## LSZH AD 2.1 AERODROME LOCATION INDICATOR AND NAME

## LSZH - ZURICH

## LSZH AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

| | | |
|---|---|---|
| 1 | **ARP coordinates and site at Aerodrome** | 47 27 30N 008 32 53E<br>INT RWY 16/34, 10/28 |
| 2 | **Direction and distance from the CITY** | 9 km N Zurich |
| 3 | **Elevation/Reference temperature** | *1416 ft*<br>24.0° |
| 4 | **MAG VAR/Annual change** | 0°44' E (2005.0) / 0°08' decreasing |
| 5 | **AD Administration, address, telephone, telefax, telex, AFS** | Unique<br>(Flughafen Zürich AG)<br>P.O. Box<br>CH-8058 Zürich-Flughafen<br>TEL: +41 (0) 43 816 21 11 (Airport Authority)<br>+41 (0) 43 816 21 17 (GAC)<br>FAX: +41 (0) 43 816 47 57 (Airport Authority)<br>AFTN: LSZHYDYX<br><br>E-mail: airportauthority@unique.ch<br>Internet: http://www.flughafen-zuerich.ch |
| 6 | **Types of traffic permitted (IFR/VFR)** | IFR/VFR |
| 7 | **Remarks** | Geodetic undulation reference for ARP: 154.9 ft |

## LSZH AD 2.3 OPERATIONAL HOURS

| | | |
|---|---|---|
| 1 | **AD Administration** | H24 refer to LSZH AD 2.20 for Local flying restrictions |
| 2 | **Customs and immigration** | H24 |
| 3 | **Health and sanitation** | H24 |
| 4 | **AIS Briefing Office** | H24 |
| 5 | **ATS Reporting Office (ARO)** | H24 |
| 6 | **MET Briefing Office** | H24 |
| 7 | **ATS** | H24 |
| 8 | **Fuelling** | H24* |
| 9 | **Handling** | H24* |
| 10 | **Security** | H24 |
| 11 | **De-icing** | H24* |
| 12 | **Remarks** | *) reduced capacity during night ban |

## LSZH AD 2.4 HANDLING SERVICES AND FACILITIES

| | | |
|---|---|---|
| 1 | **Cargo handling facilities:** | All modern facilities available |
| 2 | **Fuel/oil types** | JET A1, AVGAS 100LL |
| 3 | **Fuelling facilities/capacity** | No limitations |
| 4 | **De-icing facilities** | OCT 01 - APR 30: De-icing assured<br>MAY 01 - SEP 30: De-icing on request, 60 min reaction time<br>- Remote de-icing: SR Technics<br>- On-stand de-icing: SR Technics and Jet Aviation<br>→ § 2.20.9 |
| 5 | **Hangar space available for visiting aircraft** | Restricted (only on short notice and O/R) |
| 6 | **Repair facilities for visiting aircraft** | Major aircraft repairs, major engine repairs:<br>A 300, 310, 319, 320, 321, 330, 340, ATR 42, 72, B-737, 747, 757, 767, 777, BAE 125, Beech Jet 400, Bo-105, C 208, 425, 441, Cessna Citation all series, CL 600, 601, 604, DC-8, 9, 10, DHC-6, F-28 MK0100, G-4, 5, King Air Models, L 1011, Lear 35, 36, MD-11, 80, MU-300, Premier 1, Rockwell 690, SA 319, Sabreliner 75 A, ACFT up to 5700 kg |
| 7 | **Remarks** | Oxygen and related servicing AVBL. |

## LSZH AD 2.5 PASSENGER FACILITIES

| | | |
|---|---|---|
| 1 | **Hotels** | In town; 12 dayrooms at the airport; Crew restrooms at the OPS centre |
| 2 | **Restaurants** | Various restaurants for crews and passengers |
| 3 | **Transportation** | Buses, railways, taxis, car rental agencies<br>Railway station at Zurich-Airport |
| 4 | **Medical facilities** | Airport Medical Centre: Open from 0800-2000 LT<br>Tel.: +41 (0) 43 816 60 00<br>Quarantine station (100 persons sitting);<br>Doctor O/R; 3 ambulances; Hospitals in town |
| 5 | **Bank and Post Office** | At AP and in town |
| 6 | **Tourist Office** | At AP and in town |
| 7 | **Remarks** | |

## LSZH AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

| | | |
|---|---|---|
| 1 | **AD category for fire fighting** | 9 |
| 2 | **Rescue equipment** | Available |
| 3 | **Capability for removal of disabled aircraft** | B-747 |
| 4 | **Remarks** | |

## LSZH AD 2.7 SEASONAL AVAILABILITY - CLEARING

| | | |
|---|---|---|
| 1 | **Type(s) of clearing equipment** | 6 snow blowers, 54 snow ploughs, 17 aircraft de-icer, 4 runway de-icer |
| 2 | **Clearance priorities** | Depends on situation |
| 3 | **Remarks** | Snow removal assured - all seasons |

## LSZH AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

| | | |
|---|---|---|
| 1 | **Apron surface and strength** | CONC - PCN 60 R/B/W/T |
| 2 | **Taxiway width, surface and strength** | WID: 27 m and 23 m<br>CONC - PCN 60 R/B/W/T |
| 3 | **ACL location and elevation** | Beginning RWY 10: *1391 ft*<br>Beginning RWY 28: *1416 ft*<br>Beginning RWY 14: *1402 ft*<br>Beginning RWY 32: *1402 ft*<br>Beginning RWY 16: *1390 ft*<br>Beginning RWY 34: *1385 ft*<br>Parking sector A, B: *1396 ft*<br>Parking sector C, D, E, G, T: *1390 ft*<br>Parking sector H, I: *1400 ft*<br>Parking sector F: *1407 ft*<br>Parking sector W: *1385 ft* |
| 4 | **Location of VOR checkpoints** | NIL |
| 5 | **INS checkpoints** | |

| NR | COORD WGS84 | NR | COORD WGS84 | NR | COORD WGS84 |
|---|---|---|---|---|---|
| | | E19 | 47 27 41.13N 008 33 30.54E | G01 | 47 26 51.81N 008 33 41.24E |
| A02 | 47 27 12.76N 008 33 31.06E | E20 | 47 27 37.76N 008 33 30.02E | G02 | 47 26 50.61N 008 33 42.23E |
| A03 | 47 27 13.78N 008 33 40.07E | E22 | 47 27 37.78N 008 33 29.66E | G03 | 47 26 49.36N 008 33 43.09E |
| A04 | 47 27 12.89N 008 33 29.14E | E23 | 47 27 41.18N 008 33 27.95E | G04 | 47 26 48.12N 008 33 43.94E |
| A05 | 47 27 13.92N 008 33 38.06E | E24 | 47 27 37.44N 008 33 27.88E | G05 | 47 26 46.68N 008 33 44.89E |
| A07 | 47 27 14.06N 008 33 36.04E | E25 | 47 27 41.23N 008 33 25.87E | G06 | 47 26 45.45N 008 33 45.73E |
| A08 | 47 27 13.17N 008 33 25.29E | E26 | 47 27 37.79N 008 33 26.54E | G07 | 47 26 44.28N 008 33 45.15E |
| A09 | 47 27 14.21N 008 33 34.02E | E27 | 47 27 41.50N 008 33 24.52E | G08 | 47 26 44.80N 008 33 46.78E |
| A10 | 47 27 13.31N 008 33 23.37E | E28 | 47 27 37.54N 008 33 25.81E | G11 | 47 26 46.49N 008 33 45.12E |
| A11 | 47 27 14.58N 008 33 28.77E | E29 | 47 27 41.33N 008 33 23.80E | G12 | 47 26 45.32N 008 33 44.98E |
| A13 | 47 27 14.73N 008 33 26.76E | E32 | 47 27 38.19N 008 33 23.24E | | |
| A15 | 47 27 14.87N 008 33 24.74E | E33 | 47 27 41.86N 008 33 21.79E | | |
| A17 | 47 27 15.01N 008 33 22.72E | E34 | 47 27 38.01N 008 33 22.52E | H11 | 47 27 20.68N 008 33 41.82E |
| A43 | 47 27 13.79N 008 33 39.83E | E35 | 47 27 41.76N 008 33 21.08E | H12 | 47 27 21.01N 008 33 37.44E |
| A44 | 47 27 12.55N 008 33 34.00E | E36 | 47 27 37.98N 008 33 21.12E | H13 | 47 27 21.25N 008 33 34.14E |
| A45 | 47 27 13.99N 008 33 37.11E | E37 | 47 27 41.97N 008 33 19.72E | H81 | 47 27 20.24N 008 33 42.75E |
| A46 | 47 27 12.80N 008 33 30.42E | E42 | 47 27 38.29N 008 33 19.08E | H82 | 47 27 19.13N 008 33 42.57E |
| A47 | 47 27 14.18N 008 33 34.38E | E43 | 47 27 41.86N 008 33 17.62E | H85 | 47 27 20.87N 008 33 38.27E |
| A48 | 47 27 13.03N 008 33 27.21E | E44 | 47 27 38.23N 008 33 16.98E | H86 | 47 27 20.99N 008 33 36.63E |
| A49 | 47 27 14.40N 008 33 31.27E | E45 | 47 27 42.11N 008 33 15.57E | H87 | 47 27 21.10N 008 33 34.99E |
| A50 | 47 27 13.26N 008 33 24.01E | E46 | 47 27 38.54N 008 33 15.64E | H88 | 47 27 21.22N 008 33 33.35E |
| A51 | 47 27 14.60N 008 33 28.54E | E47 | 47 27 42.10N 008 33 14.17E | | |
| A53 | 47 27 14.79N 008 33 25.80E | E48 | 47 27 38.29N 008 33 14.91E | I01 | 47 27 21.70N 008 33 27.50E |
| A5M | 47 27 14.96N 008 33 25.99E | E49 | 47 27 42.06N 008 33 13.47E | I02 | 47 27 21.87N 008 33 25.00E |
| A55 | 47 27 14.99N 008 33 23.08E | E50 | 47 27 38.92N 008 33 12.91E | I03 | 47 27 22.15N 008 33 21.23E |
| A57 | 47 27 15.17N 008 33 20.50E | E51 | 47 27 42.68N 008 33 10.90E | I04 | 47 27 22.31N 008 33 18.91E |
| A59 | 47 27 15.17N 008 33 20.50E | E52 | 47 27 38.75N 008 33 12.19E | I05 | 47 27 22.46N 008 33 16.75E |
| | | E53 | 47 27 42.41N 008 33 10.16E | I21 | 47 27 21.65N 008 33 28.12E |

| | | | | | |
|---|---|---|---|---|---|
| | | E54 | 47 27 38.88N 008 33 10.82E | I90 | 47 27 20.39N 008 33 26.84E |
| B2M | 47 27 01.05N 008 33 30.54E | E55 | 47 27 42.80N 008 33 08.83E | I91 | 47 27 21.13N 008 33 28.08E |
| B3M | 47 27 01.21N 008 33 28.33E | E56 | 47 27 39.15N 008 33 08.78E | I92 | 47 27 20.57N 008 33 24.37E |
| B4M | 47 27 01.39N 008 33 26.17E | E58 | 47 27 38.64N 008 33 06.58E | I93 | 47 27 21.31N 008 33 25.61E |
| B5M | 47 27 02.96N 008 33 24.10E | E62 | 47 27 39.91N 008 33 05.68E | I94 | 47 27 20.86N 008 33 20.27E |
| B31 | 47 27 05.00N 008 33 32.37E | E63 | 47 27 42.94N 008 33 04.68E | I95 | 47 27 21.61N 008 33 21.51E |
| B33 | 47 27 05.25N 008 33 28.84E | E64 | 47 27 41.13N 008 33 04.63E | I96 | 47 27 21.04N 008 33 17.80E |
| B35 | 47 27 05.98N 008 33 25.68E | E65 | 47 27 43.57N 008 33 03.94E | I97 | 47 27 21.78N 008 33 19.04E |
| B37 | 47 27 06.14N 008 33 23.55E | E66 | 47 27 42.25N 008 33 03.70E | I98 | 47 27 22.14N 008 33 16.50E |
| B39 | 47 27 05.36N 008 33 24.43E | E67 | 47 27 42.36N 008 33 04.05E | | |
| | | E68 | 47 27 43.32N 008 33 02.97E | T42 | 47 26 37.08N 008 33 59.56E |
| C01 | 47 26 57.38N 008 33 27.17E | E69 | 47 27 44.39N 008 33 02.23E | T43 | 47 26 36.41N 008 33 58.23E |
| C02R | 47 26 56.92N 008 33 30.30E | | | T44 | 47 26 35.52N 008 33 56.36E |
| C02F | 47 26 56.15N 008 33 28.12E | F60 | 47 27 19.95N 008 33 52.60E | T45 | 47 26 46.42N 008 33 59.74E |
| C03R | 47 26 55.69N 008 33 31.24E | F61 | 47 27 19.83N 008 33 54.18E | T46 | 47 26 45.08N 008 34 00.31E |
| C03F | 47 26 54.92N 008 33 29.00E | F62 | 47 27 19.71N 008 33 55.78E | T50 | 47 26 45.96N 008 33 48.89E |
| C04R | 47 26 54.46N 008 33 32.16E | F63 | 47 27 19.60N 008 33 57.36E | T51 | 47 26 46.69N 008 33 49.33E |
| C04F | 47 26 53.69N 008 33 29.95E | F64 | 47 27 19.49N 008 33 58.96E | T52 | 47 26 46.94N 008 33 50.29E |
| C05R | 47 26 53.24N 008 33 33.08E | F65 | 47 27 19.38N 008 34 00.54E | T53 | 47 26 47.99N 008 33 52.60E |
| C05F | 47 26 52.46N 008 33 30.84E | F66 | 47 27 19.26N 008 34 02.14E | T54 | 47 26 47.04N 008 33 52.30E |
| C11 | 47 26 56.75N 008 33 27.64E | F67 | 47 27 19.15N 008 34 03.72E | T55 | 47 26 48.69N 008 33 57.08E |
| C21 | 47 26 54.85N 008 33 29.06E | F70 | 47 27 19.99N 008 33 52.24E | T56 | 47 26 48.33N 008 33 53.50E |
| C22 | 47 26 52.75N 008 33 30.62E | F71 | 47 27 19.84N 008 33 54.42E | T57 | 47 26 43.04N 008 33 54.57E |
| | | F72 | 47 27 19.68N 008 33 56.61E | T58 | 47 26 41.50N 008 33 55.68E |
| D01 | 47 26 48.62N 008 33 34.70E | F73 | 47 27 19.53N 008 33 58.79E | | |
| D02 | 47 26 47.24N 008 33 35.13E | F74 | 47 27 19.37N 008 34 00.97E | W01 | 47 26 53.01N 008 32 56.85E |
| D03 | 47 26 45.99N 008 33 35.99E | F75 | 47 27 19.22N 008 34 03.16E | W02 | 47 26 53.64N 008 32 58.82E |
| D04 | 47 26 44.74N 008 33 36.84E | F76 | 47 27 19.04N 008 34 05.64E | W03 | 47 26 54.31N 008 33 00.96E |
| D05 | 47 26 43.50N 008 33 37.70E | F77 | 47 27 18.88N 008 34 07.82E | W04 | 47 26 55.07N 008 33 03.36E |
| D06 | 47 26 42.25N 008 33 38.56E | F78 | 47 27 18.73N 008 34 10.01E | W05 | 47 26 55.63N 008 33 05.13E |
| D07 | 47 26 41.00N 008 33 39.42E | | | W21 | 47 26 53.20N 008 32 57.43E |
| D08 | 47 26 39.76N 008 33 40.28E | | | W22 | 47 26 54.19N 008 33 00.57E |
| D11 | 47 26 46.53N 008 33 35.30E | | | W23 | 47 26 55.30N 008 33 04.07E |
| D12 | 47 26 44.29N 008 33 36.84E | | | | |
| D13 | 47 26 42.17N 008 33 38.30E | | | | |
| D14 | 47 26 40.04N 008 33 39.76E | | | | |
| D21 | 47 26 46.57N 008 33 35.58E | | | | |
| D22 | 47 26 43.78N 008 33 37.50E | | | | |
| D23 | 47 26 40.93N 008 33 39.46E | | | | |
| | | | | ARP | 47 27 29.50N 008 32 52.80E |

