Radius 2.70 NM, clockwise 45 55 51 N 008 46 22 E
2	**Vertical limits**	*6500 ft AMSL (2000 m)*
3	**Airspace classification**	D
4	**ATS unit call sign Language(s)**	Lugano TWR En; En and It for Non-Commercial VFR traffic.
5	**Transition altitude**	*6000 ft AMSL (1800 m)*
6	**Remarks**	ACT: HX

LSZA AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of Operation	Remarks
1	**2**	**3**	**4**	**5**
ATIS		121.175 MHz	H24	TEL Service +41 (0) 22 417 40 88
TWR VDF	Lugano Tower	120.250 MHz 119.700 MHz	HX do.	QDM AVBL O/R ALTN FREQ En; En and It for Non-Commercial VFR traffic.
CLR DEL	Lugano Delivery	121.780 MHz	HX	

LSZA AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, supported OPS, classification, MAG VAR, (declination)	ID	FREQ, CH NR, RPI	Hours of operation	Coordinates of transmitting antenna position	ELEV of DME antenna or GBAS; ELEV, ellipsoid HGT of reference point SBAS; ellipsoid HGT of LTP/FTP	SER volume radius from GBAS reference point	RMK
1	2	3	4	5	6	7	8
LOC 01, IGS, class I/C/2, VAR 2° E	ILU	108.90 MHz	H24	46 00 42.15N 008 54 51.21E	NIL	NIL	LOC PSN: 409 m FM THR 19. RWY 01: LOC course 017° MAG. Front course sector width 5.0°. Restricted coverage: at 10 NM - 30° W to 30° E from CL above *5000 ft* AMSL.
GP 01		329.30 MHz	H24	46 00 01.28N 008 54 34.40E	NIL	NIL	GP angle 6.65°. PSN: 123 m FM THR 01. GP HGT THR 01: 48 ft / 14.6 m. Restricted coverage: at 8 NM - 8° W to 8° E from CL above *5000 ft* AMSL.
DME 01	ILU	26X	H24	46 00 41.27N 008 54 49.04E	*942 ft*	NIL	DME co-located with LOC, reads D0.8 at THR 01. Restricted coverage: at 10 NM - 6° W to 14° E from CL above *5000 ft* AMSL. at 10 NM - 25° W to 25° E from CL above *5900 ft* AMSL.

LSZA AD 2.20 LOCAL AERODROME REGULATIONS

1. Local flying restrictions and remarks

1.1 Commercial and Private traffic

- DEPs and LDGs may be planned according AD OPR HR.
- If out of NML OPS HR, PPR according to Remarks in LSZA AD 2.3

1.2 AD circuits

- AD circuits allowed between 0700-1100 (0600-1000) and 1300-SS [MAX-1700] (1200-SS [MAX-1600]) from Monday to Friday and between 0800-1100 (0700-1000) and 1400-1600 (1300-1500) on Saturday.
- Night VFR flights (circuits) under instruction are allowed from SS to 1900 (1800) from Monday to Friday.
-

1.3 Apron - Parking

-
- HEL OPS during the night, air taxi via N.
- Embarking and disembarking crew members, passengers, luggage and catering with the engine running is prohibited.
- Refuelling with the engine running is prohibited. Exceptions can be granted by Lugano AP Authority for EMERG reasons.
- For general aviation ACFT, the parking period for arriving ACFT shall be indicated in item 18 of the flight plan.
- “Follow me” SER on request.
- For handling and fuelling, SER priority is given to SKED FLT.
- Refueling on the grass is forbidden. For any fuel request contact TWR for coordination.
- **Safety Rules for Crews and Passengers**
  All persons on the Airside must wear a high-visibility jacket which complies with EN 471 standard class 2 or 3. With the exception of passengers of scheduled and general aviation FLTs accompanied by the handling agent or crew members wearing high-visibility clothing or vests.
  Crew members arriving without high-visibility clothing or vests must be transported by car by the handling agent.
- **Security Rules for Crew Members**
  Crew members holding an Airport ID Card or crew member certificate must ensure it is visible. Departing crew members accessing the movement area must already have filed a FPL or flight notification.

