

## 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 13 N / 008 54 37 E<br>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<br>via Aeroporto<br>CH-6982 Agno<br><br>Phone: +41 (0) 91 610 11 11<br><br>Email: info@luganoairport.ch<br>URL: www.luganoairport.ch<br><br><b>LSZA-Airport Authority:</b><br>Phone: +41 (0) 79 917 68 01<br>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:<br>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;<br>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,<br>FLT of the Swiss Confederation, members of the Swiss Government<br>or equivalent foreign official.<br>PPR compulsory for all other operators at least 48 hours notice<br>before ETA/ETD and subject to Airport Authority approval.<br>All requests have to be submitted via email to<br>Email: gahandling@luganoairport.ch<br><b>ONLY FOR URGENT REQUESTS</b> outside opening hours contact<br>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<br>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:<br>Lugano Airport<br>Phone: +41 (0) 91 610 11 16<br>FREQ: 131.805 MHz<br>AFS: LSZAYDYH<br>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<br>URL: <a href="https://flpsa.ch">https://flpsa.ch</a> |
| 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<br>Category 4 O/R 3 HR before ETA/ETD<br>Category 5 and 6 O/R preferably 24 HR before ETA/ETD |
| 2 | Rescue equipment                            | Rosenbauer Panther Fire Fighting Truck 6x6<br>Mercedes Benz Fire Fighting Truck<br>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,<br>1 RWY and Apron de-icer, 1 ACFT de-icer   |
| 2 | Clearance priorities          | RWY, TWY, then apron                                                                        |
| 3 | Remarks                       | All seasons:<br>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<br>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.<br>Restrictions as well as taxiing and parking procedures:<br>See ACFT PRKG Chart <a href="#">LSZA AD 2.24.2</a> - 1                                                                                                                                                                                                                                                     |
| 2 | RWY/TWY markings and LGT                                                                                      | RWY markings:<br>DTHR, designation, aiming point, touchdown zone and centre line.<br>Paved TWY markings: Centre line (including on turn pads) and intermediate holding position.<br>Grass TWY markings / markers: Edge markers and intermediate holding position.<br>Markings at intersections with RWY: RWY holding position, mandatory instruction and enhanced TWY centre line.<br>RWY LGT: See <a href="#">LSZA AD 2.14</a><br>TWY LGT: See <a href="#">LSZA AD 2.15</a> |
| 3 | Stop bars and RWY guard lights                                                                                | Stop bars: NIL<br>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.<br>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<br>Elevation<br>Markings/LGT | Co-ordinates |                           | Obstacle type<br>Elevation<br>Markings/LGT | Co-ordinates |                                                          | RMK      |
| a                      | b                                          |              | c                         | a                                          |              | b                                                        | c        |
|                        |                                            | ft           |                           |                                            | ft           |                                                          |          |
| AOC 01 (1)             | Building                                   | 950          | 46 00 37 N<br>008 54 45 E | Antenna<br>LGTD                            | 1020         | 46 00 09 N<br>008 54 23 E                                |          |
| AOC 01 (2)             | Pole                                       | 951          | 46 00 38 N<br>008 54 45 E | Crane/Cranes<br>marked/LGTD                | 989          | 46 00 18 N<br>008 54 48 E                                | B1216/21 |
| AOC 01 (3)             | Tree/Trees                                 | 965          | 46 00 38 N<br>008 54 54 E | Tower/Mast<br>LGTD                         | 945          | 46 00 03 N<br>008 54 36 E                                |          |