**6 Remarks**

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

| | | |
|---|---|---|
| 1 | **Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands** | **Dock A, B and E**<br>Safegate Aircraft Docking Guidance System "Safedock"<br><br>**Routine docking manoeuvre:**<br>• Check for correct ACFT type displayed (ICAO designator)<br>• Do not proceed beyond the bridge unless the floating arrows have been superseded by the yellow centre line bar<br>• Red arrow shows direction to turn<br>• Yellow arrow shows position in relation to centre line<br>• The absence of any direction arrow indicates the aircraft on centre line<br>• Display of digital countdown in meters starts 20 m before stop position<br>• 12 m before stop position the closing rate will be indicated by turning off one row of the yellow centre line bar per 0.5 metres covered by the ACFT<br>• At the stop position the display will show "STOP" with red light squares, followed by "OK"<br><br>In case of malfunction request assistance from APRON CONTROL<br><br>Detailed system description, docking procedure, fault messages and safety procedures with corresponding graphics is available under:<br>http://www.unique.ch/manuals<br><br>**Stop at parking positions C, D, E** (65, 66, 68 and 69), **F, G, H, I, T, W**:<br>Stop bar markings are located to the left with a 90 degree angle to the guide lines. Aircraft has to be stopped with the pilot seat abeam the stop-bar. (REF: LSZH AD 2.24.3 - 1, inset) |
| 2 | **RWY/TWY markings and LGT** | RWY Centre lines, thresholds, touchdown zone; Taxiway centre line, holding positions, taxi-out lines; apron heliport ICAO markings (REF: LSZH AD 2.24.1 - 1) |
| 3 | **Stop bars** | LIH R:<br>LSZH AD 2.24.3 - 1 and LSZH AD 2.24.3 - 3 |
| 4 | **Remarks** | RWY-16: Turn Pad at THR 16. Turns are executed from left to right only. (REF: LSZH AD 2.24.1 - 1) |

## LSZH AD 2.10 AERODROME OBSTACLES

| In approach/TKOF areas | | | | In circling area and at aerodrome | | | |
|---|---|---|---|---|---|---|---|
| 1 | | | | 2 | | | 3 |
| RWY/Area affected | Obstacle type Elevation Markings/LGT | | Co-ordinates | Obstacle type Elevation Markings/LGT | | Co-ordinates | RMK |
| a | b | | c | a | | b | c |
| | | *ft* | | | *ft* | | |
| AOC 16 | Tower/Mast LGTD A0116/01 | *1457* | 47 26 18 N 008 33 52 E | Crane/Cranes marked/LGTD A0085/01 | *1496* | 47 27 35 N 008 33 33 E | |
| AOC 16 | Crane/Cranes marked/LGTD A0157/01 | *1539* | 47 25 33 N 008 34 05 E | Building LGTD A0096/01 | *1483* | 47 27 27 N 008 34 25 E | |
| AOC 32 | Tree/Trees | *1476* | 47 29 25 N 008 31 27 E | Pole marked/LGTD A0010/02 | *2198* | 47 26 32 N 008 43 13 E | |
| AOC 32 | Tree/Trees | *1460* | 47 29 13 N 008 31 54 E | Building LGTD A0390/02 | *1690* | 47 24 49 N 008 33 10 E | |
| AOC 32 | Tree/Trees | *1450* | 47 29 11 N 008 31 56 E | Crane/Cranes marked/LGTD A0243/01 | *1581* | 47 26 12 N 008 34 17 E | |
| AOC 34 | Tree/Trees | *1532* | 47 29 35 N 008 31 43 E | Crane/Cranes marked/LGTD A0087/01 | *1768* | 47 24 49 N 008 33 09 E | |
| AOC 34 | Tree/Trees | *1473* | 47 29 03 N 008 31 42 E | Radar marked/LGTD A0393/02 | *1526* | 47 27 52 N 008 33 03 E | |
| AOC 34 | Tree/Trees | *1572* | 47 29 55 N 008 31 24 E | Antenna marked/LGTD A0045/01 | *1539* | 47 27 06 N 008 34 17 E | |
| AOC 16 | Antenna | *1398* | 47 26 37 N 008 33 29 E | Church A0178/00 | *1581* | 47 25 56 N 008 34 38 E | |
| AOC 28 | Building LGTD | *1434* | 47 27 29 N 008 31 42 E | Antenna LGTD A0194/01 | *1604* | 47 23 27 N 008 31 14 E | |
| AOC 28 | Building | *1437* | 47 27 36 N 008 31 41 E | Antenna marked/LGTD A0281/00 | *1401* | 47 26 59 N 008 33 08 E | |
| AOC 28 | Building | *1440* | 47 27 36 N 008 31 37 E | Antenna LGTD A0285/00 | *1591* | 47 26 56 N 008 34 33 E | |
| AOC 14 | Building LGTD | *1457* | 47 27 16 N 008 34 14 E | Crane/Cranes marked/LGTD A0283/00 | *1683* | 47 25 49 N 008 32 43 E | |
| AOC 16 | Building | *1411* | 47 26 30 N 008 33 29 E | Crane/Cranes marked/LGTD A0332/00 | *1555* | 47 26 46 N 008 33 00 E | |
| AOC 16 | Building | *1417* | 47 26 28 N 008 33 28 E | Antenna marked/LGTD | *1591* | 47 26 59 N 008 34 26 E | |
| AOC 10 | Building | *1434* | 47 27 20 N 008 34 30 E | Tower/Mast LGTD | *1683* | 47 26 30 N 008 34 55 E | |

| In approach/TKOF areas | | | | In circling area and at aerodrome | | | |
|---|---|---|---|---|---|---|---|
| 1 | | | | 2 | | | 3 |
| RWY/Area affected | Obstacle type Elevation Markings/LGT | | Co-ordinates | Obstacle type Elevation Markings/LGT | | Co-ordinates | RMK |
| a | b | | c | a | | b | c |
| | | *ft* | | | *ft* | | |
| AOC 16 | Building | *1421* | 47 26 24 N 008 33 45 E | Crane/Cranes marked/LGTD | *1516* | 47 23 35 N 008 30 29 E | |
| AOC 16 | Building | *1427* | 47 26 21 N 008 33 48 E | Tower LGTD | *1550* | 47 27 14 N 008 33 28 E | |
| AOC 16 | Building | *1434* | 47 26 19 N 008 33 45 E | Antenna LGTD | *1473* | 47 28 43 N 008 31 47 E | |
| AOC 10 | Building | *1493* | 47 27 24 N 008 34 46 E | Antenna | *1703* | 47 28 16 N 008 30 11 E | |
| AOC 16 | Building | *1447* | 47 26 17 N 008 33 50 E | Crane/Cranes marked/LGTD A0026/01 | *1532* | 47 27 30 N 008 34 25 E | |
| AOC 16 | Building | *1447* | 47 26 17 N 008 33 49 E | Antenna marked/LGTD | *1699* | 47 25 22 N 008 32 14 E | |
| AOC 16 | Building | *1440* | 47 26 16 N 008 33 39 E | Building LGTD | *1476* | 47 27 29 N 008 34 24 E | |
| AOC 16 | Building | *1444* | 47 26 17 N 008 33 42 E | | | | |
| AOC 10 | Building | *1509* | 47 27 14 N 008 35 02 E | Antenna LGTD | *1532* | 47 26 43 N 008 32 57 E | |
| AOC 16 | Building LGTD | *1506* | 47 25 44 N 008 33 52 E | Tree/Trees | *1611* | 47 26 31 N 008 34 20 E | |
| AOC 16 | Building | *1512* | 47 25 45 N 008 34 12 E | Building | *1532* | 47 27 13 N 008 34 13 E | |
| AOC 16 | Building | *1552* | 47 25 29 N 008 34 29 E | Antenna LGTD | *1545* | 47 27 14 N 008 33 52 E | |
| AOC 16 | Building | *1558* | 47 25 27 N 008 34 30 E | Antenna LGTD | *1421* | 47 27 26 N 008 32 44 E | |
| AOC 28 | Tower/Mast | *1417* | 47 27 30 N 008 31 53 E | Crane/Cranes marked/LGTD A0449/00 | *1535* | 47 23 32 N 008 30 50 E | |
| AOC 28 | Tower/Mast | *1417* | 47 27 38 N 008 31 48 E | Crane/Cranes marked/LGTD A0450/00 | *1568* | 47 29 33 N 008 32 52 E | |
| AOC 14 | Tower/Mast LGTD | *1493* | 47 27 15 N 008 34 20 E | Crane/Cranes marked/LGTD A0090/01 | *1627* | 47 27 00 N 008 33 47 E | |
| AOC 10 | Tower/Mast | *1437* | 47 27 20 N 008 34 30 E | Crane/Cranes marked/LGTD A0097/01 | *1782* | 47 28 11 N 008 35 01 E | |
| AOC 10 | Tower/Mast | *1437* | 47 27 20 N 008 34 30 E | Crane/Cranes LGTD B0131/02 | *2130* | 47 20 53 N 008 28 05 E | |
| AOC 10 | Tower/Mast LGTD | *1572* | 47 27 25 N 008 35 24 E | Crane/Cranes marked/LGTD A0107/02 | *1582* | 47 27 08 N 008 33 39 E | |
| AOC 10 | Tower/Mast LGTD | *1673* | 47 27 10 N 008 36 13 E | Pole LGTD A0289/02 | *1451* | 47 27 38 N 008 33 38 E | |

| In approach/TKOF areas | | | | In circling area and at aerodrome | | | |
|---|---|---|---|---|---|---|---|
| 1 | | | | 2 | | | 3 |
| RWY/Area affected | Obstacle type Elevation Markings/LGT | | Co-ordinates | Obstacle type Elevation Markings/LGT | | Co-ordinates | RMK |
| a | b | | c | a | | b | c |
| | | *ft* | | | *ft* | | |
| AOC 28 | Tree/Trees | *1417* | 47 27 31 N<br>008 32 04 E | Pole<br>LGTD<br>A0288/02 | *1497* | 47 27 41 N<br>008 33 06 E | |
| AOC 28 | Tree/Trees | *1457* | 47 27 37 N<br>008 31 32 E | Antenna<br>marked/LGTD<br>A0316/02 | *1542* | 47 27 12 N<br>008 34 05 E | |
| AOC 10 | Tree/Trees | *1447* | 47 27 26 N<br>008 34 33 E | Antenna<br>LGTD<br>A0041/03 | *1533* | 47 26 12 N<br>008 34 17 E | |
| AOC 28 | Tree/Trees | *1496* | 47 27 33 N<br>008 31 06 E | Antenna<br>marked<br>A0391/02 | *1533* | 47 27 32 N<br>008 34 34 E | |
| AOC 28 | Tree/Trees | *1493* | 47 27 33 N<br>008 31 08 E | Antenna<br>marked<br>A0385/02 | *1441* | 47 29 03 N<br>008 32 12 E | |
| AOC 28 | Tree/Trees | *1473* | 47 27 33 N<br>008 31 10 E | Antenna<br>marked<br>A0387/02 | *1434* | 47 27 43 N<br>008 33 59 E | |
| AOC 10 | Tree/Trees | *1463* | 47 28 18 N<br>008 34 37 E | Building<br>A0264/04 | *1605* | 47 23 08 N<br>008 31 52 E | |
| AOC 28 | Tree/Trees | *1503* | 47 27 34 N<br>008 31 05 E | | | | |
| AOC 10 | Tree/Trees | *1470* | 47 27 18 N<br>008 34 41 E | | | | |
| AOC 10 | Tree/Trees | *1480* | 47 27 17 N<br>008 34 41 E | Pole<br>LGTD<br>A0359/02 | *1444* | 47 27 32 N<br>008 33 39 E | |
| AOC 10 | Tree/Trees | *1483* | 47 27 25 N<br>008 34 45 E | Pole<br>LGTD<br>A0360/02 | *1421* | 47 27 41 N<br>008 32 47 E | |
| AOC 10 | Tree/Trees | *1486* | 47 27 26 N<br>008 34 46 E | Pole<br>LGTD<br>A0361/02 | *1500* | 47 27 58 N<br>008 32 56 E | |
| AOC 16 | Tree/Trees | *1440* | 47 26 16 N<br>008 33 44 E | Crane/Cranes<br>marked/LGTD<br>A0128/01 | *1594* | 47 25 54 N<br>008 33 36 E | |
| AOC 10 | Tree/Trees | *1499* | 47 27 26 N<br>008 34 54 E | Crane/Cranes<br>marked/LGTD<br>A0153/01 | *1624* | 47 27 10 N<br>008 33 59 E | |
| AOC 16 | Tree/Trees | *1467* | 47 26 16 N<br>008 33 53 E | Crane/Cranes<br>marked/LGTD<br>A0163/01 | *1463* | 47 27 22 N<br>008 33 44 E | |
| AOC 16 | Tree/Trees | *1460* | 47 26 15 N<br>008 33 51 E | Crane/Cranes<br>marked/LGTD<br>A0281/01 | *1598* | 47 25 39 N<br>008 33 10 E | |
| AOC 10 | Tree/Trees | *1503* | 47 27 26 N<br>008 34 55 E | Crane/Cranes<br>marked/LGTD<br>A0288/01 | *1601* | 47 25 38 N<br>008 33 18 E | |