2. Procedure for Deparure

2.1 Start-up Clearance

For IFR or SVFR FLT, a **start-up clearance** shall be requested on the Lugano Clearance Delivery FREQ.

3. De-icing

3.1 Clean Aircraft Concept (CAC)

Clean Aircraft Concept as defined in ICAO Doc 9640 is applied. Aircraft are de-iced according to the requirements of SAE AS6285. Airport Authority can intervene in case of non-adherence.

LSZA AD 2.21 NOISE ABATEMENT PROCEDURES

1. General

- The following regulations are defined to avoid excessive noise at and in the VCY of Lugano AP.
- Operators UNA to comply with these rules and procedures shall submit for APV to Lugano AP Authority those procedures they intend to apply.
- All ACFT types to be used for regular services at Lugano AP will be subject to an individual noise qualification prior to receiving operational rights.
- In particular cases, Lugano AP Authority can issue differing procedures and rules for noise abatement.

2. Aircraft not admitted without a special authorisation

The following ACFT types are not admitted to operate at Lugano AP unless a special AUTH has been issued by Lugano AP Authority.
The request for a special AUTH must be filed at least 24 HR before the intended ARR.

2.1 Jet aeroplanes

REF: GEN 4.1.13., class I, II, III, IV.

2.2 Propeller aeroplanes

REF: GEN 4.1.14., class A and following aeroplanes of class B:

- BE-55 Beech Baron 55
- C 210 Cessna
- C 336/337 Cessna; 336 Skymaster/337 Super Skymaster

2.3 Helicopters

- Bell 204
- Bell 214
- Kamow

3. Circling procedure RWY 19

The Circling Foxtrot procedure is the preferential manoeuvre for noise abatement purposes when LDG on RWY 19.
FLTs performing a visual APCH to RWY 19 from a PSN south or east of the AP are requested, if conditions permit, to join the circling Foxtrot pattern at the beginning of the base turn.

4. Reverse thrust

For deceleration it is recommended to use the entire RWY LEN AVBL; use of reverse thrust shall be limited to only when safety or particular operational reasons require it.

5. Taxi and holding

Aeroplanes shall be operated so as to reduce noise to a MNM during TAX and HLDG operations.

6. Auxiliary Power Units (APU)

The following regulations are applicable to the use of APU:

- a MAX of 20 MIN prior to the ACFT DEP,
- a MAX of 20 MIN after the ACFT ARR.

The use of APU shall be restricted to a MNM DUR.
For maintenance, only the GPU shall be used, except for technical reasons on Coordination with the Airport Authority.

7. Instruction and qualification for IFR flights

Operators are requested to plan introduction flights well in advance. Airport authority should be contacted whenever possible latest 5 days in advance of the planned training.

8. Engine tests

Engine tests are considered to be those run-ups prescribed by technical inspections and which are not part of the normal checks before take-off. Engine tests are subject to special authorization by the Airport Authority and must be requested in advance indicating the start time and maximum duration.
The duration of engine tests must be kept to a minimum and may not exceed 30 minutes.
If a test must be repeated, this may only be done after an interval of at least 15 minutes.
Engine tests shall not be permitted on Saturdays and local public holidays, as well as on weekdays between 1100 - 1200 (1000 - 1100) and between 1700 - 0800 (1600 - 0700).
Engine tests must be carried out according to the instructions of the ramp Staff. During taxiing or towing to the test site and returning to the parking area, radio contact must be maintained with the TWR.

LSZA AD 2.22 FLIGHT PROCEDURES

1. Special regulations for IFR approach and departure

1.1 IFR procedures

The use of IFR APCH or DEP procedures in Lugano is limited to pilots, operators and ACFT fulfilling the AP Qualifications in accordance with § 1.2.

Helicopter flight crews are allowed to operate without Lugano Qualification.

1.1.1 IFR departure procedures

Any departing ACFT must comply with the requirements of Aircraft Certification § 1.2.1, as well as with the relevant procedures published on the SID charts.

SID (Standard Instrument Departures):

a. Requirements:
- Pilot Qualification type A.

Conditions:
- VIS 3000 m or more and ceiling *2100 ft AAL* or HYR.

b. Requirements:
- Pilot Qualification type D.

