

LSGC - LES ÉPLATURES

LSGC AD 2.1 AERODROME LOCATION INDICATOR AND NAME

LSGC - LES ÉPLATURES

LSGC AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

| | | |
|---|--|--|
| 1 | ARP coordinates and site at Aerodrome | 47 05 03 N 006 47 36 E - 234°/441 m from THR 23 |
| 2 | Direction and distance from the CITY | 2 km SW La Chaux-de-Fonds |
| 3 | Elevation/Reference temperature | 3368 ft - 20.0°C |
| 4 | Geoid undulation at AD ELEV PSN | 163.6 ft |
| 5 | MAG VAR/Annual change | 2°.17' E (2019.5) / 0°09' eastwards |
| 6 | AD Administration, address, telephone, telefax, telex, AFS | Post: ARESA Aéroport Régional Les Eplatures SA Boulevard des Eplatures 56 CH-2300 La Chaux-de-Fonds Phone: +41 (0) 32 925 97 97 AFS: LSGCYDYX Email: info@leseplaturesairport.ch |
| 7 | Types of traffic permitted (IFR/VFR) | IFR/VFR |
| 8 | Remarks | NIL |

LSGC AD 2.3 OPERATIONAL HOURS

| | | |
|----|----------------------------|--|
| 1 | Aerodrome Operator | 1. 0700 (0600) - SS / MAX 1900 (1800) 2. AD CLSD: DEC 25, DEC 26, JAN 01 |
| 2 | Customs and immigration | As AD Administration; Customs procedure and documents see: URL: http://www.leseplaturesairport.ch |
| 3 | Health and sanitation | NIL |
| 4 | AIS Briefing Office | As AD Administration |
| 5 | ATS Reporting Office (ARO) | As AD Administration |
| 6 | MET Briefing Office | NIL |
| 7 | ATS | As AD Administration |
| 8 | Fuelling | As AD Administration |
| 9 | Handling | As AD Administration / services O/R |
| 10 | Security | NIL |
| 11 | De-icing | NIL |
| 12 | Remarks | Other hours O/R by phone to AD Administration |

LSGC AD 2.4 HANDLING SERVICES AND FACILITIES

| | | |
|---|---|--|
| 1 | Cargo-handling facilities | NIL |
| 2 | Fuel/oil types | JET A1, AVGAS 100LL 80, 100, W80, W100, W15W50, EXXON 23-80 |
| 3 | Fuelling facilities/capacity | JET A1: dock with 30 m pipe / 180 L/MIN AVGAS 100LL: dock with 15 m pipe / 25 L/MIN |
| 4 | De-icing facilities | NIL |
| 5 | Hangar space for visiting aircraft | Limited - O/R to AD Administration |
| 6 | Repair facilities for visiting aircraft | Hangarage, major aircraft repairs and minor engine repairs for ACFT up to 5700kg |
| 7 | Remarks | Oxygen available in limited quantities |

LSGC AD 2.5 PASSENGER FACILITIES

| | | |
|---|----------------------|---------------------------------------|
| 1 | Hotels | Near AD and in city |
| 2 | Restaurants | 2 restaurants at AD |
| 3 | Transportation | Buses, Taxis, Car rental O/R |
| 4 | Medical facilities | Hospital in city |
| 5 | Bank and Post Office | Near AD and in city |
| 6 | Tourist Office | In city Phone: +41 (0)32 889 68 95 |
| 7 | Remarks | NIL |

LSGC AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

| | | |
|---|---|--|
| 1 | AD category for fire fighting | Category 1 Category 2 - 4: O/R 24 HR before ETA/ETD |
| 2 | Rescue equipment | O/R |
| 3 | Capability for removal of disabled aircraft | NIL |
| 4 | Remarks | NIL |

LSGC AD 2.7 SEASONAL AVAILABILITY - CLEARING

| | | |
|---|-------------------------------|---|
| 1 | Type(s) of clearing equipment | 2 Snow blower, 2 Snow ploughs, 2 Sweepers |
| 2 | Clearance priorities | 1. RWY 2. TWY 3. Apron 4. Other areas |
| 3 | Remarks | NOV 01 - MAR 31 It is essential to check RWY conditions by TEL |