| In approach/TKOF areas | | | | In circling area and at aerodrome | | | |
|---|---|---|---|---|---|---|---|
| 1 | | | | 2 | | | 3 |
| RWY/Area affected | Obstacle type Elevation Markings/LGT | | Co-ordinates | Obstacle type Elevation Markings/LGT | | Co-ordinates | RMK |
| a | b | | c | a | | b | c |
| | | *ft* | | | *ft* | | |
| AOC 28 | Tree/Trees | *1588* | 47 27 32 N 008 30 43 E | Crane/Cranes A0392/04 | *2169* | 47 22 52 N 008 34 29 E | |
| AOC 28 | Tree/Trees | *1558* | 47 27 40 N 008 30 47 E | Building LGTD A0341/01 | *1480* | 47 27 30 N 008 34 23 E | |
| AOC 28 | Tree/Trees | *1621* | 47 27 31 N 008 30 40 E | Pole marked/LGTD A0348/01 | *1772* | 47 27 47 N 008 35 51 E | |
| AOC 28 | Tree/Trees | *1604* | 47 27 37 N 008 30 40 E | Crane/Cranes marked/LGTD A0050/02 | *1654* | 47 25 28 N 008 35 01 E | |
| AOC 10 | Tree/Trees | *1512* | 47 27 14 N 008 35 03 E | Crane/Cranes marked/LGTD A0198/02 | *1549* | 47 28 37 N 008 30 04 E | |
| AOC 16 | Tree/Trees | *1480* | 47 26 03 N 008 33 43 E | Crane/Cranes marked/LGTD A0270/02 | *1647* | 47 26 46 N 008 35 05 E | |
| AOC 10 | Tree/Trees | *1545* | 47 27 25 N 008 35 22 E | Pole LGTD A0362/02 | *1467* | 47 27 47 N 008 33 21 E | |
| AOC 16 | Tree/Trees | *1496* | 47 25 58 N 008 34 03 E | Antenna marked/LGTD A0316/02 | *1542* | 47 27 12 N 008 34 05 E | |
| AOC 28 | Tree/Trees | *1634* | 47 27 34 N 008 30 22 E | | | | |
| AOC 10 | Tree/Trees | *1562* | 47 27 25 N 008 35 23 E | | | | |
| AOC 10 | Tree/Trees | *1594* | 47 27 09 N 008 35 52 E | | | | |
| AOC 10 | Tree/Trees | *1601* | 47 27 09 N 008 35 53 E | | | | |
| AOC 10 | Tree/Trees | *1614* | 47 27 08 N 008 35 54 E | | | | |
| AOC 10 | Tree/Trees | *1617* | 47 27 05 N 008 35 56 E | | | | |
| AOC 10 | Tree/Trees | *1624* | 47 27 04 N 008 35 57 E | | | | |
| AOC 10 | Tree/Trees | *1631* | 47 27 01 N 008 36 01 E | | | | |
| AOC 10 | Tree/Trees | *1634* | 47 27 13 N 008 36 14 E | | | | |
| AOC 10 | Tree/Trees | *1660* | 47 27 11 N 008 36 14 E | | | | |
| AOC 28 | Tree/Trees | *1732* | 47 27 27 N 008 29 27 E | | | | |
| AOC 10 | Tree/Trees | *1640* | 47 27 13 N 008 36 15 E | | | | |

| In approach/TKOF areas | | | | In circling area and at aerodrome | | | |
|---|---|---|---|---|---|---|---|
| 1 | | | | 2 | | | 3 |
| RWY/Area affected | Obstacle type Elevation Markings/LGT | | Co-ordinates | Obstacle type Elevation Markings/LGT | | Co-ordinates | RMK |
| a | b | | c | a | | b | c |
| | | *ft* | | | *ft* | | |
| AOC 10 | Tree/Trees | *1670* | 47 27 11 N 008 36 14 E | | | | |
| AOC 10 | Tree/Trees | *1683* | 47 27 10 N 008 36 16 E | | | | |
| AOC 28 | Tree/Trees | *1749* | 47 27 26 N 008 29 23 E | | | | |
| AOC 34 | Tree/Trees | *1562* | 47 29 53 N 008 31 29 E | | | | |
| AOC 28 | Tree/Trees | *1913* | 47 27 45 N 008 27 13 E | | | | |
| AOC 32 | Tree/Trees | *1591* | 47 30 38 N 008 29 36 E | | | | |
| AOC 32 | Tree/Trees | *1640* | 47 30 48 N 008 29 44 E | | | | |
| AOC 10 | Bridge | *1463* | 47 27 27 N 008 34 41 E | | | | |
| AOC 10 | Crane/Cranes | *1516* | 47 27 22 N 008 35 15 E | | | | |
| AOC 34 | Antenna A00436/03 | *1408* | 47 28 45 N 008 32 01 E | Crane/Cranes marked/LGTD A0019/03 | *1569* | 47 25 59 N 008 34 17 E | |
| AOC 16 | Crane/Cranes marked/LGTD A0351/02 | *1539* | 47 25 36 N 008 34 13 E | Crane/Cranes marked/LGTD A0350/02 | *1638* | 46 13 26 N 006 07 06 E | |
| AOC 16 | Building A0408/02 | *1414* | 47 26 44 N 008 33 41 E | Crane/Cranes marked/LGTD A0058/03 | *1588* | 47 26 31 N 008 33 48 E | |
| AOC 16 | Mast A0416/02 | *1424* | 47 26 26 N 008 33 38 E | Antenna LGTD A0087/03 | *2074* | 47 22 53 N 008 43 52 E | |
| AOC 16 | Building A0410/02 | *1437* | 47 26 17 N 008 33 40 E | Crane/Cranes marked/LGTD A0092/03 | *1562* | 47 28 43 N 008 30 05 E | |
| AOC 16 | Tree/Trees A0411/02 | *1447* | 47 26 19 N 008 33 50 E | Antenna A0104/03 | *2428* | 47 22 12 N 008 35 18 E | |
| AOC 16 | Tree/Trees A0412/02 | *1457* | 47 26 17 N 008 33 54 E | Crane/Cranes marked/LGTD A0132/03 | *1516* | 47 27 45 N 008 31 38 E | |
| AOC 16 | Tree/Trees A0413/02 | *1464* | 47 26 12 N 008 33 53 E | Antenna LGTD B0345/04 | *1398* | 47 27 05 N 008 33 07 E | |
| AOC 16 | Tree/Trees A0414/02 | *1483* | 47 26 11 N 008 33 58 E | | | | |
| AOC 16 | Tree/Trees A0415/02 | *1503* | 47 25 58 N 008 34 03 E | | | | |
| AOC 16 | Building LGTD A0472/04 | *1418* | 47 26 25 N 008 33 28 E | Crane/Cranes marked/LGTD A0176/03 | *1651* | 47 23 50 N 008 35 53 E | |

| In approach/TKOF areas | | | | In circling area and at aerodrome | | | |
|---|---|---|---|---|---|---|---|
| 1 | | | | 2 | | | 3 |
| RWY/Area affected | Obstacle type Elevation Markings/LGT | | Co-ordinates | Obstacle type Elevation Markings/LGT | | Co-ordinates | RMK |
| a | b | | c | a | | b | c |
| | | *ft* | | | *ft* | | |
| AOC 10 | Building | *1467* | 47 27 28 N<br>008 34 25 E | Antenna<br>A0325/03 | *1605* | 47 22 19 N<br>008 31 38 E | |
| AOC 10 | Building | *1460* | 47 27 18 N<br>008 34 20 E | Crane/Cranes marked/LGTD<br>A0326/03 | *1549* | 47 28 37 N<br>008 30 04 E | |
| AOC 16 | Tree/Trees | *1469* | 47 26 29 N<br>008 33 24 E | Tower<br>LGTD<br>A0428/03 | *2382* | 47 22 12 N<br>008 35 57 E | |
| AOC 14 | Anemometer<br>LGTD<br>A0057/05 | *1444* | 47 27 30 N<br>008 34 01 E | Pole<br>LGTD<br>A0467/03 | *1506* | 47 26 38 N<br>008 33 41 E | |
| | | | | Building<br>LGTD<br>B0615/03 | *1529* | 47 26 34 N<br>008 33 51 E | |
| | | | | Building<br>LGTD<br>A0392/03 | *1470* | 47 26 24 N<br>008 33 52 E | |
| | | | | Building<br>LGTD<br>A0393/03 | *1487* | 47 26 23 N<br>008 33 53 E | |
| | | | | Pole<br>LGTD<br>A0391/03 | *2340* | 47 21 59 N<br>008 35 36 E | |
| | | | | Pole<br>LGTD<br>A0390/03 | *2264* | 47 22 13 N<br>008 36 20 E | |
| | | | | Crane/Cranes marked/LGTD<br>A0432/03 | *1588* | 47 25 51 N<br>008 34 33 E | |
| | | | | Crane/Cranes marked/LGTD<br>B0634/03 | *1615* | 47 26 29 N<br>008 34 23 E | |
| | | | | Pole<br>LGTD<br>A0468/03 | *1474* | 47 26 36 N<br>008 33 38 E | |
| | | | | Antenna<br>A0170/04 | *1434* | 47 27 43 N<br>008 33 59 E | |
| | | | | Crane/Cranes marked/LGTD<br>A0209/04 | *1598* | 47 25 46 N<br>008 34 41 E | |
| | | | | Anemometer<br>LGTD<br>A0046/05 | *1421* | 47 27 09 N<br>008 32 55 E | |
| Refer also to AOC 10/28, LSZH AD 2.24.4 - 1,<br>AOC 16/34, LSZH AD 2.24.4 - 3,<br>AOC 32, LSZH AD 2.24.4 - 5,<br>AOC 14, LSZH AD 2.24.4 - 7 | | | | | | | |

## LSZH AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

| | | |
|---|---|---|
| 1 | **Associated MET Office** | Zurich-Airport |
| 2 | **Hours of service** | H24 |
| 3 | **Office responsible for TAF preparation**<br>**Periods of validity** | Zurich<br>9 and 18 hours |
| 4 | **Type of landing forecast** | Trend |
| 5 | **Briefing/consultation provided** | Briefing officer, self-briefing system, telephone |
| 6 | **Flight documentation**<br>**Language(s) used** | Fr, En, Ge |
| 7 | **Charts and other information available for briefing or consultation** | All area forecast charts available worldwide |
| 8 | **Supplementary equipment available for providing information** | Weather Radar, Satellite Pictures |
| 9 | **ATS units provided with information** | Zurich |
| 10 | **Additional information (limitation of service, etc.)** | TEL: 0900 162 737<br>MWO |

## LSZH AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

| **Designations RWY NR** | **TRUE and MAG* BRG** | **Dimensions of RWY (m)** | **Strength (PCN) and surface of RWY and SWY** REF AD 1.1.6 | **THR COORD** | **THR elevation and highest elevation of TDZ of precision APP RWY** | **Slope of RWY-SWY** |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16 | 155° GEO<br>154° MAG | 3700 x 60 | CONC<br>PCN 60 R/B/W/T | 47 28 32.57N<br>008 32 09.36E | *1390 ft* | Refer to LSZH AOC 16/34/32, 10/28 |
| 34 | 335° GEO<br>334° MAG | | | 47 26 57.40N<br>008 33 14.90E | *1388 ft* | |
| 10 | 096° GEO<br>095° MAG | 2500 x 60 | CONC<br>PCN 60 R/B/W/T | 47 27 32.19N<br>008 32 14.91E | *1391 ft* | |
| 28 | 276° GEO<br>275° MAG | | | 47 27 23.76N<br>008 34 13.61E | *1416 ft* | |
| 14 | 137° GEO<br>137° MAG | 3300 x 60 | CONC<br>PCN 60 R/B/W/T | 47 28 55.54N<br>008 32 09.85E | *1402 ft* | |
| 32 | 317° GEO<br>317° MAG | | | 47 27 40.66N<br>008 33 52.04E | *1402 ft* | |

* VAR (05.0): 0° 44' E

| **Designations RWY NR** | **SWY dimensions (m)** | **CWY dimensions (m)** | **Strip dimensions (M)** | **OFZ** | **Remarks** REF: AD 1.1, § 1.1.6.2.4.2 |
|---|---|---|---|---|---|
| 1 | 8 | 9 | 10 | 11 | 12 |
| 16 | | 60 | 3820 x 300 | | Precision approach runway CAT III b<br>FCT: 0.81/*0.79* last 600 m not grooved |
| 34 | | 60 | 3820 x 300 | | Precision approach runway CAT I<br>FCT: 0.81/*0.79* first 600 m not grooved |
| 10 | | 60 | 2620 x 150 | | Non-instrument runway<br>FCT: 0.87/*0.85* grooved |

| Designations RWY NR | SWY dimensions (m) | CWY dimensions (m) | Strip dimensions (M) | OFZ | Remarks REF: AD 1.1, § 1.1.6.2.4.2 |
|---|---|---|---|---|---|
| 1 | 8 | 9 | 10 | 11 | 12 |
| 28 | | 60 | 2620 x 150 | | Non-instrument runway FCT: 0.87/0.85 grooved |
| 14 | | -- | 3420 x 300 | | Precision approach runway CAT III b FCT: 0.82/0.79 grooved |
| 32 | | 60 | 3420 x 300 | | Non-instrument runway FCT: 0.82/0.79 grooved |