Conditions:
- for ME (A) VIS 400 m or more and less than 3000 m
- for SE (A) VIS 800 m or more and less than 3000 m, ceiling *1200 ft AAL* or HYR

1.1.2 SID Descriptions

1.1.2.1 SID RNAV 1

1.1.2.1.1 SID RWY 01/19 (see chart LSZA AD 2.24.7 - 1)

DESIGNATOR	RWY 01/19 - RNAV (GNSS)			
	ROUTE			
	Lateral	Vertical	Contact	Remark
INITIAL CLIMB RWY 01	Climb straight ahead. At D2 ILU turn right (MAX IAS 150kt during turn. MNM bank angle 25°). Proceed to LUGAN.	Maintain visual ground contact up to LUGAN. Cross LUGAN (overhead RWY) at *5000ft* or above.		Average climb gradient to reach LUGAN at *5000ft* is 8.1%
INITIAL CLIMB RWY 19 PDG 10.2% to 4100ft	After departure climb on TR201 until receiving MMP. Establish and follow R017 MMP inbound.			HIGH PERFORMANCE SID
CANNE 1E	Proceed to PINIK. Proceed via ZA557 and ZA559 to CANNE.	Cross PINIK at *6000ft* or above, ZA557 at FL100 or above, ZA559 at FL120 or above, CANNE at FL140/FL150 or above (depending on QNH).		by ATC only RNAV applicable when passing PINIK.
OMETO 1E	Proceed to PINIK. Proceed via ZA557, ZA558 and BAVMI to OMETO.	Cross PINIK at *6000ft* or above, ZA557 at FL100 or above, ZA558 at FL130 or above, BAVMI at FL150 or above, OMETO at FL180/ FL190 or above (depending on QNH).		RNAV applicable when passing PINIK.

RNAV (GNSS) SID CANNE 1E						
Path terminator	Waypoint	Flyover	Altitude (ft)	Speed limit (kt)	Track	Distance (NM)
-	PINIK	N	+ 6000	-	-	-
TF	ZA557	N	+ FL100	-	232° (234.4°T)	8.3
TF	ZA559	N	+ FL120	-	300° (302.1°T)	8.0
TF	CANNE	N	+ FL140/150	-	037° (039.1°T)	23.5

RNAV (GNSS) SID OMETO 1E						
Path terminator	Waypoint	Flyover	Altitude (ft)	Speed limit (kt)	Track	Distance (NM)
-	PINIK	N	+ 6000	-	-	-
TF	ZA557	N	+ FL100	-	232° (234.4°T)	8.3
TF	ZA558	N	+ FL130	-	232° (234.2°T)	10.0
TF	BAVMI	N	+ FL150	-	275° (277.3°T)	3.7
TF	OMETO	N	+ FL180/190	-	275° (277.5°T)	15.5

1.1.2.2 SID NON RNAV

1.1.2.2.1 SID RWY 01 (see chart LSZA AD 2.24.7 - 3)

SID RWY 19 (see chart LSZA AD 2.24.7 - 5)