| AOC 01 (4)             | Tree/Trees                                 | 977          | 46 00 39 N<br>008 54 54 E | Antenna<br>LGTD                            | 1529         | 46 02 15 N<br>008 56 20 E                                |          |
| AOC 01 (5)             | Building                                   | 981          | 46 00 44 N<br>008 54 47 E | Antenna<br>LGTD                            | 1526         | 46 00 39 N<br>008 55 32 E                                | B0555/01 |
| AOC 01 (6)             | Pole                                       | 985          | 46 00 47 N<br>008 54 49 E | Telephone line                             | 45 m<br>AGL  | 45 59 36 N<br>008 50 13 E -<br>45 59 36 N<br>008 50 06 E | B0016/02 |
| AOC 01 (7)             | Building                                   | 986          | 46 00 48 N<br>008 54 48 E | Tower<br>marked/LGTD                       | 998          | 46 00 16 N<br>008 54 31 E                                | B0121/02 |
| AOC 01 (8)             | Building                                   | 996          | 46 00 49 N<br>008 54 49 E | Tower<br>LGTD                              | 974          | 46 00 43 N<br>008 54 54 E                                | B0043/04 |
| AOC 01 (9)             | Building                                   | 1040         | 46 01 19 N<br>008 55 12 E | Silo                                       | 965          | 46 00 53 N<br>008 54 59 E                                | B0480/05 |
| AOC 01 (10)            | Tree/Trees                                 | 1061         | 46 01 27 N<br>008 55 00 E | Power line                                 | 72 m<br>AGL  | 45 59 18 N<br>008 52 23 E -<br>45 59 18 N<br>008 52 38 E | B0617/05 |
| AOC 01 (11)            | Tree/Trees                                 | 1081         | 46 01 38 N<br>008 55 03 E | Pole<br>LGTD                               | 2366         | 46 02 43 N<br>008 57 44 E                                | B0471/07 |
| AOC 01 (12)            | Power line                                 | 1100         | 46 01 37 N<br>008 55 22 E | Pole<br>LGTD                               | 1752         | 45 57 49 N<br>008 52 56 E                                | B0470/07 |
| AOC 01 (13)            | Power line                                 | 1113         | 46 01 40 N<br>008 55 16 E | Pole<br>LGTD                               | 1886         | 46 02 58 N<br>008 55 54 E                                | B0469/07 |
| AOC 01 (14)            | Power line                                 | 1137         | 46 01 45 N<br>008 55 12 E |                                            |              |                                                          |          |
| AOC 01 (15)            | Power line                                 | 1155         | 46 01 42 N<br>008 55 24 E | Pole<br>marked/LGTD                        | 989          | 46 00 13 N<br>008 54 28 E                                | B0099/09 |
| AOC 01 (16)            | Tree/Trees                                 | 1209         | 46 01 55 N<br>008 56 12 E | Pole<br>LGTD                               | 1825         | 46 01 28 N<br>008 56 46 E                                | B1145/09 |
| AOC 01 (17)            | Tree/Trees                                 | 1215         | 46 01 56 N<br>008 56 13 E | Pole<br>LGTD                               | 1914         | 45 58 27 N<br>008 54 48 E                                | B1144/09 |
| AOC 01 (18)            | Tree/Trees                                 | 1246         | 46 02 05 N<br>008 56 11 E | Power line<br>marked                       | 90 m<br>AGL  | 46 05 32 N<br>009 03 11 E -<br>46 05 33 N<br>009 02 51 E | C0366/05 |
| AOC 01 (19)            | Tree/Trees                                 | 1256         | 46 02 05 N<br>008 56 11 E | Cable<br>CW                                | 80 m<br>AGL  | 46 03 52 N<br>008 55 12 E -<br>46 03 43 N<br>008 54 43 E | B0054/06 |
| AOC 01 (20)            | Tree/Trees                                 | 1259         | 46 02 06 N<br>008 56 12 E | Building                                   | 3m<br>AGL    | 46 00 41 N<br>008 54 49 E                                | B0131/07 |
| AOC 01 (21)            | Tree/Trees                                 | 1277         | 46 01 56 N<br>008 56 16 E | Chimney<br>LGTD                            | 25 m<br>AGL  | 46 01 15 N<br>008 55 00 E                                | B0130/07 |
| AOC 01 (22)            | Tree/Trees                                 | 1281         | 46 02 20 N<br>008 56 11 E | Antenna<br>marked, LGTD                    | 5414         | 45 55 35 N<br>009 00 54 E                                | B0733/08 |