## LSZH AD 2.13 DECLARED DISTANCES

| RWY Designator | TORA (m) | TODA (m) | ASDA (m) | LDA (m) | Remarks |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 16 | 3700 | 3760 | 3700 | 3700 | Full length |
| | 3000 | 3060 | 3000 | Not applicable | Intersection E3 |
| 34 | 3700 | 3760 | 3700 | 3230 | Full length |
| | 3270 | 3330 | 3270 | Not applicable | Intersection E8 |
| | 3270 | 3330 | 3270 | Not applicable | Intersection R8 |
| | 2570 | 2630 | 2570 | Not applicable | Intersection E7 |
| | 2570 | 2630 | 2570 | Not applicable | Intersection R7 |
| 10 | 2500 | 2560 | 2500 | 2500 | Full length |
| 28 | 2500 | 2560 | 2500 | 2500 | Full length |
| | 1900 | 1960 | 1900 | Not applicable | Intersection K |
| 14 | 3300 | 3360 | 3300 | 3150 | Full length (Access only with backtrack from INT G) |
| | 2700 | 2760 | 2700 | Not applicable | Intersection G |
| 32 | 3300 | 3360 | 3300 | 3300 | Full length |
| | 2700 | 2760 | 2700 | Not applicable | Intersection H2 |

## LSZH AD 2.14 APPROACH AND RUNWAY LIGHTING

| RWY Designator | APCH LGT type LEN INTST | THR LGT colour WBAR | VASIS (MEHT) PAPI | TDZ length | RWY Centre Line LGT Length, spacing, colour, INTST | RWY edge LGT LEN, spacing, colour, INTST | RWY End LGT colour WBAR | SWY LGT LEN (m) colour | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 16 | Calvert LIH; CAT II/III LIH; Simple LIL 420 m | CAT III LIH/LIL THR ID | 3.0° (20.57 m) | LIH 1200 m | 0-2800 m VRB LIH W, 2800-3400 m VRB LIH R/W 3400-3700 m VRB LIH R | LIH/LIL YCZ: 600 m | R | | |
| 34 | Calvert LIH/LIL 780 m | LIH/LIL THR ID | 3.3° (17.60 m) | | | LIH/LIL YCZ: 600 m | R | | |
| 10 | Simple LIL | LIL | 3.5° (22.18 m) | | 0-1600 m VRB LIH W, 1600-2200 m VRB LIH R/W 2200-2500 m VRB LIH R | LIL YCZ: 600 m | R | | |
| 28 | Calvert LIH 630 m Simple LIL 420 m | LIH/LIL THR ID | 3.3° (18.8 m) | | | LIH/LIL YCZ: 600 m | R | | |

| RWY Designator | APCH LGT type LEN INTST | THR LGT colour WBAR | VASIS (MEHT) PAPI | TDZ length | RWY Centre Line LGT Length, spacing, colour, INTST | RWY edge LGT LEN, spacing, colour, INTST | RWY End LGT colour WBAR | SWY LGT LEN (m) colour | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 14 | Calvert LIH; CAT II/III LIH | CAT III LIH THR ID | 3.0° (17.40 m) | LIH 1200 m | 0-2400 VRB LIH W, 2400-3000 m VRB LIH R/W 3000-3300 m VRB LIH R | LIH/LIL | R | | YCZ: 600 m |
| 32 | Simple LIH/LIL | LIH/LIL THR ID | 3.5° (28 m) | | | LIH/LIL | R | | YCZ: 600 m |

## LSZH 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** | WDI LGTD |
| 3 | **TWY edge and centre line lighting** | EDGE: LIL B<br>Centre line: LIH G (TWY A, B, C, C1, C2, D, E, E3, E5, E7, E8, E9, F, F1, F2, H, H1, H2, H3, J, K, Z)<br><br>Apron + Stop bars - refer to LSZH AD 2.24.3 - 1 and LSZH AD 2.24.3 - 3<br>Coded TWY centre line LGT to indicate ILS critical / sensitive area OPR on TWY E, E7, E8, E9, H1, H2, H3 |
| 4 | **Secondary power supply/switch-over time** | yes / MAX switch over time: CAT I - less than 15 s<br>CAT II/III - less than 1 s |
| 5 | **Remarks** | Obstacles marked and LGTD |

## LSZH AD 2.16 HELICOPTER LANDING AREA

| | | |
|---|---|---|
| 1 | **Coordinates TLOF or THR of FATO** | |
| 2 | **TLOF and/or FATO elevation M/FT** | |
| 3 | **TLOF and FATO area dimensions, surface, strength, marking** | |
| 4 | **True and MAG BRG of FATO** | |
| 5 | **Declared distance available** | |
| 6 | **APP and FATO lighting** | |
| 7 | **Remarks** | |

## LSZH AD 2.17 ATS AIRSPACE

| | | |
|---|---|---|
| 1 | **Designation and lateral limits** | **Zurich CTR 1** [1]<br>47 24 38N 008 45 30E - 47 22 31N 008 39 41E - 47 21 21N 008 23 33E - arc of circle 9 NM on 47 27 36N 008 33 02E - 47 24 38 N 008 45 30E<br>**Zurich CTR 2** [2] [3]<br>47 23 04 N 008 41 11 E - 47 14 54 N 008 47 34 E - 47 14 12 N 008 37 08 E - 47 21 57 N 008 31 49 E - 47 22 31 N 008 39 41 E - 47 23 04 N 008 41 11 E |
| 2 | **Vertical limits** | CTR 1: *4500 ft AMSL (1350 m)*<br>CTR 2: *5500 ft AMSL (1700 m)* |
| 3 | **Airspace classification** | D |
| 4 | **ATS unit call sign Language(s)** | Zurich TWR [1]<br>En |
| 5 | **Transition altitude** | *7000 ft* |
| 6 | **Remarks** | [1] CTR 1 prohibited for balloon and GLD ACT, EXC and regulations REF: ENR 5.5<br>[2] EXC and regulations for CTR 2 REF: ENR 5.5<br>[3] ACT:<br>MON - FRI 0000 - 0715 LT and 2045 - 2400 LT<br>SAT/SUN* 0000 - 0915 LT and 1945 - 2400 LT (* incl. German holidays) |

## LSZH AD 2.18 ATS COMMUNICATION FACILITIES

| Service designation | Call sign | Frequency | Hours of operation | Remarks |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| ATIS | | 128.525 MHz | H24 | REF: GEN 3.3.3.5 [1] [2] [3] [5]<br>TEL Service +41 (0) 43 816 22 94 |
| APP/SR VDF* | Zurich Arrival | 118.000 MHz | H24 | ARR ACFT via GIPOL |
| | do. | 120.750 MHz | H24 | ARR ACFT via AMIKI and RILAX |
| | do. | 119.700 MHz | H24 | |
| | Zurich Departure | 125.950 MHz | H24 | DEP ACFT |
| | Zurich Final | 125.325 MHz | HX** | **only on ATC instruction |
| TWR VDF* | Zurich Tower | 118.100 MHz | H24 | Primary |
| | do. | 120.225 MHz | H24 | APCH RWY 14 and TKOF RWY 32 |
| | do. | 119.700 MHz | H24 | |
| Terminal VDF* | Zurich Terminal | 127.750 MHz | H24 | VFR FLT within LSZH TMA |
| CLR DEL | Zurich Delivery | 121.800 MHz | H24 | Start-up and ATC clearance for IFR, NVFR |
| GND VDF* | Zurich Ground | 121.900 MHz | H24 | Primary |
| | | 118.100 MHz | H24 | |
| | | 119.700 MHz | H24 | |
| De-Icing | Pad Coordinator F | 121.650 MHz | AVBL if MET COND requires | REF: LSZH AD 2.20.9 |
| | Pad Coordinator C | 121.600 MHz | AVBL if MET COND requires | REF: LSZH AD 2.20.9 |
| | Pad Coordinator HOLDING BAY 10 | 130.375 MHz | AVBL if MET COND requires | REF: LSZH AD 2.20.9 |
| | Pad Coordinator D13/D14 | 130.375 MHz | AVBL if MET COND requires | REF: LSZH AD 2.20.9 |

| Service designation | Call sign | Frequency | Hours of operation | Remarks |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| | De-icing Coordination | 130.375 MHz | 2) 0400-2230* | 2) OCT 01 - APR 30 |
| APRON | Zurich Apron | 121.750 MHz | 0430-2230 | South of RWY 28 |
| | do. | 121.700 MHz | 0430-2230 | ALTN FREQ |
| | do. | 121.850 MHz | 0430-2230 | North of RWY 28 |
| | do. | 121.975 MHz | 0430-2230 | ALTN FREQ |
| ZURICH AREA | | | | |
| ATC/VDF* | Swiss Radar | 128.050 MHz | H24 | **Language: En**<br>Southern part FL 240 and below |
| | do. | 136.150 MHz | H24 | Northern part FL 240 and below |
| | do. | 135.675 MHz | H24 | Western part FL 240 and below |
| | do. | 133.900 MHz | H24 | Eastern part FL 240 and below |
| ATC | do. | 131.150 MHz | HX | AMIKI holding stack |
| ATC | Zurich Arrival | 119.925 MHz | H24 | ARR/DEP EDNY and LSZR |
| ATC/VDF* | Swiss Radar | 133.050 MHz | H24 | FL 250 to FL 280 |
| | do. | CH: 132.815 | H24 | FL 290 to FL 320 |
| | do. | CH: 134.605 | H24 | FL 330 to FL 350 |
| | do. | CH: 133.405 | H24 | FL 360 and above |
| | do. | 266.350 MHz | H24 | FL 290 to FL 350, for non-8.33 EQPT State flights |
| | do | 284.325 MHz | H24 | FL 360 and above, for non-8.33 EQPT State flights |
| ATC/VDF* | Zurich Delta | 119.225 MHz | H24 | VFR FLT within class C and D airspaces<br>**Languages: En, Ge** |
| FIC/VDF* | Zurich Information | 124.700 MHz | H24 | VFR FLT<br>**Languages: En, Ge** |
| ATC/FIC | | 126.225 MHz | HX | Alternate FREQ for all FREQ used in Zurich ATC and FIC |
| Immarsat satellite | Zurich ATC centre supervisor | | H24 | Use no. 426902 for phone calls from aircraft. Non-routine flight safety calls only |
| | | 121.500 MHz | H24 | **Language: En**<br>Emergency channel |

* VDF REC antenna PSN: 472701N 083437E

## LSZH AD 2.19 RADIO NAVIGATION AND LANDING AIDS

| Type Category (Variation) | ID | Frequency | Hours of operation | Site of transmitting antenna coordinates | Elevation of DME transmitting antenna | Remarks |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| TRASADINGEN DVOR/DME (VAR 0° 11' W) | TRA | 114.30 MHz 90X | H24 | 47 41 22.2N 008 26 13.1E | *1850 ft* | PSN: 343° MAG, 13.5 NM FM THR 16.<br>DOC 100 NM / *50'000 ft* |
| KLOTEN DVOR/DME (VAR 0° 10' W) | KLO | 114.85 MHz 95Y | H24 | 47 27 25.7N 008 32 44.1E | *1410 ft* | PSN: 237° MAG, 0.12 NM FM ARP.<br>DOC 50 NM / *25'000 ft*<br>VOR partially UNREL BTN R235 and R245 BLW *7400 ft AMSL* and BTN R040 and R080 BLW *5200 ft AMSL*. DME partially UNREL BLW *10'600 ft AMSL*. |
| ZURICH EAST DVOR/DME (VAR 0° 06' W) | ZUE | 110.05 MHz 37Y | H24 | 47 35 31.8N 008 49 03.6E | *1730 ft* | PSN: 054° MAG, 13.6 NM FM ARP.<br>DOC 80 NM / *50'000 ft*<br>range 40 NM in sector 225° - 300° |

| Type Category (Variation) | ID | Frequency | Hours of operation | Site of transmitting antenna coordinates | Elevation of DME transmitting antenna | Remarks |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| HOCHWALD DVOR/DME (VAR 0° 24' W) | HOC | 113.20 MHz CH 79X | H24 | 47 27 59.6N 007 39 55.6E | *2425 ft* | DOC 60 NM / 50'000 ft, range 100 NM in sector 270° - 090° |
| WILLISAU VOR/DME (VAR 0° 00') | WIL | 116.90 MHz CH 116X | H24 | 47 10 41.9N 007 54 21.3E | *2417 ft* | DOC 50 NM / 25'000 ft |
| **ILS 14**-LLZ CAT III | IKL | 108.30 MHz | H24 | 47 27 32.6N 008 34 03.0E | | PSN: 340 m FM THR 32<br>**RWY 14:** LLZ course 137° MAG. Front course sector angle 3.5° |
| GP 14 | | 334.10 MHz | H24 | 47 28 49.9N 008 32 25.4E | | Angle 3°. 120 m E RCL; 347 m FM THR 14. GP HGT THR 14: 53 ft/16.2 m |
| DME 14 | | 20X | H24 | 47 28 49.7N 008 32 25.6E | *1460 ft* | Co-located with GP zero range THR 14 |
| MKR | K | 75 MHz | H24 | 47 27 35.4N 008 34 06.4E | | PSN: 348 m FM THR 32 |
| **ILS 16**-LLZ CAT III | IZH | 110.50 MHz | H24 | 47 26 36.5N 008 33 29.2E | | PSN: 712 m FM THR 34<br>**RWY 16:** LLZ course 154° MAG. Front course sector angle 3.1°. LLZ coverage area reduced to 5° l/r CL. Caution: low clearance signal level outside reduced coverage area. |
| GP 16 | | 329.60 MHz | H24 | 47 28 23.0N 008 32 22.3E | | Angle 3°. 120 m E RCL; 384 m FM THR 16. GP HGT THR 16: 55 ft/16.8 m |
| DME 16 | | 42X | H24 | 47 28 23.0N 008 32 22.9E | *1400 ft* | Co-located with GP zero range THR 16 |
| **ILS 34**-LLZ CAT I | IZS | 110.75 MHz | H24 | 47 28 44.6N 008 32 01.1E | | PSN: 409 m FM THR 16<br>**RWY 34:** LLZ course 334° MAG. Front course sector angle 3.32° |
| GP 34 | | 330.05 MHz | H24 | Radiating point: 47 27 04.6N 008 33 07.1E | | Angle 3.3°. 54 m W RCL; 272 m FM THR 34. GP HGT THR 34: 51 ft/15.5 m |
| DME 34 | | 44Y | H24 | 47 27 04.5N 008 33 06.6E | *1410 ft* | |

## LSZH AD 2.20 LOCAL TRAFFIC REGULATIONS

### 2.20.1 Local flying restrictions and remarks

#### 2.20.1.1 General

According to Art. 39 of the ordinance concerning the aviation infrastructure (OAI) utmost restraint will be exercised when granting authorization for take-off and landing at night between 2100* and 0500* UTC. Air carriers may not expect that authorizations for night flight movements will be granted systematically for the period from 2100* until 0500* UTC.