DESIGNATOR	RWY 01/19			
	ROUTE			
	Lateral	Vertical	Contact	Remark
INITIAL CLIMB RWY 01	Climb straight ahead. At D2 ILU turn right (MAX IAS 150kt during turn. MNM bank angle 25°). Proceed to LUGAN.	Maintain visual ground contact up to LUGAN. Cross LUGAN (overhead RWY) at *5000ft* or above.		Average climb gradient to reach LUGAN at *5000ft* is 8.1%
INITIAL CLIMB RWY 19 PDG 10.2% to *4100ft*	After departure climb on TR201 until receiving MMP. Establish and follow R017 MMP inbound.			HIGH PERFORMANCE SID
CANNE 2U	At *5000ft* turn left (MAX IAS 165kt, MNM bank angle 25°). Intercept R347 SRN to CANNE.	Cross ZA505 at FL090 or above, ZA506 at FL130 or above, CANNE at FL140/FL150 or above (depending on QNH).		
CANNE 1Z	Proceed to PINIK. At PINIK turn right, intercept R009 MMP to CANNE.	Cross PINIK at *6000ft* or above, D20 MMP at FL090 or above, CANNE at FL140/FL150 or above (depending on QNH).		
OMETO 1F	Follow R017 MMP inbound MMP. At D4.3 MMP turn right, intercept R276 SRN to ZA558. Proceed via BAVMI to OMETO	Cross PINIK at 6000ft or above, D4.3 MMP at FL100 or above, ZA558 at FL130 or above, BAVMI at FL150 or above, OMETO at FL180/FL190 or above (depending on QNH).		
ORIO 1U (ORI 1U)	Proceed to PINIK. At PINIK intercept R330 SRN. inbound to SULUR. At SULUR intercept R277 BEG inbound to BEG. Proceed to ORI.	Cross PINIK at 6000ft or above, SULUR at FL080 or above, BEG at FL120 or above.		
ORIO 1W (ORI 1W)	Proceed to PINIK, At PINIK intercept R287 BEG inbound to BEG. Proceed to ORI.	Cross PINIK at 6000ft or above, ZA526 at FL080 or above (depending on TL), ZA527 at FL100 or above, BEG at FL120 or above.		by ATC only
PINIK 1A	Proceed to PINIK. Enter PINIK HLDG.	Climb to and maintain 6000ft to reach 6000ft at PINIK or before.		
SARONNO 1W (SRN 1W)	Proceed to PINIK. At PINIK intercept R330 SRN inbound to SRN.	Cross PINIK at *6000ft* or above, SRN MCA according to next AWY segment.		
VOGHERA 1W (VOG 1W)	Follow R017 MMP inbound to MMP. At MMP intercept R344 VOG inbound to VOG.	Cross PINIK at *6000ft* or above, MMP at FL080 or above, VOG at FL110 or above.		

(Tracks and radials calculated with VAR 2° East)

1.1.3 IFR approach procedures

Any approaching ACFT must comply with the requirements of Aircraft Certification § 1.2.1, as well as with the relevant procedures published on the APCH charts.
The following instrument APCH procedures, with the corresponding requirements, are AVBL:

1. **LOC RWY 01 for CIRCLING FOXTROT RWY 19**
   - Requirements:
     Pilot Qualification type A.
     Approach can be flown during the day only.

2. **LOC RWY 01 for CIRCLING CHARLIE RWY 19**
   - Requirements:
     Pilot Qualification type B.
     An Approved contingency procedure RWY 19 may be required according to § 1.1.9

3. **IGS RWY 01** (steep APCH procedure)
   - Requirements:
     Pilot Qualification type C.
     ACFT certification in accordance with § 1.2.1, for steep APCH of 6° or higher.

1.1.4 Approach to RWY 01

1.1.4.1 IGS RWY 01 steep approach 6.65°

Instruction of crews using the IGS 01 APCH procedure must satisfy the rules of the "Training Requirements Application Manual" (TRAM) for Lugano AP.
The IGS APCH may only be used by qualified crew and certified ACFT for a "steep APCH" of 6° or HYR.
For ACFT certified for steep APCHs of 6.65° or more, the instrument APCH procedure IGS 01 may be used with an angle of 6.65° during the entire APCH until LDG.
For ACFT certified for steep APCHs with an angle between 6° and 6.64°, the use of the instrument APCH procedure IGS 01 is regulated as follows:

- The ACFT shall obtain a “Letter of non-objection” from the manufacturer to carry out APCHs with a MAX angle of 6.65°.
- The APCH takes place at an angle of 6.65° from the FAF to the DA. The next LDG phase starting from the DA is carried out with a MAX angle of 6° using the PAPI.
- The ACFT must be stabilized at the latest at a HGT of *500 ft AAL*; otherwise the APCH procedure must be interrupted and a go-around procedure must be initiated.
- For ACFT with approved AFM supplement or annex for steep APCH, fulfilling the IGS angle of descend requirement, the tail wind component limitation must not exceed the AFM limitation value from the steep approach supplement or annex. For all other ACFTs the tail wind component must not exceed half of the value of the tail wind component according the AFM.
- The maximum discrepancy allowed along the trajectory corresponds to a half scale on the glideslope Indicator (usually 1 “dot”). If thislimit is exceeded, a go-around procedure must be carried out without exception.