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

| | | |
|---|--|---|
| 1 | Designation, surface and strength of Aprons | ASPH: - PCN 20 F/C/Y/T |
| 2 | Designation, width, surface and strength of Taxiways | TWY West and East: 9 m; intersection A: 20 m; intersection B: 16.5 m; intersection C: 12.5 m; All TWY ASPH: PCN 20 F/C/Y/T |
| 3 | ACL location and elevation | Holding point 05: 3363 ft - Holding point 23: 3343 ft |
| 4 | Location of VOR checkpoints | NIL |
| 5 | Location of INS checkpoints | NIL |
| 6 | Remarks | NIL |

LSGC AD 2.9 SURFACE MOVEMENT GUIDANCE, CONTROL SYSTEM AND MARKINGS

| | | |
|---|---|---|
| 1 | Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands | Parking sectors Green and Orange: Marshalling and towing only, coloured perimeter markings. Parking sector Blue and Purple: Self-taxiing, max span 11 m (Blue) and 13 m (Purple), coloured centre lines. |
| 2 | RWY/TWY markings and LGT | Markings: RWY (designation, THR, TDZ, CL, begin and end), TWY (CL and holding positions). LGT: SALS 23, THR, REDL, RENL, no TWY LGT. |
| 3 | Stop bars and RWY guard lights | NIL |
| 4 | Other RWY protection measures | NIL |
| 5 | Remarks | TWY between intersections A and B is located within the runway strip. No use without ATC instructions. |

LSGC 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 05 (1) | Building 3349 | 47 05 14 N 006 48 00 E | Crane/Cranes marked/LGTD 3461 | 47 04 58 N 006 47 12 E | B0517/00 | | |
| AOC 05 (2) | Antenna 3350 | 47 05 14 N 006 48 01 E | Tower/Mast 4738 | 47 04 42 N 006 53 14 E | B0694/00 | | |
| AOC 05 (3) | Pole 3352 | 47 05 15 N 006 48 00 E | Tower/Mast 4551 | 47 03 50 N 006 51 21 E | B0707/00 | | |
| AOC 05 (4) | Antenna 3354 | 47 05 16 N 006 48 02 E | Antenna marked/LGTD 3402 | 47 05 09 N 006 47 44 E | B0144/01 | | |
| AOC 05 (5) | Pole 3359 | 47 05 18 N 006 48 04 E | Cable ----- | 47 08 51 N 006 52 51 E- 47 08 40 N 006 52 47 E | B0546/03 | | |
| AOC 05 (6) | Building 3366 | 47 05 14 N 006 48 08 E | Antenna 3970 | 47 00 38 N 006 47 12 E | B0383/04 | | |
| AOC 05 (7) | Tree/Trees 3369 | 47 05 18 N 006 48 05 E | Crane/Cranes marked/LGTD 3419 | 47 05 02 N 006 47 45 E | B0124/22 | | |
| AOC 05 (8) | Antenna 3377 | 47 05 18 N 006 48 12 E | | | | | |
| AOC 05 (9) | Tree/Trees 3396 | 47 05 17 N 006 48 17 E | | | | | |
| AOC 05 (10) | Tree/Trees 3404 | 47 05 19 N 006 48 16 E | | | | | |
| AOC 05 (11) | Building 3412 | 47 05 23 N 006 48 13 E | | | | | |
| AOC 05 (12) | Antenna 3415 | 47 05 23 N 006 48 13 E | | | | | |
| AOC 05 (13) | Antenna 3430 | 47 05 24 N 006 48 14 E | | | | | |
| AOC 05 (14) | Antenna 3449 | 47 05 26 N 006 48 20 E | | | | | |
| AOC 05 (15) | Power line 3483 | 47 05 18 N 006 48 56 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 05 (16) | Building | 3524 | 47 05 19 N 006 49 10 E | | | |
| AOC 05 (17) | Building | 3533 | 47 05 20 N 006 49 13 E | | | |
| AOC 05 (18) | Tree/Trees | 3671 | 47 05 23 N 006 49 43 E | | | |
| AOC 05 (19) | Tree/Trees | 3678 | 47 05 24 N 006 49 43 E | | | |
| AOC 05 (20) | Tree/Trees | 3691 | 47 05 25 N 006 49 45 E | | | |
| AOC 05 (21) | Tree/Trees | 3715 | 47 05 22 N 006 49 49 E | | | |
| | | | | | | |
| AOC 23 (1) | Pole | 3369 | 47 04 50 N 006 47 14 E | | | |
| AOC 23 (2) | Tree/Trees | 3416 | 47 04 49 N 006 47 14 E | | | |
| AOC 23 (3) | Tree/Trees | 3417 | 47 04 41 N 006 46 57 E | | | |
| AOC 23 (4) | Tree/Trees | 3431 | 47 04 38 N 006 46 48 E | | | |
| AOC 23 (5) | Tree/Trees | 3460 | 47 04 36 N 006 46 40 E | | | |
| AOC 23 (6) | Tree/Trees | 3495 | 47 04 34 N 006 46 37 E | | | |
| AOC 23 (7) | Tree/Trees | 3537 | 47 04 30 N 006 46 26 E | | | |
| Refer also to LSGC AOC 05/23, LSGC AD 2.24.4-1 | | | | | | |