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

## LSZA AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

|    |                                                                     |                                                                                               |
|----|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| 1  | Associated MET Office                                               | MeteoSwiss                                                                                    |
| 2  | Hours of service                                                    | H24                                                                                           |
| 3  | Office responsible for TAF preparation<br>Periods of validity       | MeteoSwiss, Zurich<br>9 hours                                                                 |
| 4  | Type of landing forecast                                            | NIL                                                                                           |
| 5  | Briefing/consultation provided                                      | Self Briefing Service ( <a href="http://www.skybriefing.com">www.skybriefing.com</a> )        |
| 6  | Flight documentation<br>Language(s) used                            | Digital and hard copy<br>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),<br>0900 162 767 (Fr); accessible within Switzerland |

## LSZA AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

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

<sup>1)</sup> MAG VAR tolerance for RWY designators exceeded.

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

<sup>1)</sup> MAG VAR tolerance for RWY designators exceeded.

## LSZA AD 2.13 DECLARED DISTANCES

| RWY<br>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<br>beginning of RWY |
|                   | 1025     | 1025     | 1095     | Not applicable | Intersection MIKE                      |
| 19                | 1415     | 1475     | 1415     | 1135           | Turn pad at the beginning<br>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<br>Designator | ALS<br>type,<br>LEN,<br>INTST                                                 | THR LGT<br>colour,<br>INTST,<br>WBAR                            | VASIS<br>type,<br>PSN,<br>MEHT                                                     | RTZL<br>LEN,<br>colour,<br>INTST                            | RCLL<br>LEN,<br>spacing,<br>colour,<br>INTST                                                        | REDL<br>LEN,<br>spacing,<br>colour,<br>INTST                                             | RENL<br>colour,<br>INTST | SWY<br>LGT<br>LEN,<br>colour,<br>INTST | RMK                                                                  |
|-------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------|----------------------------------------|----------------------------------------------------------------------|
| 1                 | 2                                                                             | 3                                                               | 4                                                                                  | 5                                                           | 6                                                                                                   | 7                                                                                        | 8                        | 9                                      | 10                                                                   |
| 01                | NIL                                                                           | RTHL G,<br>LIH,<br>WBAR,<br>no LED;<br>RTIL<br>FLG W,<br>no LED | PAPI<br>4.17°, L,<br>6.27 m,<br>no LED;<br>PAPI<br>6.00°, L,<br>15.54 m,<br>no LED | Simple<br>TZL*<br>323 m FM<br>THR 01,<br>W, LIH,<br>no LED  | 740 m,<br>30 m, W,<br>LIH;<br>375 m,<br>30 m,<br>R/W, LIH;<br>300 m,<br>30 m, R,<br>LIH.<br>All LED | 110 m, 60 m,<br>R, LIH;<br>830 m, 60 m,<br>W, LIH;<br>475 m, 60 m,<br>Y, LIH.<br>All LED | R, LIH,<br>LED           | NIL                                    | PAPI 6.00°<br>only<br>switched on<br>for IGS RWY<br>01<br>approaches |
| 19                | RLLS Seq.<br>FLG LGT<br>W, LIH,<br>no LED;<br>SALS<br>360m,<br>LIH,<br>no LED | RTHL G,<br>LIH,<br>WBAR,<br>no LED;<br>RTIL<br>FLG W,<br>no LED | PAPI<br>4.17°, L,<br>6.71 m,<br>no LED                                             | Simple<br>TZL*,<br>323 m FM<br>THR 19,<br>W, LIH,<br>no LED |                                                                                                     | 280 m, 60 m,<br>R, LIH;<br>660 m, 60 m,<br>W, LIH;<br>475 m, 60 m,<br>Y, LIH.<br>All LED | R, LIH,<br>LED           | NIL                                    | RLLS<br>follows<br>circling<br>Charlie<br>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<br>Anemometer location and LGT      | No LDI<br>Anemometer:<br>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.<br>CL: NIL              |