1.1.4.2 PAPI RWY 01

For all APCHs, only one PAPI shall be illuminated and operative.
The use of the 6° PAPI on RWY 01 is limited to certified ACFT and to FLT crews qualified for steep APCHs and LDGs of 6° or HYR.
The 6° PAPI on RWY 01 will only be in use for IFR traffic performing an IGS APCH. For all other APCHs, the 4.17° PAPI on RWY 01 will be in use.
If on an IGS APCH, IFR is CNL, or if a visual APCH is requested after having passed CALDO (INBD), then the LDG procedure on RWY 01 must be complete following (and not undershooting) the 6° PAPI until LDG on RWY 01, or a circling procedure for LDG on RWY 19 is initiated. Under these circumstances, the ACFT may descend onto the 6.0° PAPI earlier than MDA or Visual Descent Point (VDP) but not before PSG 3.7 DME ILU.

1.1.5 Approach to RWY 19

1.1.5.1 LOC approach for circling RWY 19

The LOC APCH shall be flown on a continuous descent angle or gradient.
The break-off points on the APCH will always remain at the same PSN, but it will be overflown at the applicable ALT.

1.1.5.2 Circling procedures RWY 19

There are two circling procedures AVBL:

1. **CIRCLING FOXTROT RWY 19** (see chart LSZA AD 2.24.10 - 5)
   Requirements:
   - Pilot Qualification type A.

Conditions:
   - VIS 5000 m or more, day only and ceiling *3100 ft AAL* or HYR.

2. **CIRCLING CHARLIE RWY 19** (see chart LSZA AD 2.24.10 - 7)
   a. Requirements:
      - Pilot Qualification type A or B depending on weather minima's as required in § 1.1.9

Conditions:
      - VIS 5000 m or more, day only and ceiling *3100 ft AAL* or HYR.

   b. Requirements:
      - Pilot Qualification type B.
        Contingency procedure APV by the respective National Aviation Authority (Including APCH LDG climb gross gradient table and 2.0 NM ARP TP definition).
      - Specific FLT training associated with the afore mentioned contingency procedure.

Conditions:
      - VIS 3000 m or more during the day / VIS 5000 m or more at night, and ceiling *1700 ft AAL* or HYR.

1.1.6 Missed approach

During all IFR APCHs the applicable MDA and the corresponding MNM visibility shall be predefined by the operator and the FLT crew reflecting the daily PER limits of the corresponding ACFT given by mass, temperature, density, and wind conditions (including, where applicable, the Company contingency procedures).

1.1.7 STAR Descriptions

1.1.7.1 STAR RWY 01/19 (see chart LSZA AD 2.24.9 - 1)

DESIGNATOR	RWY 01/19		
	ROUTE		
	Lateral	Vertical	Remark
ORIO 7L (ORI 7L)	At ORI intercept R103 BEG. Proceed to BEG. At BEG intercept R299 BEG. Proceed to LUGAN. At LUGAN intercept R017 MMP. Proceed to PINIK.	Cross BEG at FL120 or above, LUGAN at FL100/FL110 or above (depending on QNH).	Expect base turn over CALDO.
LUSIL 7L	At LUSIL intercept R035 BEG. Proceed to BEG. At BEG intercept R299 BEG. Proceed to LUGAN. At LUGAN intercept R017 MMP. Proceed to PINIK.	Cross LUSIL at FL140 or above, BEG at FL120 or above, LUGAN at FL100/FL110 or above (depending on QNH).	Expect base turn over CALDO.
ORIO 7P (ORI 7P)	At ORI intercept R103 BEG. Proceed to BEG. At BEG intercept R287 BEG. Proceed to PINIK.	Cross BEG at FL120 or above, ZA631 at FL100 or above, ZA632 at FL080/TL or above (depending on TL).	
LUSIL 7P	At LUSIL intercept R035 BEG. Proceed to BEG. At BEG intercept R287 BEG. Proceed to PINIK.	Cross LUSIL at FL140 or above, BEG at FL120 or above, ZA631 at FL100 or above, ZA632 at FL080/ TL or above (depending on TL).	
SARONNO 6L (SRN 6L)	At SRN intercept R330 SRN. Proceed via SULUR to PINIK.	Cross SRN at 6000ft or above.	
VOGHERA 6L (VOG 6L)	At VOG intercept R344 VOG. Proceed to MMP. At MMP intercept R017 MMP. Proceed to PINIK.	Cross VOG at FL090 or above, MMP at 6000ft or above.	
TORINO 6L (TOP 6L)	At TOP intercept R085 TOP. Proceed to VOG. At VOG intercept R344 VOG. Proceed to MMP. At MMP intercept R017 MMP. Proceed to PINIK.	Cross TOP at FL090 or above, VOG at FL090 or above, MMP at 6000ft or above.	
ODINA 7L	At ODINA intercept R299 BEG. Proceed to LUGAN. At LUGAN intercept R017 MMP. Proceed to PINIK.	Cross ODINA at FL140/FL150 or above (depending on QNH), LUGAN at FL100/FL110 or above (depending on QNH).	Expect base turn over CALDO.