* ETE adjust by **minus 1 HR**

**2.20.1.2 Scheduled Air Traffic**
(including supplementary flights and rerouted flights but excluding alternate landings)

2.20.1.2.1 Departures and landings can be planned between 0500* and 2300* UTC (see § 2.20.2.1)

*2.20.1.2.2 Departure*

2.20.1.2.2.1 A Pilot in command can only expect to receive a departure clearance if he is ready to start the engines at 2245* UTC at the latest.

2.20.1.2.2.2 Departures are not permitted between 2330* and 0500* UTC. Exemptions can only be authorized by the Airport Authority in unforeseen and exceptional cases.

*2.20.1.2.3 Approach*

2.20.1.2.3.1 Landings are not permitted between 2330* and 0500* UTC. Exemptions can only be authorized by the Airport Authority in unforeseen and exceptional cases.

**2.20.1.3 Non-scheduled commercial air traffic**
(including non scheduled flights of scheduled airlines)

2.20.1.3.1 Departures and landings can be planned between 0500* and 2200* UTC.

*2.20.1.3.2 Departure*

2.20.1.3.2.1 A Pilot in command can only expect to receive a departure clearance if he is ready to start the turbo-jet or turbo-prop engine or, in the case of piston engine aircraft, if he is ready to taxi at 2145* UTC at the latest. Departures are not permitted between 2230* and 0500* UTC. Exemptions can only be authorized by the Airport Authority in unforeseen and exceptional cases.

2.20.1.3.2.2 Departures of Charter flights can be planned between 0500* and 2100* UTC. A Pilot in command can only expect to receive a departure clearance if he is ready to start the engine at 2045* UTC at the latest. Departures are not permitted between 2130* and 0500* UTC. Exemptions can only be authorized by the Airport Authority in unforeseen and exceptional cases.

*2.20.1.3.3 Approach*

2.20.1.3.3.1 Landings are not permitted between 2230* and 0500* UTC. Exemptions can only be authorized by the Airport Authority in unforeseen and exceptional cases.

**2.20.1.4 Private traffic**

2.20.1.4.1 Departure and landing are not permitted between 2100* and 0500* UTC.

* ETE adjust by **minus 1 HR**

*2.20.1.4.2 Departure*

A Pilot in command can only expect to receive a departure clearance if he is ready to start the turbo-jet or turbo-prop engine or, in the case of piston engine aircraft, if he is ready to taxi at 2045* UTC at the latest.

2.20.1.4.3 For NVFR flights the checkpoints CITY, BREMGARTEN or ATTIKON will be applicable.

**2.20.1.5 Exemptions**

2.20.1.5.1 Urgent flights

- Urgent flights with special authorization by FOCA, namely State aircraft with Diplomatic Clearance;
- Search and rescue flights;
- Police and supervision flights;
- Flights carrying sick or injured persons;
- Relief flights in disaster cases;
- Forced landing due to technical or other safety reasons;
- Alternate landing due to meteorological conditions.

2.20.1.5.2 Permission requests

In justified cases, the Airport Authority may grant exemptions on request for particular or specified cases not stipulated in paragraph 15.

An application for such requests shall be submitted to:
Zurich Airport Authority TEL: +41 (0) 43 816 21 11

**2.20.2 Permission request procedures**

**2.20.2.1 General**

Air Carriers may not expect a systematically slot allocation for night flight movements for the period from 2045* and 0500* UTC. All slot requests will be finally authorized by Slot Coordination Switzerland in order to obtain the local noise restrictions.

**2.20.2.2 Scheduled air traffic and charter flights**

Scheduled air traffic and charter flights are subject to schedule co-ordination made by Slot Coordination Switzerland. Permission requests for slots shall be submitted to:

Slot Coordination Switzerland SITA ZRHACXH or e-mail: info@slotcoord.ch

**2.20.2.3 Other non-scheduled commercial air traffic as well as non-commercial air traffic**

2.20.2.3.1 Non scheduled commercial air traffic and non-commercial air traffic are subject to co-ordination requirement: PPR

2.20.2.3.1.1 Additionally, two outbound and two inbound slots per hour are available for IFR non scheduled commercial air traffic (jets and turbo-prop) MAX 72 hours in advance.

* ETE adjust by **minus 1 HR**

2.20.2.3.2 Due to limited stands, aircraft with a wing span larger than 24 meters are subject to permission from the airport operator for the parking time.

2.20.2.3.3 Permissions for VFR movements will be given for one of the following periods: 0500* - 0859*; 0900* - 1059*; 1100* - 1259*; 1300* - 1659*; 1700* - 1859*; 1900* - 2059* UTC

**Note:** Between 0600* - 1200*; 1900* - 2100* UTC movement permissions may not be expected due to almost reached capacity limits caused by scheduled and non-scheduled air traffic.

2.20.2.3.3.1 Requests for each VFR movement shall be made for the preferred landing or take-off time, whereas the permission is valid for the entire period.

2.20.2.3.4 Permissions shall be requested between 0700* - 1600* UTC from

Unique
(Flughafen Zürich AG)
Slot Management
TEL: +41 (0) 43 816 46 37
FAX: +41 (0) 43 816 73 79
e-mail: slot.gasc@unique.ch
AFTN: GG LSZHYGYX
SITA: ZRHAMPP

After closing hours, short-notice requests should be made to: TEL: +41 (0) 43 816 73 16

1600* - 2100* UTC for IFR-flights within the next 24h or cancellation of VFR-flights.

0530* - 0700* UTC only IFR-flights for the actual day.

2.20.2.3.4.1 Permission requests shall contain the following data:

- New request, modification or cancellation;
- Registration mark;
- Type of flight /IFR, test or instruction flight;
- ACFT type;
- LDG and/or TKOF;
- Date;
- Origin;
- ETA in UTC over the initial approach fix (GIPOL, AMIKI, RILAX);
- Estimated Off-Block Time (EOBT LSZH in UTC);
- FLT NR / Call sign.

2.20.2.3.4.2 Slot Management co-ordinate ATC slots in co-operation with the Flow Management Position (FMP) of Zurich ACC.

2.20.2.3.4.3 This additional service, based on the airport slot, will apply exclusively to general aviation departures.

2.20.2.3.4.4 Airport slots have to be requested before filling any flight plan, by calling TEL: +41 (0) 43 816 46 37. Flight plans have to be filed at least 2 HR before EOBT.

* ETE adjust by **minus 1 HR**

Filled FLT plans have to include EOBT based on the allocated AP slot. Acknowledgement of flight plan by IFPS has to be ensured by calling AIS TEL: +41 (0) 43 816 39 72.

2.20.2.3.4.5 Prior to general aviation departures all pilots/operators have to contact Slot Management: TEL: +41 (0) 43 816 73 16 in order to reconfirm ATC slots issued and transmitted by Central Flow Management Unit (CFMU) Brussels. Prior to departure and after landing all pilots/operators shall report at the C-Office in the General Aviation Centre.

2.20.2.3.4.6 Application for ATC slots outside office hours will be automatically connected to FMP.

2.20.2.3.4.7 Modifications and cancellations of the already permitted flight as well as all modifications of the PLN times which need a new permission, shall be notified immediately to Slot Management (see § 2.20.2.3.4).

2.20.2.3.5 Start up or taxi clearances to IFR and VFR general aviation traffic will be delivered by Apron Control only, if the delay does not exceed 15 min to the received airport slot. If more delay is expected, a new slot has to be requested at the Slot Management.

2.20.2.3.6 Not subject to flight plan co-ordination and permission requirements are:

- Air traffic which has to approach Zurich Airport due to security, meteorological or technical reasons;
- Search and rescue, urgent medical and emergency flights;
- State aircraft flights with Diplomatic Clearance by FOCA;
- Helicopter under VFR.

2.20.2.3.7 Technical check flight have to be co-ordinated with ATC TWR (TEL: +41 (0) 43 816 39 03) at least one hour prior ETD. The following declarations should be stated:

- Requested flight program;
  - Routing;
  - Requested flight level;
  - Special flight program parts;
- Duration of special flight program parts.

ATC may instruct other times and/or routings respective impose other restrictions. Subsequently a corresponding flight plan has to be filed.

**2.20.3 Duty of notification for technical transit flight**

2.20.3.1 In case that airworthiness of an aircraft is impaired by damages, technical failures or other reasons and the lawful repair of the aircraft on the spot is not possible, all take-off of technical transit flight from Zurich Airport are subject to approval from the Airport Authority. Such a flight has to be notified to the Airport Authority by FAX +41 (0) 43 816 47 57, prior to the submission of the ATC flight plan.

This message shall contain the following data:

- Purpose of the planned transit flight;
- Planned flight route;
- Kind and dimensions of the impairment of airworthiness;
- Any possible restrictions of the aircraft manufacturer and/or the authority of the state of registry.

2.20.3.2 The approval will be confirmed by the Airport Authority.

In order to judge the circumstances, required specialists (FOCA, maintenance agencies at the AP, air traffic services) can be called in.

**2.20.4 Notification of ground time**

For non-scheduled commercial flights and for private flights with aeroplanes and HEL, an indication of the ground elapse time in the flight plan under item 18 is required provided such flight plan is prescribed (e.g. RMK/ground time 2 HR). Parking sectors 1 to 7 ground time more than 48 HR: On request by airport authority only on TEL: +41 (0) 43 816 21 17.

**2.20.5 Special regulations for TMA/CTR ZURICH**

**Procedures for:** IFR; VFR; noise abatement and VFR flight of non-radio aircraft.

**2.20.6 Guidance of ACFT on apron/Apron Control**

**2.20.6.1 General**

The Airport Authority is operating a ground control radio station (way securing service) with call sign „Zurich Apron".

**Sprache/Language: En**

**2.20.6.2 Area of responsibility**

The exact boundary of the area of responsibility is shown on the chart LSZH AD 2.24.3 - 1 and LSZH AD 2.24.3 - 3.

**2.20.6.3 Operational hours**

2.20.6.3.1 Radio contact with Apron Control is available from 0430* til 2230* UTC.

2.20.6.3.2 Between 2230* and 0430* UTC, aircraft on the apron are guided by „Follow me" car if needed/requested.

2.20.6.3.3 In exceptional conditions the radio contact with Apron Control will also be available after 2230* UTC.

**2.20.6.4 Procedures**

**2.20.6.4.1 Clearances**

Apron Control will only issue clearances which apply to area of responsibility. In particular, a clearance to taxi to a take-off runway **does not** include the clearance to cross a runway or to taxi onto that runway.

**2.20.6.4.2 Transmission of messages**

2.20.6.4.2.1 Apron Control will only transmit messages belonging to its competence.

2.20.6.4.2.2 Handling requests will not be transmitted by Apron Control.

* ETE adjust by **minus 1 HR.**

**2.20.6.4.3 Arriving aircraft**

2.20.6.4.3.1 Arriving aircraft shall taxi independently to the parking position as instructed by Apron Control.

2.20.6.4.3.2 If, while taxiing into a dock-parking position, the crew notices that the docking guidance system has not been put into operation or is otherwise unserviceable, they shall stop the aircraft immediately.

The unserviceability has to be notified on the Apron Control frequency.

The aircraft shall not taxi any further, until a „Follow-me" car has taken over the guidance.

2.20.6.4.3.3 General Aviation aircraft shall taxi to the published GA sectors as instructed by Apron Control. The final guidance will be provided by marshaller.

**2.20.6.4.4 Departing aircraft**

**2.20.6.4.4.1 General**

Zurich airport operates a departure traffic management system called "darts". For every departure, the system calculates the earliest possible off-block or start-up time. This calculation is based on STD or ETD, ATC slot, SID, departure fix, wake turbulence category, aircraft type, the operational RWY concept and the taxi time from the parking stand to the departure RWY.

Accurate ETD Management is therefore a prerequisite for a punctual departure.

Crews shall request the ATC clearance in accordance with the following procedures - otherwise the flight will be affected by additional delay, when the ACFT is not fully ready at the declared time.

**2.20.6.4.4.1.1 ATC Clearance**

**2.20.6.4.4.1.1.1 Crew action prior to start-up**

1. All passengers on board;
2. All doors closed;
3. Tractor connected, if required;
4. Prepared to push-back and/or start-up without delay.

**2.20.6.4.4.1.1.2 Clearance delivery**

If the aircraft is ready within the next few minutes - at latest 5 minutes prior to STD/ETD or 10 minutes prior to CTOT - the crew shall contact Clearance Delivery on 121.800 MHz to request the ATC clearance.

**2.20.6.4.4.1.2 Start-up and/or push-back clearance**

After the ATC clearance has been issued, the aircraft will be instructed to stand-by on either Apron North 121.850 MHz or Apron South 121.750 MHz. According to the actual traffic situation and the calculation of the departure management system, Apron North or South clears the Crew for start-up and push-back (when needed) according to the planned departure time.