LSGC AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

| | | |
|----|---|---|
| 1 | Associated MET Office | MeteoSwiss |
| 2 | Hours of service | H24 |
| 3 | Office responsible for TAF preparation Periods of validity | MeteoSwiss, Geneva 9 hours |
| 4 | Type of landing forecast | NIL |
| 5 | Briefing/consultation provided | Self Briefing Service (www.skybriefing.com) |
| 6 | Flight documentation Language(s) used | Digital En, Ge, Fr |
| 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 | Les Eplatures TWR |
| 10 | Additional information (limitation of service, etc.) | TEL: Weather briefing: 0900 162 767 (Fr), 0900 162 737 (Ge); accessible within Switzerland |

LSGC AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

| Designations RWY NR | TRUE & MAG BRG | Dimensions of RWY (m) | Strength (PCN) and surface of RWY and SWY | THR COORD | THR elevation and highest elevation of TDZ of precision APP RWY | Slope of RWY-SWY |
|------------------------|----------------------|-----------------------------|---|-------------------------------|---|---------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 05 | 054° GEO 052° MAG | 1090 x 27 | PCN 20 F/C/Y/T ASPH | 47 04 52.89N 006 47 15.95E | 3368 ft | AVG -0.746% |
| 23 | 234° GEO 232° MAG | | | 47 05 12.22N 006 47 55.32E | 3346 ft | AVG +0.746% |

| Designations RWY NR | SWY dimensions (m) | CWY dimensions (m) | Strip dimensions (m) | OFZ | Remarks |
|---------------------------|--------------------------|--------------------------|----------------------------|-----|---|
| 1 | 8 | 9 | 10 | 11 | 12 |
| 05 | NIL | 60 | 1150 x 60 | NIL | Non-instrument RWY Pavement surface width 30m RESA: 30 m Grooved |
| 23 | NIL | 30 | | NIL | Non-instrument RWY Pavement surface width 30m RESA: 30 m Grooved |

LSGC AD 2.13 DECLARED DISTANCES

| RWY Designator | TORA (m) | TODA (m) | ASDA (m) | LDA (m) | Remarks |
|-------------------|----------|----------|----------|---------|--|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 05 | 1090 | 1150 | 1090 | 1054 | Additional 40 m starter extension available, subject to Airport Authority approval |
| 23 | 1090 | 1120 | 1090 | 1059 | Additional 54 m starter extension available, subject to Airport Authority approval |

LSGC AD 2.14 APPROACH AND RUNWAY LIGHTING

| RWY Designator | ALS Type, LEN, INTST | THR LGT Colour, INTST, WBAR | VASIS Type, PSN, MEHT | RTZL LEN, INTST | RCLL LEN, spacing, colour, INTST | REDL LEN, spacing, colour, INTST | RENL Colour, INTST | SWY LGT LEN, colour | Remarks |
|----------------|----------------------|-----------------------------|-----------------------|-----------------|----------------------------------|--|--------------------|---------------------|---------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 05 | NIL | RTHL G, LIH | APAPI 4.3° L 9.5 m | NIL | NIL | 37 m, 80 m, R, LIH; 688 m, 80 m, W, LIH; 365 m, 80 m, Y, LIH | R, LIH | NIL | NIL |
| 23 | SALS 420 m LIH | RTHL G, LIH | APAPI 3.83° L 8.4 m | NIL | NIL | 30 m, 80 m, R, LIH; 695 m, 80 m, W, LIH; 365 m, 80 m, Y, LIH | R, LIH | NIL | NIL |

LSGC AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

| | | |
|---|--|----------------------------------|
| 1 | ABN/IBN location, characteristics and hours of operation | NIL |
| 2 | LDI location and LGT Anemometer location and LGT | NIL |
| 3 | TWY edge and centre line lighting | NIL |
| 4 | Secondary power supply/switch-over time | NIL |
| 5 | Remarks | Obstruction marking and lighting |