(Tracks and radials calculated with VAR 2° East)

1.1.8 ATC

1.1.8.1 Communication with ATC

FLT crews entering Lugano CTR under IFR shall make contact with ATC, requesting the type of APCH they intend to execute.

1.1.8.2 ATC flight plan

Operators holding an AP Qualification in accordance with § 1.2 shall insert "THE TYPE OF QUALIFICATION" in item 18 of ATC flight plan.

1.1.9 Requirements overview

Requirements overview						
Flight Procedure	Flight Operation				Pilot Qualification	Operator Qualification Procedures	Aircraft Performances
Approach and landing (1)	- VFR commercial - IFR Visual APP				Type A	NIL	NIL
	- LOC R01, Circling C R19 - LOC R01, Circling F R19	(VIS 5000 m or more and ceiling 3100 ft AAL or higher)	-Day Only-				
	- LOC R01 Circling C R19	(VIS 3000 m or more) (VIS 5000 m or more) (ceiling 1700 ft AAL or higher)	-Day- -Night- -Day and Night-		Type B	Approved contingency procedure for circling missed approach required	NIL
	- IGS				Type C	NIL	glide > 6° See Explanation §1.1.5.1
Departure (1)	IFR departure				-	-	-
	Take-off	SE/ME	VIS 3000 m or more and ceiling 2100 ft AAL or higher		Type A	NIL	NIL
		ME	VIS 400 m or more and less than 3000 m		Type D	Approved contingency procedure take-off RWY 19 and/or 01 required	NIL
		SE	VIS 800 m or more and less than 3000 m, ceiling 1200 ft AAL or higher				

(1) VFR according SERA and Swiss AIP.
Note: VIS = Visibility. Visibility is meant as reported Meteorological Visibility.

1.2 Airport qualification

To operate at Lugano under IFR, the following AP requirements must be fulfilled:

a. The ACFT must meet the PER requirements in accordance with the ACFT certification, including (where necessary) a steep APCH and LDG certification.
b. Operator's contingency procedures (if required by the type of FLT operation) must be calculated and AVBL.
c. The FLT crew must hold a valid Pilot Qualification for the applicable type of operation and FLT procedures.

The application shall contain:

a. A letter of Endorsement from the National Aviation Authority (NAA) approving Training Syllabus and the operation into Lugano and confirming conformity with the requirements of § 1.2.1 and 1.2.2
b. The APV, given by the respective NAA, of the operator's contingency procedures.

1.2.1 Aircraft certification

Any ACFT to be operated under IFR at Lugano AP shall be able to comply with the published IFR procedures § 1.1 or with approved company contingency procedures.
The MAX IAS, as published on the relevant charts, shall not be exceeded during the corresponding FLT manoeuvres.

For ACFT certified for steep APCHs with an angle of 6.65° or more

The ACFT Certification of compliancy for the AP Qualification shall contain:

- Type, REG and Serial Number (S/N) of the ACFT;
- Mass, AP and Temperature (MAT) PER table calculated and published for the operation in Lugano and for the Individual Runway Tables including:
  a. MTOM table for all applicable SID, covering One Engine Inoperative (OEI) conditions,
  b. MAX Landing Mass (MLM) for the APCH covering the speed requirements,
  c. table of the applicable minima covering the requirements for the APCH gross climb gradient,
  d. if required, contingency procedures covering the entire MAT items above.
- If required for the operation, a copy of the "steep APCH" certificate, or equivalent steep APCH and LDG capabilities for the applicable S/N AFM.