**2.20.6.4.4.2 VFR**

Aircraft operating according to VFR will directly contact „Zurich Apron" on **121.750** MHz (south of RWY 28) or FREQ **121.850** MHz (north of RWY 28). After having received a taxi clearance, pilots will be instructed to contact „Zurich Tower" or „Zurich Ground".

**2.20.6.5 Helicopters**

Helicopters will only receive instruction from ATC. Take-off and landing is only admitted on the areas officially designated for this purpose; hovering is not authorized. The Airport Authority may grant exceptions.
They contact „Zurich Tower" on **118.100** MHz directly.

**2.20.6.6 Push-back and tow procedures**

2.20.6.6.1 Aeroplanes **without** Auxiliary Power Unit (APU):

1. Request ATC clearance with „Zurich Delivery", FREQ **121.800** MHz;
2. Stand by with „Zurich Apron" on FREQ **121.750** MHz (south of RWY 28) or FREQ **121.850** MHz (north of RWY 28) for start-up;
3. Request clearance with „Zurich Apron" on FREQ **121.750** MHz (south of RWY 28) or FREQ **121.850** MHz (north of RWY 28) for push-back resp. tow manoeuvre;
4. Push-back resp. tow manoeuvre;
5. Request taxi clearance with „Zurich Apron" on FREQ **121.750** MHz (south of RWY 28) or FREQ **121.850** MHz (north of RWY 28).

2.20.6.6.2 Aeroplanes **with** Auxiliary Power Unit (APU):

1. Request ATC clearance with „Zurich Delivery", FREQ **121.800** MHz;
2. Stand by with „Zurich Apron" on FREQ **121.750** MHz (south of RWY 28) or FREQ **121.850** MHz (north of RWY 28) for push-back resp. tow manoeuvre;
3. Push-back resp. tow manoeuvre;
4. Request clearance with „Zurich Apron" on FREQ **121.750** MHz (south of RWY 28) or FREQ **121.850** MHz (north of RWY 28) for start-up;
5. Request taxi clearance with „Zurich Apron" on FREQ **121.750** MHz (south of RWY 28) or FREQ **121.850** MHz (north of RWY 28).

2.20.6.6.3 If necessary other procedures can be requested or authorized by Apron Control, e.g.: Engines start-up before or during push-back manoeuvre.

2.20.6.6.4 For the towing or push-back of an operating aeroplane a general authorization will only be given to the cockpit crew. Detailed instructions will be transmitted directly by Apron Control on the tow vehicle's FREQ to the driver after the clearance has been issued to the cockpit crew.

2.20.6.6.5 All instructions for the tow or push-back of aeroplanes with maintenance personnel in the cockpit will be transmitted directly by Apron Control on the tow vehicle's FREQ to the driver.

**2.20.6.7 Miscellaneous**

2.20.6.7.1 When requesting start-up, push-back, tow or taxi clearance from „Zurich Delivery" resp. „Zurich Apron" the parking position shall **always** be indicated.

2.20.6.7.2 Clearances for push-back or taxi may only be requested if the aeroplane is ready to immediately carry out the manoeuvre.

2.20.6.7.3 Changes of FREQ must be carried out immediately as instructed.

2.20.6.7.4 In exceptional operational conditions „Follow-me" cars are available for aeroplane guidance.

2.20.6.7.5 For safety reasons and noise monitoring as well as to ensure proper operations, the running of engines (e.g. short and idle), not used for taxiing out, is subject to prior permission.

Permissions shall be requested either from „Zurich Apron" on **121.750** MHz (south of RWY 28) or FREQ **121.850** MHz (north of RWY 28) or from the Airport Authority TEL: +41 (0) 43 816 21 11.

For run-up see § 2.21.5

## 2.20.7 Ground handling

2.20.7.1 Operators of scheduled air traffic and charter flights (including ferry- and positioning flights) are obliged to choose one of the following ground handling agents mentioned in article § 2.20.7.1.1.

2.20.7.1.1 Ground handling agents:

Swissport Zürich AG
Operation Control
BZRO
P.O. Box
CH-8058 Zurich-Airport

TEL: +41 (0) 43 812 62 53
FAX: +41 (0) 43 812 90 52
e-mail: zrh.staco@swissport.com
SITA: ZRHKCXH
FREQ: 131.650 MHz

Jet Aviation Handling Ltd.
P.O. Box
CH-8058 Zurich-Airport

TEL: +41 (0) 58 158 83 11
FAX: +41 (0) 58 158 83 15
SITA: ZRHSCPP
e-mail: jaha@jetaviation.ch
FREQ: 130.450 MHz

2.20.7.2 General aviation

Ground handling agents:

Jet Aviation Handling Ltd.
Private Aircraft Handling
P.O. Box 1513
CH-8058 Zurich-Airport

TEL: +41 (0) 58 158 84 66
FAX: +41 (0) 58 158 84 75
SITA: ZRHPHPP
FREQ: 130.450 MHz

ExecuJet Switzerland AG
FBO
Business Aviation Center
P.O. Box 1
CH-8058 Zurich-Airport

TEL: +41 (0) 44 876 56 56
FAX: +41 (0) 44 876 56 57
SITA: ZRHEH8X
FREQ: 130.250 MHz

e-mail: flightsupport@execujet.ch
Internet: www.execujet.ch

## 2.20.8 Procedures for IFR departures

2.20.8.1 When a flight is subject to an ATC slot, the pilot shall keep listening watch on "Clearance Delivery" **121.800** MHz 20 minutes prior to beginning of the slot.

2.20.8.2

2.20.8.3

2.20.8.4 Aircraft type must be reported with start-up clearance; indication of wake turbulence category is not necessary.

**2.20.9 De-icing**

**2.20.9.1 All aircraft departing from LSZH are planned for remote de-icing**

**Exceptions:**

- Pre-de-icing of aircraft parked over night
- According to exception list published in "Winter Operation at Zurich Airport"
- Manual available under http://www.unique.ch/manuals
- By decision of De-icing Coordination

**2.20.9.2 De-icing - Status**

The de-icing status at Zurich airport can be one of the two following:

**2.20.9.2.1 De-icing on request**

- Crew call 'DE-ICING COORDINATION' FREQ **130.375** MHz and request de-icing latest 15 minutes before STD/ETD
- Crew will be informed about the de-icing procedure foreseen (on-stand or remote de-icing)

**2.20.9.2.2 General De-icing (as published by ATIS):**

- All aircraft are planned for de-icing, no special request required
- Crew check with 'DE-ICING COORDINATION' FREQ **130.375** MHz which de-icing procedure foreseen (on-stand or remote de-icing)

**2.20.9.3 De-icing - Procedures**

**2.20.9.3.1 On-stand de-icing:**

- Crew request ATC Clearance when ready and de-icing completed
- Avoid blocking of ready to go flights by early start-up request

**2.20.9.3.2 Remote de-icing:** LSZH AD 2.24.1 - 1

- Crew confirm aircraft is ready for remote de-icing including fully ready for push-back resp. tow and/or start-up

**2.20.9.4 ATC – Procedures:**

**2.20.9.4.1 Aircraft, de-iced on stand**

- After de-icing on stand is completed, crew request ATC clearance with "ZURICH DELIVERY", FREQ **121.800** MHz
- Stand by on FREQ **121.750** MHz (South of RWY 28) or **121.850** MHz (north of RWY 28) "ZURICH APRON" for start-up and/or push-back resp. tow
- Push-back resp. tow manoeuvre
- Request taxi clearance with "ZURICH APRON" FREQ **121.750** MHz (south of RWY 28) or **121.850** MHz (north of RWY 28)

**2.20.9.4.2 Aircraft foreseen for remote de-icing**

- When ready for start-up and/or push back resp. tow, crew request ATC clearance with "ZURICH DELIVERY", FREQ 121.800 MHz, announcing "for remote de-icing"
- Stand by on FREQ **121.750** MHz (South of RWY 28) or **121.850** MHz (north of RWY 28) "ZURICH APRON" for start-up and/or push back resp. tow
- Push back or tow manoeuvre
- Request taxi clearance with "ZURICH APRON" FREQ **121.750** MHz (south of RWY 28) or **121.850** MHz (north of RWY 28)
- Taxi to the assigned remote de-icing pad following instructions given by 'ZURICH APRON' and 'ZURICH GROUND' FREQ **121.900** MHz
- Reaching the de-icing position within the pad, hold position and contact the remote de-icing pad coordinator on second radio set FREQ 121.600 MHz (pad Charlie) or FREQ 121.650 MHz (pad Foxtrot) or FREQ 130.375 MHz (pads D13/D14, Holding Bay 10)
- Keep monitoring ZURICH APRON or ZURICH GROUND (pad Holding Bay 10 only)

When the remote de-icing process is completed, request ZURICH APRON or ZURICH GROUND (pad Holding Bay 10 only) to continue taxiing.

2.20.9.4.3 Between 1st November and 31st March it is prohibited to drain the aircraft's drinking water tanks onto the tarmac.

## LSZH AD 2.21 NOISE ABATEMENT PROCEDURES

**2.21.1 General**

2.21.1.1 The following regulations are in force to avoid excessive aircraft noise in the populated areas in the vicinity of Zurich AP:

2.21.1.1.1 Jet aircraft not licensed in accordance with ICAO Annex 16, Volume 1, Chapter 3 are not permitted.

2.21.1.1.2 Deviation from published route and procedures are only permitted if the safety of the aircraft is affected; subject to Art. 27 of the ordinance concerning the aviation infrastructure (OAI).

2.21.1.1.3 Aircraft operators provable unable to comply with these regulations and procedures have to submit alternative procedures to the Airport Authority.

2.21.1.1.4 VFR flights:

Refer to VFR Manual, AD INFO, VFR RAC 4-3 LSZH

**2.21.2 Approaches**

**2.21.2.1 ILS approach:**

2.21.2.1.1 The descent shall be arranged so as to maintain ENR configuration as long as possible considering safety and ATC requirements. Speed reduction and extension of landing gear and high lift devices are to be planned in such a way, that landing configuration is established and correct approach speed is reached shortly prior to or at D5 IKL respective IZH.

**2.21.2.2 Other approaches:**

2.21.2.2.1

2.21.2.2.2

2.21.2.2.3 Visual circuits shall be flown at *3000 ft AMSL* or higher whenever visibility and cloud base permits. Overflying of densely populated areas is to be avoided as far as possible.

**2.21.2.3 Landing RWY**

Due to restrictions about the use of German airspace landing runways shall be used as follows:

2.21.2.3.1 Weekdays

2.21.2.3.1.1 Between 0500* and 0607* UTC landings shall normally be made on RWY 34.

2.21.2.3.1.2 Between 0608* and 1959* UTC landings shall normally be made on RWY 14 and 16.

2.21.2.3.1.3 Between 2000* and 0459* UTC landings shall normally be made on RWY 28.

2.21.2.3.1.4 Other runways may only be used due to operational or meteorological reasons.

2.21.2.3.2 SAT and SUN and German Holidays:

2.21.2.3.2.1 Between 0500* and 0807* UTC landings shall normally be made on RWY 34.

2.21.2.3.2.2 Between 0808* and 1859* UTC landings shall normally be made on RWY 14 and 16.

2.21.2.3.2.3 Between 1900* and 0459* UTC landings shall normally be made on RWY 28.

2.21.2.3.2.4 Other runways may only be used due to operational or meteorological reasons.

2.21.2.3.3 German holidays will be published in an AIC Series A.

**2.21.2.4 Reverse thrust**

More than idle reverse shall not be used except when necessitated for operational or safety reasons.

**2.21.2.5 Auxiliary Power Units (APU)**

2.21.2.5.1 Docking stands

Primarily, the stationary airport pneumatic and electrical service units shall be used. Alternatively, mobile units shall be used.

2.21.2.5.2 Other stands

For pneumatic and power supply of aircraft not parked at docking stands, mobile units shall be used.

* ETE adjust by **minus 1 HR.**

2.21.2.5.3 Airborne APU shall only be started:

2.21.2.5.3.1 To start engine, but earliest 5 minutes before off-block time.

2.21.2.5.3.2 If maintenance work on the aircraft makes it unavoidable; in that case the service period shall be kept as short as possible.

2.21.2.5.3.3 If the stationary or mobile units are not available or unserviceable for specific aircraft types. In that case APU shall be started at earliest 60 minutes before off-block time and kept in operation not more then 20 minutes after the on-block time.

2.21.2.5.3.4 In particular cases, the Airport Manager of the Airport Authority may permit longer service periods after the on-block time.

**2.21.3 Departures**

2.21.3.1 Departure routes

2.21.3.1.1 Deviations from the Standard Instrument Departure Routes (SID) published in AIP are only permitted at and above *5000 ft AMSL*. Between 2101* and 0500* UTC, deviation from a SID leading into AWY A9 is only permitted at FL 80 or above with permission of Air Traffic Control.

2.21.3.2 Departure procedures

2.21.3.2.1 As far as possible a rolling take-off shall be executed. The engine-power shall be increased only after entering the take-off RWY.

2.21.3.2.2 After lift-off the maximum climb gradient considering flight safety shall be maintained.

2.21.3.2.3 For jet aircraft the climb shall be carried out as follows:

*a.* **Fan jet** equipped aircraft:

1. Take-off up to *2900 ft AMSL*
   - take-off power;
   - lift increasing device in take-off setting;
   - speed $V_2$+10 kt (or according to climb angle limitation).
2. When at *2900 ft AMSL*
   - speed $V_2$+10 kt (or according to climb angle limitation).
   - thrust reduction to not less than climb power.
3. *2900 ft AMSL* to *4500 ft AMSL*
   - speed $V_2$+10 kt (or limited by body angle).
4. At *4500 ft AMSL*
   - normal en-route climb speed (increase speed and retract high-lift devices).

*b.* Automatic measuring equipment is used to monitor adherence to § 2.21.3.2.3.