LSGC AD 2.16 HELICOPTER LANDING AREA

| | | |
|---|---|--|
| 1 | Coordinates TLOF or THR of FATO | NIL |
| | Geoid undulation | NIL |
| 2 | TLOF and/or FATO elevation | 1026 m / 3366 ft |
| 3 | TLOF and FATO area dimensions, surface, strength, marking | FATO on RWY 05/23 ASPH, PCN 20 F/C/Y/T. No specific marking |
| 4 | True BRG of FATO | RWY 05: 054° RWY 23: 234° |
| 5 | Declared distance available | See: LSGC AD 2.13 for RWY 05/23 |
| 6 | APP and FATO lighting | RWY LGT |
| 7 | Remarks | APCH via RWY and air taxi to apron. Follow ATC instruction. |

LSGC AD 2.17 ATS AIRSPACE

| | | |
|---|--------------------------------|---|
| 1 | Designation and lateral limits | Les Eplatures CTR 47 00 51N 006 38 53E - along Swiss BDRY - 47 03 27N 006 42 31E - 47 03 47N 006 42 43E - 47 07 31N 006 49 40E - 47 10 44N 006 56 02E - 47 08 08N 006 58 27E - 47 06 00N 006 52 15E - 47 01 47N 006 47 30E - 46 58 51N 006 43 11E - 47 00 51N 006 38 53E |
| 2 | Vertical limits | 6500 ft |
| 3 | Airspace classification | D |
| 4 | ATS unit call sign Language(s) | En, En and Fr for Non-Commercial VFR traffic. |
| 5 | Transition altitude | 7000 ft |
| 6 | Remarks | ACT: HX |

LSGC AD 2.18 ATS COMMUNICATION FACILITIES

| Service designation | Call sign | Frequency | Hours of Operation | Remarks |
|---------------------|---------------------|-------------|--------------------|---------|
| 1 | 2 | 3 | 4 | 5 |
| TWR | Les Eplatures Tower | 118.125 MHz | HX | NIL |

LSGC 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 |
| NIL | | | | | | |

LSGC AD 2.20 LOCAL AERODROME REGULATIONS**1. Airport regulations**

No RDO ACFT, strictly PPR by phone to AD administration.

2. ACFT taxi and parking

Taxi on paved RWY and TWY only. Parking sectors Blue and Purple available for small aircraft, parking sectors Green and Orange for ICAO code letter A and B aircraft. Coloured lines (green, blue, purple and orange) delimit all parking areas. Panels indicate the positions and names of parking lines and sectors.

3. Summer times

High-density altitudes up to 6000 ft possible. Publication on METAR when temperatures are above 25°C.

4. Winter times

Operations only performed on non-contaminated RWY. Request information by TEL prior to flight in the period from OCT to APR. Runway condition broadcasted on METAR during ATS OPR HR.

5. School and training flights - technical test flights - use of runways

IFR and VFR school flights PPR.

No circuits permitted between 1100 and 1230 (1000 and 1130), after 1800 (1700), SUN and HOL.

6. HEL IFR APCH and DEP

Expect HEL IFR APCH and DEP outside ATC HR up to 7000 ft AMSL and according to special authorization.

LSGC AD 2.21 NOISE ABATEMENT PROCEDURES**1. General provisions**

No go-around over city permitted for IFR school and training FLT (APCH RWY 23).

2. Use of the runway system during the day period

TKOF RWY 23 preferred for single engine ACFT.

LSGC AD 2.22 FLIGHT PROCEDURES

1. 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 | |
| 05 | A | 1500/1000 | 1500/1000 | --- | NIL |
| | B | 1500/1000 | 1500/1000 | --- | |
| 23 | A | 1500/800 | 1500/800 | --- | |
| | B | 1500/800 | 1500/800 | --- | |