For ACFT certified for steep APCHs between 6° and 6.64°

A "Letter of non objection" is needed. The "Letter of non objection" proves, from a technical/operational point of view, that in the certification already obtained by an ACFT, it also includes an “INA” of 6.65° until the published Minimum Descent Altitude (MDA), and a further "steep APCH to LDG", starting at 500 ft AAL, at the latest, with an angle of 6°. The manufacturer shall prove that this special procedure is supported by tests and equipment used for the AVBL certification.

Furthermore, the manufacturer, in the "Letter of non objection", shall clearly state the PER requirements in a such manner that they shall be properly covered in case an ACFT is certified for 6° (tolerance of +/-2° included); for instance, the "handling qualities", the Flight Guidance Systems and Autopilot until the published Minimum Descent Altitude (MDA) and the PER.

1.2.2 Pilot qualification

MNM training requirements for the AP Qualification are included in a so-called "Training Requirements Application Manual (TRAM)"
Pilots intending to operate under IFR conditions at Lugano AP shall hold a valid Pilot Qualification, in accordance with the requirements of IFR Procedures § 1.1.9

1.2.2.1 Pilot qualification type A

The Pilot Qualification type A is directly controlled by the Lugano AP Authority and includes:

a. A theoretical self-instruction on:
- Lugano general operational requirements (FOCA & Lugano AP Authority),
- Local weather phenomena and dangers,
- Lugano orographic and topographic situation, including all relevant obstacles,
- APCH and DEP procedures (VFR and IFR),
- Noise abatement and communication procedures,
- ACFT PER (All Engines Operating (AEO) and OEI), including calculations of MTOM, MLM gradients and applicable minima,
- EMERG procedures.

To apply for the Pilot Qualification type A, the pilot shall contact Lugano AP Authority or consult Lugano AP's website.
URL: http://www.lugano-qualification.ch/

1.2.2.2 Pilot qualification type B, C and D

Initial and recurrence training for Pilot Qualification types B, C and D are to be conducted under the jurisdiction of the respective NAA.

1.2.2.3 Procedures to obtain the qualification

Qualification A:
The pilot applies for the Pilot qualification type A to the Lugano Airport Authority on :
www.lugano-qualification.ch. The qualification consists in a familiarization briefing and a test with multiple-choice questions. The Lugano Airport Authority verifies the validity of the application in the Lugano Qualification database where all relevant data are automatically collected.

Qualification B:
The operator submits its training syllabus with the related approved contingency procedure to the respective NAA for approval and transmits the approval confirmation to the Lugano Airport Authority.
The pilot in command performs the training according to the training syllabus approved by the respective NAA. Once done, the operator transmits an updated list of operator/pilots who obtained the Type B qualification to the Lugano Airport Authority which it will be classified as per operator name, in a dedicated binder.

Qualification C:
The operator submits its training syllabus to the respective NAA for approval and transmits the approval confirmation to the Lugano Airport Authority.
The operator presents the corresponding AFM supplements or a “Letter of non-objection” (described in chapter 1.2.1) to the Lugano Airport Authority.
The pilot in command performs the training according to the training syllabus approved by the respective NAA. Once done, the operator transmits an updated list of operator/pilots/ aircraft who obtained the Type C qualification to the Lugano Airport Authority which it will be classified as per operator name, in a dedicated binder.

Qualification D:
The operator submits its training syllabus with the related approved contingency procedure to the respective NAA for approval and transmits the approval confirmation to the Lugano Airport Authority.
The pilot in command performs the training according to the training syllabus approved by the respective NAA. Once done, the operator transmits an updated list of operator/pilots who obtained the qualification type D to the Lugano Airport Authority which it will be classified as per operator name, in a dedicated binder.

1.2.2.4 Airport qualification validity

Qualification Type A:
Airport qualification type A is valid for two years.