**2.21.3.3 Take-off runways**

2.21.3.3.1 Between 0600* and 1959* UTC normally all take-offs shall be made on runway 28.

2.21.3.3.2 When take-off on RWY 28 is not possible due to operational reasons, RWY 10, 34, 32, or 16 shall be used.

2.21.3.3.3 Between 2000* and 0559* UTC all take-off of jet aircraft shall be made on RWY 32 or 34.

2.21.3.3.4 Between 2000* and 0559* UTC take offs on RWY 34 shall be executed from intersection with TWY R8 unless the whole runway length is required for safety reasons.

2.21.3.3.5 Deviations from § 2.21.3.3.1/2/3 are permitted for safety reasons, meteorological and RWY conditions.

2.21.3.3.6 Aircraft exceeding noise index 96 (http://www.unique.ch/manuals) are not admitted for departure between 2100* and 2330* UTC.

2.21.3.3.7 Aircraft with a non-stop flight distance of 5000 km and above and not exceeding noise index 98 (http://www.unique.ch/manuals) are admitted for departure between 2100* and 2330* UTC.

**2.21.4 Instruction and check flights**

2.21.4.1 Noise abatement procedures are also applicable for instruction and check flights.

2.21.4.2 Deviations are admissible within a flight program approved by FOCA.

**2.21.5 Run-up**

2.21.5.1 Run-ups are tests of engine installed in the aircraft, at power settings above idle rpm.

2.21.5.2 On the Apron, TWY and RWY run-ups require permission from the Airport Authority. No run-ups are permitted between 2100* and 0500* UTC. Outside these hours both duration and power setting for such run-ups shall be kept at a minimum.

2.21.5.3 On the aprons of the maintenance base, run-ups of jet engine may only be performed when using silencers. Run-ups of prop-engine are not permitted between 2100* and 0500* UTC.

2.21.5.4 Exceptions:
The Airport Authority may permit run-ups of jet engine without silencers on the maintenance base:

- when the silencers cannot be used for technical or meteorological reasons;
- if the silencers are not compatible with the type of aircraft in question.

2.21.5.5 SR-Technics issues special regulations for the operation of silencers. They are subject to the approval of the Airport Authority.

## LSZH AD 2.22 FLIGHT PROCEDURES

### 2.22.1 SPECIAL REGULATIONS FOR CONTROL ZONE (CTR) AND TERMINAL CONTROL AREA (TMA)

**IFR PROCEDURE**

#### 2.22.1.1 STAR

Procedures to be followed by arriving aircraft are contained on the charts STANDARD INSTRUMENT ARRIVAL ROUTES (NON RNAV STAR / RNAV STAR).

#### 2.22.1.2 ILS category III

The category III instrument landing system (RWY 14 and 16) and the associated equipment are in compliance with ICAO Standard and recommended practices. Details are given in LSZH AD 2.19 and IAC.

#### 2.22.1.3 Approach procedures:

ENR 1.5.

Aircraft type must be reported at first radio contact with "Zurich Arrival"; indication of wake turbulence category is not necessary.

#### 2.22.1.4

#### 2.22.1.5 Special landing procedure for RWY 14 and 16 ("swing-over")

Due to maintain an efficient air traffic flow, the ATC may propose to aircraft during an instrument approach to RWY 14 or 16 a visual final approach with landing on the other RWY of both.

On final approach and on pilots request, a visual "swing-over" to the other runway of both may be granted by ATC if the traffic situation permits.

It is the responsibility of the pilot-in-command to decide whether he accepts the "swing-over" procedure with regard to present MET conditions and operational conditions of the aircraft.

Missed approaches have to be executed according to the procedures published for the last allocated and cleared runway acknowledged by pilots.

**2.22.1.6 Displaced touchdown point RWY 14 for CAT A and B aircraft**

To reduce runway occupancy time, operators with CAT A and B aircraft are requested to use displaced touchdown point RWY 14 as far as practicable. This touchdown point is marked with two yellow arcs (diameter 16 m) left and right of RWY centre line and lies 1050 m beyond landing THR RWY 14.

Conditions of availability:
- Visibility 3000 m;
- No RWY contamination (snow, slush or ice).

**2.22.1.7**

**2.22.1.7.1**

**2.22.1.7.2**

**2.22.1.7.2.1**

**2.22.1.7.2.2**

**2.22.1.7.3**

**2.22.1.7.4**

**2.22.1.7.5**

**2.22.1.7.6**

2.22.1.7.7

2.22.1.7.8

## 2.22.1.8 Hold Short Operation RWY 28 (secondary intersecting RWY)

2.22.1.8.1 The hold short operation allows approaches with admitted aircraft types and in compliance with defined conditions on RWY 28 (secondary intersecting RWY) with simultaneous approaches and departures on RWY 16/34 (primary intersecting RWY). The landing distance available (**LDA**) on RWY 28 for this operation is **1411 m**. This distance is marked on RWY 28 with "Taxi Holding Position Marking" (Hold Short Line on the RWY) and alternating RWY guard lights on both sides of RWY.

2.22.1.8.2 The hold short operation on RWY 28 is applicable for all approach procedures on that RWY and the aircraft admitted for it according to § 2.22.1.8.5 and crews.

It is **not** allowed to apply the hold short operation under the following circumstances:

a) The cloud ceiling is less than 450 m AGL (1500 ft AGL); or
b) The visibility is less than 5 km; or
c) The secondary intersecting runway (RWY 28) is wet and also subject to tail wind component; or
d) The secondary intersecting runway (RWY 28) is affected by reported and/or detected low level wind shear; or
e) The secondary intersecting runway (RWY 28) is contaminated for example by snow, ice, standing water or rubber deposit to the extent that aircraft braking action could be adversely affected; or
f) The braking action on the declared reduced landing distance of the secondary intersecting runway (RWY 28) is reported or measured as less than "GOOD".

**2.22.1.8.3 ATC:**

- gives the clearance for hold short operation only to crews, which have confirmed to be able for it and only if the aircraft is admitted for it;
- informs both crews participating on simultaneous operation;
- ensures, that the hold short instructions transmitted together with the landing clearance are confirmed by readback.

**2.22.1.8.4 Pilots:**

- report, if they are able to comply with hold short procedure RWY 28;
- confirm the received traffic information;
- confirm by readback the received hold short instructions.

**2.22.1.8.5 List of admitted ACFT**

| | |
|---|---|
| - All single-engine ACFT up to 5700 kg MTOM | |
| - ATR-42-200/-300/-320 (**except** ATR-72) | ICAO ACFT type designator = AT43 |
| - Queen Air 65-B80 | ICAO ACFT type designator = BE65 |
| - Travel Air 95 | ICAO ACFT type designator = BE95 |
| - Cessna 310 | ICAO ACFT type designator = C310 |
| - Cessna 421 "Golden Eagle" | ICAO ACFT type designator = C421 |
| - Cessna 425 "Corsair/Conquest" | ICAO ACFT type designator = C425 |
| - Cessna 500, 501 "Citation I" | ICAO ACFT type designator = C500 |
| - Cessna 550, 551 "Citation II" | ICAO ACFT type designator = C550 |
| - Dash 7 | ICAO ACFT type designator = DHC7 |
| - Dash 8 (**except** DHC-8/311) | ICAO ACFT type designator = DH8A |
| - Dornier DO-28 | ICAO ACFT type designator = DO28 |
| - Dornier DO-228 | ICAO ACFT type designator = D228 |
| - Fokker 50 | ICAO ACFT type designator = F50 |
| - Piper, Navaho, Cheyenne PA-31/31P | ICAO ACFT type designator = PA31 |
| - Piper Aztec PA-23/250 | ICAO ACFT type designator = PA27 |
| - SAAB SF-340 A and B | ICAO ACFT type designator = SF34 |

**2.22.1.9 SID**

2.22.1.9.1 Procedures to be followed by departing aircraft are contained on the charts STANDARD INSTRUMENT DEPARTURE ROUTES (NON RNAV SID / RNAV SID).

2.22.1.9.2 Deviations from the Standard Instrument Departure Routes (SID) published in AIP are only permitted at and above *5000 ft AMSL*. Between 2101* and 0500* UTC, deviation from a SID leading into AWY A9 is only permitted at FL 80 or above with permission of Air Traffic Control.

**2.22.1.10 Diversion from LSZH to LFSB during specific weather conditions in LSZH**

The specific weather conditions are:

- visibility less than 5 km and/or
- ceiling less than 2000 ft.

For alternate fuel planning purposes to LFSB in these conditions, flight crews shall consider the applicable missed approach procedure for RWY 34 in LSZH to GIPOL, thereafter direct HOC, followed by approximately 25 NM of radar vectored distance to the final approach for RWY 16 in LFSB. The distance resulting from the radar vectors in LFSB shall be regarded as an estimate, depending on traffic and airspace restrictions around LFSB (if RWY 34 is in use in LFSB, the vectored distance could increase to 40 NM).

This results in the following calculation (using shortest distances):

| | |
|---|---|
| Missed APP LSZH RWY 34 | 28 NM |
| GIPOL to HOC | 16 NM |
| HOC via radar vectors to final approach LFSB RWY 16 | 25 NM |
| Final approach to RWY 16 | 6 NM |

This calculation results in a total distance of 75 NM.

If a RWY other than RWY 34 is in use in LSZH, the appropriate recalculation shall be performed.

**2.22.2 VFR PROCEDURE**

Refer to VFR Manual, AD INFO, VFR RAC 4-3 LSZH

* ETE adjust by **minus 1 HR.**

## 2.22.3 JAA minima for Zurich AP

| RWY | STRAIGHT-IN RWY | A | B | C | D |
|---|---|---|---|---|---|
| 14 | CAT 2 ILS/DME | **1502 ft** (100 ft) [1] **RA 95 ft - RVR 300 m** | **1502 ft** (100 ft) [1] **RA 95 ft - RVR 300 m** | **1502 ft** (100 ft) [1] **RA 95 ft - RVR 300 m** | **1502 ft** (100 ft) [1] [2] **RA 95 ft - RVR 350 m** |
| | ILS/DME | **1602 ft** (200 ft) **RA 187 ft - RVR 550m** | **1602 ft** (200 ft) **RA 187 ft - RVR 550m** | **1602 ft** (200 ft) **RA 187 ft - RVR 550m** | **1602 ft** (200 ft) **RA 187 ft - RVR 550m** |
| | ALS out | RVR 1000 m | RVR 1000 m | RVR 1000 m | RVR 1000 m |
| | LOC | **1900 ft** (498 ft) **RVR 1000 m** | **1900 ft** (498 ft) **RVR 1200 m** | **1900 ft** (498 ft) **RVR 1200 m** | **1900 ft** (498 ft) **RVR 1600 m** |
| | ALS out | RVR 1500 m | RVR 1500 m | RVR 2000 m | RVR 2000 m |
| | | | | | |
| | SRE | **2040 ft** (638 ft) **RVR 1000 m** | **2040 ft** (638 ft) **RVR 1200 m** | **2040 ft** (638 ft) **RVR 1200 m** | **2040 ft** (638 ft) **RVR 1600 m** |
| | ALS out | RVR 1500 m | RVR 1500 m | RVR 2000 m | RVR 2000 m |
| 16 | CAT 2 ILS/DME (missed APCH climb gradient 4.6% to *2700 ft*) | **1490 ft** (100 ft) [1] **RA 93 ft - RVR 300 m** | **1490 ft** (100 ft) [1] **RA 93 ft - RVR 300 m** | **1490 ft** (100 ft) [1] **RA 93 ft - RVR 300 m** | **1490 ft** (100 ft) [1] [2] **RA 93 ft - RVR 350 m** |
| | ILS/DME (missed APCH climb gradient 4.6% to *2700 ft*) | **1590 ft** (200 ft) **RA 187 ft - RVR 550m** | **1590 ft** (200 ft) **RA 187 ft - RVR 550m** | **1590 ft** (200 ft) **RA 187 ft - RVR 550m** | **1590 ft** (200 ft) **RA 187 ft - RVR 550m** |
| | ALS out | RVR 1000 m | RVR 1000 m | RVR 1000 m | RVR 1000 m |
| | LOC | **1880 ft** (490 ft) **RVR 1200 m** | **1880 ft** (490 ft) **RVR 1300 m** | **1880 ft** (490 ft) **RVR 1400 m** | **1880 ft** (490 ft) **RVR 1500 m** |
| | ALS out | RVR 1800 m | RVR 1900 m | RVR 2000 m | RVR 2100 m |
| | VOR/DME | **1950 ft** (560 ft) **RVR 1400 m** | **1950 ft** (560 ft) **RVR 1500 m** | **1950 ft** (560 ft) **RVR 1600 m** | **1950 ft** (560 ft) **RVR 1700 m** |
| | ALS out | RVR 2000 m | RVR 2100 m | RVR 2200 m | RVR 2300 m |
| | SRE | **2040 ft** (650 ft) **RVR 1200 m** | **2040 ft** (650 ft) **RVR 1400 m** | **2040 ft** (650 ft) **RVR 1400 m** | **2040 ft** (650 ft) **RVR 1800 m** |
| | ALS out | RVR 1500 m | RVR 1500 m | RVR 2000 m | RVR 2000 m |
| 28 | | | | | |
| | VOR/DME | **2360 ft** (944 ft) **VIS 4300 m** | **2360 ft** (944 ft) **VIS 4300 m** | **2360 ft** (944 ft) **VIS 4300 m** | **2360 ft** (944 ft) **VIS 4300 m** |
| 34 | ILS/DME (missed APCH climb gradient 3.0% to *2400 ft*) | **1588 ft** (200 ft) **RVR 550 m** | **1588 ft** (200 ft) **RVR 550 m** | **1588 ft** (200 ft) **RVR 550 m** | **1588 ft** (200 ft) **RVR 550 m** |
| | VOR/DME | **2430 ft** (1042 ft) **VIS 4500 m** | **2430 ft** (1042 ft) **VIS 4500 m** | **2430 ft** (1042 ft) **VIS 4500 m** | **2430 ft** (1042 ft) **VIS 4500 m** |
| | LLZ/DME | **1990 ft** (602 ft) **VIS 2500 m** | **1990 ft** (602 ft) **VIS 2500 m** | **1990 ft** (602 ft) **VIS 2500 m** | **1990 ft** (602 ft) **VIS 2500 m** |

[1] TDZ LGT or CL LGT out: NIGHT RVR 550 m

[2] Autoland: RVR 300 m

[3] Additional MET requirements:
- no clouds below 3000 ft AAL,
- no precipitation,
- no wind shear,
- no moderate or severe turbulence.