| 4 | Secondary power supply/switch-over time                  | AVBL / MAX 1 sec.                                                                         |
| 5 | Remarks                                                  | OBST: Marked and lighted (see <a href="#">LSZA AD 2.24</a> , 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,<br>Rotor Diameter 14 m, ASPH, marked and numbered circles with<br>diameter 6.5 m.<br>TLOF HEL stands 3 and 4: MAX Overall LEN 13 m,<br>Rotor Diameter 11 m, ASPH, marked and numbered circles with<br>diameter 6.5 m.<br>FATO: paved RWY 01-19. |
| 4 | True BRG of FATO                                          | RWY 01: 019°<br>RWY 19: 199°                                                                                                                                                                                                                                                                   |
| 5 | Declared distance available                               | See: <a href="#">LSZA AD 2.13</a> 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 | <b>Lugano CTR</b><br>45 55 51 N 008 46 22 E - 46 03 43 N 008 54 41 E<br>Arc of circle centred on 46 02 26 N 008 57 10 E,<br>Radius 2.16 NM, clockwise<br>46 01 21 N 008 59 51 E - 45 52 54 N 008 52 50 E<br>Arc of circle centred on 45 54 15 N 008 49 29 E,<br>Radius 2.70 NM, clockwise<br>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<br>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<br>119.700 MHz | HX<br>do.          | QDM AVBL O/R<br>ALTN FREQ<br>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,<br>supported<br>OPS,<br>classification,<br>MAG VAR,<br>(declination) | ID  | FREQ,<br>CH NR,<br>RPI | Hours of<br>operation | Coordinates<br>of<br>transmitting<br>antenna<br>position | ELEV of DME<br>antenna or<br>GBAS; ELEV,<br>ellipsoid HGT<br>of reference<br>point SBAS;<br>ellipsoid HGT<br>of LTP/FTP | SER<br>volume<br>radius<br>from<br>GBAS<br>reference<br>point | RMK                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------|-----|------------------------|-----------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                                                 | 2   | 3                      | 4                     | 5                                                        | 6                                                                                                                       | 7                                                             | 8                                                                                                                                                                                                      |
| LOC 01,<br>IGS, class I/C/2,<br>VAR 2° E                                          | ILU | 108.90<br>MHz          | H24                   | 46 00 42.15N<br>008 54 51.21E                            | NIL                                                                                                                     | NIL                                                           | LOC PSN:<br>409 m FM THR 19.<br>RWY 01: LOC course<br>017° MAG.<br>Front course sector width<br>5.0°.<br>Restricted coverage:<br>at 10 NM - 30° W to 30° E<br>from CL above 5000 ft<br>AMSL.           |
| GP 01                                                                             | --  | 329.30<br>MHz          | H24                   | 46 00 01.28N<br>008 54 34.40E                            | NIL                                                                                                                     | NIL                                                           | GP angle 6.65°.<br>PSN: 123 m FM THR 01.<br>GP HGT THR 01:<br>48 ft / 14.6 m.<br>Restricted coverage:<br>at 8 NM - 8° W to 8° E from<br>CL above 5000 ft AMSL.                                         |
| DME 01                                                                            | ILU | 26X                    | H24                   | 46 00 41.27N<br>008 54 49.04E                            | 942 ft                                                                                                                  | NIL                                                           | DME co-located with LOC,<br>reads D0.8 at THR 01.<br>Restricted coverage:<br>at 10 NM - 6° W to 14° E<br>from CL above 5000 ft<br>AMSL.<br>at 10 NM - 25° W to 25° E<br>from CL above 5900 ft<br>AMSL. |