Qualification Type B, C and D:
Pilots must hold a valid qualification type A.
The pilot in command shall fly at least 1 IFR approach into and 1 IFR departure from LSZA within a 12 months period.
In case of an interruption of the recency of 12 months and more, the applicable minima for the first 3 APP shall be augmented by 500 feet for Ceiling and the applicable visibility by 1000 meters.
In case of an interruption of the recency of 24 months and more, a new qualification B, C or D is required.
FFS or FTD cannot be used as per Validity requirements.

1.3 Charts

1.3.1 Procedures to be followed by arriving and departing ACFT are contained on the charts STAR/SID and IAC.

1.3.2 The MNM vectoring levels chart for CTR/TMA Lugano is AVBL under AIP Italy, ENR 2.1.

1.4 VFR procedure

Private OPS refer to VFR Manual, LSZA AD INFO. Commercial OPS see also 1.1.9.

1.5 Description of Instrument Guidance System (IGS)

Non-precision APCH with ILS components.
DEV are: Angle HYR than standard (6.65°) and the definition of a MAPT.

1.5.1 IGS components

- ILS (LOC/GP/DME) for line-up and final APCH
- SRN VOR/DME

1.5.2 Procedure

The IGS procedure is a steep APCH of 6.65° GP reference.

IGS PROC may be flown as an ILS PROC.

The published ALT at D5.3 ILU and D3.7 ILU are to be strictly OBS without undershooting.

After MAPT, PCD to RWY maintaining visual ground contact and by following the PAPI of 6.0° reference angle. LOC track is aligned with RWY 01 axis.

1.6 Minima for IFR departures (TKOF minima)

RWY	ACFT CAT	Vis (m) / Ceiling (ft AGL)			RMK
		No LGT AVBL	REDL or RCLL AVBL	REDL and RCLL AVBL	
01	A	1500/---	1500/---	1500/---	
	B	1500/---	1500/---	1500/---	
	C	1500/---	1500/---	1500/---	
19	A	800/---	400/---	400/---	
	B	800/---	400/---	400/---	
	C	800/---	400/---	400/---	

LSZA AD 2.23 ADDITIONAL INFORMATION

1. List of significant points

NAV point	COORD WGS84		Back-up Definition			Purpose
	N LAT	E LONG	Radial	DME	NAV	
1	2		3			4
BAVMI	45 42 13	008 24 28	276	26	SRN	SID LSZA
CALDO	45 54 33.2	008 51 50.9	017	---	MMP	STAR LSZA
			---	6.5	ILU	
LUSIL	46 02 35	010 07 00	035	28.2	BEG	STAR LSZA
OMETO	45 44 12.0	008 02 34.0	276	42	SRN	SID LSZA
PINIK	45 52 26.8	008 50 55.9	017	14.8	MMP	STAR/SID LSZA, HLDG
			---	8.7	ILU	
SULUR	45 44 57	008 56 36	330	7	SRN	SID LSZA
ZA505	46 00 16	008 55 29	347	22	SRN	SID LSZA
ZA506	46 05 14	008 54 09	347	27	SRN	SID LSZA
ZA526	45 50 31	008 59 11	287	32.1	BEG	SID LSZA
			351	---	SRN	
ZA527	45 48 18	009 08 41	287	25.1	BEG	SID LSZA
			026	---	SRN	
ZA552	45 46 17	008 47 49	017	8	MMP	SID LSZA
ZA557	45 47 35.8	008 41 16.7	300	16.6	SRN	SID LSZA
ZA558	45 41 45.0	008 29 42.8	276	22.4	SRN	SID LSZA
ZA559	45 51 50.0	008 31 35.6	300	24.6	SRN	SID LSZA
ZA631	45 48 18	009 08 41	287	25.1	BEG	STAR LSZA
			026	---	SRN	
ZA632	45 50 31	008 59 11	287	32.1	BEG	STAR LSZA
			351	---	SRN	

(Tracks and radials calculated with VAR 2° East)

LSZA AD 2.24 AERONAUTICAL CHARTS RELATED TO AN AERODROME

LSZA AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

The information on visual segment surface penetration is published on the respective instrument approach chart.
See LSZA AD 2.24 for details.

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