[4] Ceiling 3500 ft required.

RA = **R**adio **A**ltimeter

| CIRCLE-TO-LAND 5) | 100 KT | 135 KT | 180 KT | 180 KT |
|---|---|---|---|---|
| 6) | **2360 ft** (944 ft) VIS 1500 m 7) | **2470 ft** (1054 ft) VIS 1600 m 7) | **2710 ft** (1294 ft) VIS 2400 m 7) | **2710 ft** (1294 ft) VIS 3600 m 7) |

5) Circling after RWY 28 not applicable.
After ILS 16: Applicable only if ACFT position is definitely within circling area.

6) Prohibited southwest of airport BTN extended centre lines RWY 16 and 28.

7) For all circlings to RWY 28 VIS 4000 m

Take-off **RWY 16, 28, 32, 34** 1)

| | **Low Visibility Procedures must be in force** | | | | |
|---|---|---|---|---|---|
| | REDL, CL LGT and multiple RVR required | REDL and CL LGT | RCL markings (day only) or REDL | RCL markings (day only) or REDL | NIL (day only) |
| A | 150 m 2) 4) | 200 m | 250 m | 400 m | 500 m |
| B | | | 300 m | | 600 m |
| C | | | | | |
| D | 200 m 3) 4) | 250 m | 400 m | | 800 m |

1) Take-off RWY 14 is subject to activation by Airport Authority

2) 125 m provided the conditions under Appendix 1 to JAR-OPS 1.430 (a) (4) (i), (A) to (E) are met

3) 150 m provided the conditions under Appendix 1 to JAR-OPS 1.430 (a) (4) (i), (A) to (E) are met

4) 75 m provided the conditions under Appendix 1 to JAR-OPS 1.430 (a) (4) (i), (A) to (E) are met and the aircraft consists of an approved lateral guidance system for take-off

Take-off **RWY 10**

| | RCL markings (day only) or REDL | NIL (day only) |
|---|---|---|
| A | 400 m | 500 m |
| B | | 600 m |
| C | | |
| D | | 800 m |

### 2.22.4 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 | |
| 10 | A | 500/--- | 400/--- | 400/--- | Due to LIL |
| | B | 600/--- | 400/--- | 400/--- | |
| | C | 600/--- | 400/--- | 400/--- | |
| | D | 800/--- | 400/--- | 400/--- | |
| All EXC 10 | A | 500/--- | 250/--- | 150/--- | |
| | B | 600/--- | 300/--- | 150/--- | |
| | C | 600/--- | 300/--- | 150/--- | |
| | D | 800/--- | 400/--- | 200/--- | |

## LSZH AD 2.23 ADDITIONAL INFORMATION

### 2.23.1 List of significant points

| NAV point | COORD WGS84 | | Back-up Definition | | | Purpose |
|---|---|---|---|---|---|---|
| | N LAT | E LONG | Radial | DME | NAV | |
| 1 | 2 | | 3 | | | 4 |
| AFOLT | 47 14 11 | 008 27 38 | 195 | 13.7 | KLO | RNAV SID LSZH |
| ALBIX | 47 14 59 | 008 33 52 | 169<br>109 | 26.9<br>39 | TRA<br>HOC | NON RNAV STAR/NON RNAV SID LSZH |
| AMIKI | 47 34 26 | 009 02 15 | 097 | 9 | ZUE | RNAV STAR/NON RNAV STAR LSZH, HLDG |
| ARTAG | 47 09 52 | 008 30 50 | 184 | 17.6 | KLO | RNAV SID LSZH |
| BERSU | 47 08 08 | 007 56 29 | 232 | 31.3 | KLO | RNAV STAR LSZH, HLDG |
| BLM DVOR | 47 37 58 | 007 29 58 | --- | --- | --- | RNAV STAR/NON RNAV STAR LSZH |
| BREGO | 47 23 23 | 008 20 46 | 055<br>244 | 22<br>9.1 | WIL<br>KLO | RNAV SID/NON RNAV SID LSZH |
| DEGES | 47 24 45 | 009 12 07 | 096 | 26.9 | KLO | RNAV SID LSZH |
| DOPIL | 47 04 12 | 008 01 00 | 223 | 31.7 | KLO | RNAV STAR LSZH |
| EDUMI | 47 45 41 | 008 27 31 | 011<br>305 | 4.4<br>17.7 | TRA<br>ZUE | IAC LSZH |
| EGABI | 47 18 26 | 008 39 49 | 152 | 10.2 | KLO | VOR/DME APCH 34 LSZH |
| ERMUS | 47 13 56 | 008 14 41 | 223 | 18.3 | KLO | RNAV STAR LSZH |
| ETOXU | 47 43 33 | 009 33 02 | 087 | 45.2 | TRA | RNAV STAR/NON RNAV STAR LSZH |

| NAV point | COORD WGS84 | | Back-up Definition | | | Purpose |
|---|---|---|---|---|---|---|
| | N LAT | E LONG | Radial | DME | NAV | |
| 1 | 2 | | 3 | | | 4 |
| GERSA | 47 02 22 | 008 31 56 | 181 | 25.1 | KLO | RNAV SID LSZH |
| GIPOL | 47 30 19 | 008 02 27 | 261 | 32 | ZUE | RNAV STAR/NON RNAV STAR LSZH, HLDG |
| HOC DVOR | 47 28 00 | 007 39 56 | --- | --- | --- | RNAV STAR/SID, NON RNAV STAR/SID LSZH |
| KELIP | 46 57 22 | 008 45 42 | 164 | 31.3 | KLO | RNAV STAR LSZH |
| KLO DVOR | 47 27 26 | 008 32 44 | --- | --- | --- | |
| KOLUL | 47 28 02 | 008 49 22 | 087 | 11.3 | KLO | RNAV SID LSZH |
| LAMAX | 47 37 14 | 008 54 14 | 056 | 17.6 | KLO | RNAV STAR LSZH |
| MANID | 47 16 03 | 008 41 41 | 152 | 12.9 | KLO | VOR/DME APCH 34 LSZH |
| MATIV | 47 35 35 | 009 11 32 | 073 | 27.5 | KLO | RNAV STAR LSZH |
| MILNI | 47 17 47 | 008 39 33 | --- | 10.3 | IZS | ILS/DME APCH 34 LSZH |
| MKR K | 47 27 35 | 008 34 06 | 080 | --- | KLO | RNAV SID/NON RNAV SID LSZH |
| MOMOL | 47 27 42 | 008 40 16 | 087 | 5.1 | KLO | RNAV SID LSZH |
| MOSIT | 47 04 09 | 008 44 38 | 161 | 24.7 | KLO | RNAV STAR LSZH, HLDG |
| NATOR | 48 10 12 | 008 19 17 | 330 | 40 | ZUE | RNAV STAR/NON RNAV STAR LSZH |
| NEGRA | 47 43 20 | 009 25 38 | 087 | 40.2 | TRA | RNAV STAR/NON RNAV STAR LSZH |
| NOLKA | 47 08 53 | 008 07 34 | 223 | 25.2 | KLO | RNAV STAR LSZH |
| OSDAN | 47 29 02 | 008 49 14 | 178 | 6.5 | ZUE | IAC LSZH |
| RAVED | 47 43 45 | 009 40 10 | 087 | 50 | TRA | HLDG |
| RILAX | 47 56 34 | 008 30 49 | 011 | 15.5 | TRA | RNAV STAR/NON RNAV STAR LSZH, HLDG |

| NAV point | COORD WGS84 | | Back-up Definition | | | Purpose |
|---|---|---|---|---|---|---|
| | N LAT | E LONG | Radial | DME | NAV | |
| 1 | 2 | | 3 | | | 4 |
| SONGI | 47 46 40 | 008 43 55 | 022 | 20.7 | KLO | RNAV SID LSZH |
| SUL DVOR | 48 22 54 | 008 38 41 | --- | --- | --- | RNAV STAR/NON RNAV STAR LSZH |
| TADOB | 47 10 59 | 008 05 23 | 228 | 24.8 | KLO | RNAV STAR LSZH |
| TGO DVOR | 48 37 06 | 009 15 33 | --- | --- | --- | RNAV STAR/NON RNAV STAR LSZH |
| URNAS | 47 00 08 | 008 38 18 | 169 | 42 | TRA | NON RNAV STAR LSZH, HLDG |
| UTIXO | 47 15 09 | 008 41 20 | --- | 13.2 | IZS | ILS/DME APCH 34 LSZH |
| VEBIT | 47 16 07 | 008 00 21 | 243 | 24.8 | KLO | RNAV SID LSZH |
| WIL VOR | 47 10 42 | 007 54 21 | --- | --- | --- | NON RNAV STAR/NON RNAV SID LSZH |
| ZUE DVOR | 47 35 32 | 008 49 04 | --- | --- | --- | RNAV SID/NON RNAV SID LSZH |
| ZH502 | 47 27 55 | 008 45 59 | 087 | 9 | KLO | RNAV SID/NON RNAV SID LSZH |
| ZH503 | 47 34 30 | 008 42 35 | 257<br>043 | 4.5<br>9.7 | ZUE<br>KLO | RNAV SID LSZH |
| ZH504 | 47 27 23 | 008 53 49 | 090 | 14.3 | KLO | RNAV SID LSZH |
| ZH506 | 47 30 26 | 008 46 51 | 073 | 10 | KLO | RNAV SID LSZH |
| ZH525 | 47 26 24 | 009 00 40 | 093 | 19 | KLO | RNAV SID LSZH |
| ZH526 | 47 15 33 | 008 37 15 | 166 | 12.3 | KLO | RNAV SID LSZH |
| ZH551 | 47 18 08 | 008 10 00 | 055 | 13 | WIL | NON RNAV SID LSZH |
| ZH552 | 47 25 44 | 008 23 30 | 255 | 6.5 | KLO | RNAV SID/NON RNAV SID LSZH |
| ZH553 | 47 25 20 | 008 21 22 | 255 | 8 | KLO | NON RNAV SID LSZH |
| ZH556 | 47 20 18 | 008 23 05 | 223 | 9.7 | KLO | RNAV SID LSZH |
| ZH557 | 47 18 47 | 008 24 13 | 214 | 10.4 | KLO | RNAV SID LSZH |
| ZH558 | 47 19 05 | 008 08 41 | 243 | 18.4 | KLO | RNAV SID LSZH |

| NAV point | COORD WGS84 | | Back-up Definition | | | Purpose |
|---|---|---|---|---|---|---|
| | N LAT | E LONG | Radial | DME | NAV | |
| 1 | 2 | | 3 | | | 4 |
| ZH625 | 47 19 55 | 008 42 03 | 140 | 9.8 | KLO | RNAV STAR LSZH |
| ZH626 | 47 16 19 | 008 42 41 | 149 | 13 | KLO | RNAV STAR LSZH |
| ZH650 | 47 21 46 | 008 32 00 | 169 | 20 | TRA | NON RNAV STAR LSZH |
| ZH676 | 47 27 40 | 008 30 16 | 169 | 14 | TRA | NON RNAV STAR LSZH |
| ZH677 | 47 34 38 | 007 44 13 | 108 | 10.2 | BLM | RNAV STAR/NON RNAV STAR LSZH |
| ZH701 | 47 37 51 | 008 40 04 | 111 | 10 | TRA | IAC LSZH |
| ZH702 | 47 43 59 | 008 34 03 | 310 | 13.2 | ZUE | IAC LSZH |
| ZH725 | 47 15 12 | 008 47 53 | 140 | 16 | KLO | VOR/DME APCH 34 LSZH |
| ZH726 | 47 14 50 | 008 47 15 | 142 | 16 | KLO | ILS/DME APCH 34 LSZH |
| ZH775 | 47 35 18 | 008 07 44 | 244 | 13.9 | TRA | IAC LSZH |

### 2.23.2 Advanced Surface Movement Guidance and Control System A-SMGCS

The A-SMGCS at Zurich Airport is supported by SMR and Mode S multilateration, which provides aircraft position information and identification to TWR, Ground and Apron Control. These units will pass information and instructions on appropriate frequencies.(REF: LSZH AD 2.18).

Aircraft operators intending to use Zurich airport shall ensure that Mode S transponders are able to operate when an aircraft is on the ground, transmitting Mode S squitter and replying to Mode S addressed interrogations only.

When an aircraft is on the ground, the transponder shall be inhibited to reply to Mode S all-call interrogation and replies to Mode A/C interrogations shall also be suppressed.

Flight crew shall select the assigned Mode A (squawk) code and activate the Mode S transponder at the request for push-back or taxi, whichever is first, and after landing until reaching the aircraft stand. The transponder shall be switched off immediately after parking.

Activation of a Mode S transponder normally means selecting the AUTO or XPDR position and transponders provided with on-the-ground sensors are automatically switched in this function before take-off and after landing. If using a transponder not fitted with an on-ground-sensor then refer to the operator's guide. Selection of STAND-BY mode will not activate the Mode S transponder and selecting ON could override the required suppression of SSR Mode A replies and Mode S all-call replies when an aircraft is on the ground.

## LSZH AD 2.24 CHARTS RELATED TO AN AERODROME


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| TEMPO RNAV SID RWY 14 | LSZH AD 2.24.7.6 - 1 |
| NON RNAV SID RWY 28 | LSZH AD 2.24.7.7 - 1 |
| NON RNAV SID RWY 10 | LSZH AD 2.24.7.8 - 1 |
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| IAC LLZ/DME RWY 16 | LSZH AD 2.24.10.4 - 1 |
| IAC VOR/DME KLO RWY 16 | LSZH AD 2.24.10.5 - 1 |
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| IAC ILS/DME RWY 34 CAT I | LSZH AD 2.24.10.7 - 1 |
| IAC LLZ/DME RWY 34 | LSZH AD 2.24.10.8 - 1 |
| IAC VOR/DME RWY 34 | LSZH AD 2.24.10.9 - 1 |
| MNM OBST CLR CHART (based on vectoring criteria) | LSZH AD 2.24.13 - 1 |