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## 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 Departure

#### 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.

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## 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                                                                                                         |                                                                                                                                                              | Contact | Remark                                                  |
|                                                        | Lateral                                                                                                       | Vertical                                                                                                                                                     |         |                                                         |
| <b>INITIAL CLIMB<br/>RWY 01</b>                        | 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% |
| <b>INITIAL CLIMB<br/>RWY 19</b><br>PDG 10.2% to 4100ft | After departure climb on TR201 until receiving MMP. Establish and follow R017 MMP inbound.                    |                                                                                                                                                              |         | HIGH PERFORMANCE SID                                    |
| <b>CANNE 1E</b>                                        | 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.         |
| <b>OMETO 1E</b>                                        | 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                                                  |
| <b>INITIAL CLIMB RWY 01</b>                        | 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% |
| <b>INITIAL CLIMB RWY 19</b><br>PDG 10.2% to 4100ft | After departure climb on TR201 until receiving MMP. Establish and follow R017 MMP inbound.                                   |                                                                                                                                                                 |         | HIGH PERFORMANCE SID                                    |
| <b>CANNE 2U</b>                                    | 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).                                                       |         |                                                         |
|                                                    |                                                                                                                              |                                                                                                                                                                 |         |                                                         |
| <b>CANNE 1Z</b>                                    | 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).                                                    |         |                                                         |
| <b>OMETO 1F</b>                                    | 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). |         |                                                         |
| <b>ORIO 1U</b><br>(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.                                                                                 |         |                                                         |
| <b>ORIO 1W</b><br>(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                                             |
| <b>PINIK 1A</b>                                    | Proceed to PINIK. Enter PINIK HLDG.                                                                                          | Climb to and maintain 6000ft to reach 6000ft at PINIK or before.                                                                                                |         |                                                         |
| <b>SARONNO 1W</b><br>(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.                                                                                          |         |                                                         |
| <b>VOGHERA 1W</b><br>(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 can be used with an angle of 6.65° for the entire APCH to 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 initiates with 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 this limit is exceeded, a go-around must be initiated.

**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                                                                                                                                    |                                                                                                                              | Remark                       |
|                               | Lateral                                                                                                                                  | Vertical                                                                                                                     |                              |
| <b>ORIO 7L</b><br>(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. |
| <b>LUSIL 7L</b>               | 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. |
| <b>ORIO 7P</b><br>(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).                          |                              |
| <b>LUSIL 7P</b>               | 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). |                              |
| <b>SARONNO 6L</b><br>(SRN 6L) | At SRN intercept R330 SRN. Proceed via SULUR to PINIK.                                                                                   | Cross SRN at 6000ft or above.                                                                                                |                              |
| <b>VOGHERA 6L</b><br>(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.                                                                         |                              |
| <b>TORINO 6L</b><br>(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.                                                  |                              |
| <b>ODINA 7L</b>               | 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<br>- IFR Visual APP                                                                                                                                                                                                                         |       |                                                                       | Type A              | NIL                                                                  | NIL                                    |
|                          | - LOC R01, Circling C R19 (VIS 5000 m or more and ceiling 3100 ft AAL or higher) -Day Only-<br>- LOC R01, Circling F R19<br>- LOC R01 Circling C R19 (VIS 3000 m or more) -Day- (VIS 5000 m or more) -Night- (ceiling 1700 ft AAL or higher) -Day and Night- |       |                                                                       |                     |                                                                      |                                        |
|                          |                                                                                                                                                                                                                                                              |       |                                                                       | Type B              | Approved contingency procedure for circling missed approach required | NIL                                    |
|                          | - IGS                                                                                                                                                                                                                                                        |       |                                                                       | Type C              | NIL                                                                  | glide > 6°<br>See Explanation §1.1.4.1 |
| 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 requirements must be fulfilled:

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

The AD operator has the responsibility to ensure that the PIC/Operator have the required information to operate the qualifications type A and B, C and/or D effectively, efficiently and safely.

Nevertheless, it is responsibility of the PIC/Operator to ensure compliances with the regulation and that the requirements of this TRAM are met. Additionally, the PIC/Operator must ensure that the aircraft performance meets the required aerodrome limitations.

Operators may use Training Requirement Application Manual (TRAM) as guideline to develop their own training program (syllabus). Depending on the procedures required for B, C or D qualification and the aircraft's performance, the training program may be modified as required and in agreement with the Lugano Airport qualification representative or with specific suppliers.

### 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 Qualification for Pilots

MNM training requirements for the AP Qualification are included in a so-called "Training Requirements Application Manual (TRAM)"

The guidelines of this Training Manual are applicable for the training of aeroplane flight crews and instructors intending to operate under IFR or VFR commercial at Lugano only, in accordance with the requirements of IFR Procedures § 1.1.9

The PIC must fulfill first the online qualification type A before initiating any qualification type B, C or D training.

#### 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 Airport self-Briefing on-line including the following sections:
  - Lugano general operational requirements,
  - Local weather phenomena and associated hazards,
  - Lugano orographic and topographic situation, including all relevant obstacles,
  - APCH and DEP procedures (VFR and IFR), Contingency Procedure for OEI,
  - Noise abatement procedures, Communication procedures,
  - ACFT PER (All Engines Operating (AEO) and OEI),
  - Emergency procedures and if applicable, the relevant company contingency procedures.

To apply for the Pilot Qualification type A:

URL: <http://www.lugano-qualification.ch/>

Upon successful completion of the test a certificate will be issued.

#### 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.

On a multi-pilot operation (MPO), the Pilot Monitoring (PM) has to pass the qualification type A.

### 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:

URL: [www.lugano-qualification.ch](http://www.lugano-qualification.ch)

The qualification consists in a familiarization briefing and a test with multiple-choice questions. The AD operator verifies the validity of the application in the Lugano Qualification database where all relevant data are automatically collected.

Qualification B:

The PIC performs the training according to the operator's training syllabus and ensures that the "LSZA Qualification Declaration Form" has been filled out according to the qualification **type B**.

The PIC/Operator ensures that the related contingency procedure for circling missed approach is in compliance with the requirements and the aircraft performance meets the required limitations.

Qualification C:

The PIC performs the training according to the operator's training syllabus and ensures that the "LSZA Qualification Declaration Form" has been filled out according to the qualification **type C**.

The PIC/Operator ensures that the related AFM supplements for steep approach and/or a manufacturer "Letter of non-objection" is in compliance with the requirements and the aircraft performance meets the required limitations.

Qualification D:

The PIC performs the training according to the operator's training syllabus and ensures that the "LSZA Qualification Declaration Form" has been filled out according to the qualification **type D**.

The PIC/Operator ensures that the related contingency procedures for take-off RWY 19 or 01 is in compliance with the requirements and the aircraft performance meets the required limitations.

### 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 on the aircraft or on a suitable FSTD.

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.

In case Lugano qualified pilot will transit to a new aircraft the Lugano qualification will remain valid only if the following conditions are cumulatively met:

- The type of qualification is still current and valid.
- The transition is from Multi Engine (ME) to Multi Engine (ME) or is from Single Engine (SE) to Single Engine (SE).
- The size and the mass of the aircraft remains within a reasonable range.
- The aircraft has similar complexity and performance.
- The Airport Authority has been informed at least 1 week in advance.

### 1.2.2.5 LSZA Qualification Declaration Form

When LSZA qualification type(s) training is completed the PIC/Operator must submit to Lugano Airport Authority the "LSZA Qualification Declaration Form" for each aircraft type, either as scanned hard copy or electronically filled out and electronically signed off.

## 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**

| Name                                             | Page                |
|--------------------------------------------------|---------------------|
| Aerodrome Chart                                  | LSZA AD 2.24.1 - 1  |
| Aircraft Parking / Docking Chart                 | LSZA AD 2.24.2 - 1  |
| Aerodrome Obstacle Chart - Type A - RWY 01       | LSZA AD 2.24.4 - 1  |
| Aerodrome Obstacle Chart - Type A - RWY 19       | LSZA AD 2.24.4 - 3  |
| SID RWY 01/19 - RNAV 1                           | LSZA AD 2.24.7 - 1  |
| SID RWY 01 - NON RNAV                            | LSZA AD 2.24.7 - 3  |
| SID RWY 19 - NON RNAV - High Performance         | LSZA AD 2.24.7 - 5  |
| STAR RWY 01/19 - NON RNAV                        | LSZA AD 2.24.9 - 1  |
| IAC IGS RWY 01 STEEP APCH 6.65° (CAT A/B)        | LSZA AD 2.24.10 - 1 |
| IAC LOC RWY 01 / Circling RWY 19 (CAT A/B)       | LSZA AD 2.24.10 - 3 |
| IAC Circling FOXTROT RWY 19 - Day only (CAT A/B) | LSZA AD 2.24.10 - 5 |
| IAC Circling CHARLIE RWY 19 (CAT A/B)            | LSZA AD 2.24.10 - 7 |

**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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