1.1 SID Descriptions

1.1.0.1 Visual SID RWY 05 - RNAV (see chart LSGC AD 2.24.7 -1)

| DESIGNATOR | RWY 05 | | | | |
|--|--|---|-----|------------------------------------|--------|
| | ROUTE | | | Contact | Remark |
| | Lateral | Vertical | | | |
| FRIBOURG 6N (FRI 6N) PDG 4.0% to 5300ft MNM climb gradient 5.0% for airspace | Maintain visual GND contact until GC610 (Stone quarry). Proceed via GC611 to BOMECE. At BOMECE turn left (MAX IAS 150kt during turn). Proceed to PALLU. Climb in the PALLU HLDG pattern to FL110. Proceed to FRI. | INITIAL CLIMB CLEARANCE FL080 Cross GC610 at 4300ft or above, GC611 at 6900ft or above. | NIL | RNAV applicable when passing GC610 | |
| DEKAM 3M PDG 4.0% to 5300ft MNM climb gradient 5.0% for airspace | Maintain visual GND contact until GC610 (Stone quarry). Proceed via GC611, BOMECE to DEKAM. | INITIAL CLIMB CLEARANCE FL080 Cross GC610 at 4300ft or above, GC611 at 6900ft or above. | NIL | RNAV applicable when passing GC610 | |
| SAINT-PREX 6M (SPR 6M) PDG 4.0% to 5300ft MNM climb gradient 5.0% for airspace | Maintain visual GND contact until GC610 (Stone quarry). Proceed via GC611 to BOMECE. At BOMECE turn left (MAX IAS 150kt during turn). Proceed via PALLU, FLORY to SPR. | INITIAL CLIMB CLEARANCE FL080 Cross GC610 at 4300ft or above, GC611 at 6900ft or above. | NIL | RNAV applicable when passing GC610 | |
| SAINT-PREX 6N (SPR 6N) PDG 4.0% to 5300ft MNM climb gradient 5.0% for airspace | Maintain visual GND contact until GC610 (Stone quarry). Proceed via GC611 to BOMECE. At BOMECE turn left (MAX IAS 150kt during turn). Proceed to PALLU. Climb in the PALLU HLDG pattern to FL110. Proceed via FLORY to SPR.. | INITIAL CLIMB CLEARANCE FL080 Cross GC610 at 4300ft or above, GC611 at 6900ft or above. | NIL | RNAV applicable when passing GC610 | |

Visual SID FRI 6N - RNAV

| Path terminator | Waypoint | Flyover | Turn direction | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
|-----------------|----------|---------|----------------|---------------|------------------|----------------|---------------|
| DF | GC610 | Y | - | +4300 | - | - | - |
| TF | GC611 | N | - | +6900 | - | 052° (054.3°T) | 5.5 |
| TF | BOMECE | Y | - | - | - | 052° (054.4°T) | 1.5 |
| DF | PALLU | Y | L | - | -150 | - | - |
| HA | PALLU | Y | R | FL110 | -150 | 052° (054.1°T) | 1 min |
| TF | FRI | N | - | - | - | 134° (135.9°T) | 25.5 |

Remark: Distance from end of RWY05 to GC610 is 2.67NM

Visual SID DEKAM 3M - RNAV

| Path terminator | Waypoint | Flyover | Turn direction | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
|-----------------|----------|---------|----------------|---------------|------------------|----------------|---------------|
| DF | GC610 | Y | - | +4300 | - | - | - |
| TF | GC611 | N | - | +6900 | - | 052° (054.3°T) | 5.5 |
| TF | BOMEK | N | - | - | - | 052° (054.4°T) | 1.5 |
| TF | DEKAM | N | - | - | - | 052° (054.4°T) | 6.1 |

Remark: Distance from end of RWY05 to GC610 is 2.67 NM

Visual SID SPR 6M - RNAV

| Path terminator | Waypoint | Flyover | Turn direction | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
|-----------------|----------|---------|----------------|---------------|------------------|----------------|---------------|
| DF | GC610 | Y | - | +4300 | - | - | - |
| TF | GC611 | N | - | +6900 | - | 052° (054.3°T) | 5.5 |
| TF | BOMEK | Y | - | - | - | 052° (054.4°T) | 1.5 |
| DF | PALLU | N | L | - | -150 | - | - |
| TF | FLORY | N | - | - | - | 217° (219.3°T) | 13.5 |
| TF | SPR | N | - | - | - | 190° (192.1°T) | 27.0 |

Remark: Distance from end of RWY05 to GC610 is 2.67 NM

Visual SID SPR 6N - RNAV

| Path terminator | Waypoint | Flyover | Turn direction | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
|-----------------|----------|---------|----------------|---------------|------------------|----------------|---------------|
| DF | GC610 | Y | - | +4300 | - | - | - |
| TF | GC611 | N | - | +6900 | - | 052° (054.3°T) | 5.5 |
| TF | BOMEK | Y | - | - | - | 052° (054.4°T) | 1.5 |
| DF | PALLU | Y | L | - | -150 | - | - |
| HA | PALLU | Y | R | FL110 | -150 | 052° (054.1°T) | 1 min |
| TF | FLORY | N | - | - | - | 217° (219.3°T) | 13.5 |
| TF | SPR | N | - | - | - | 190° (192.1°T) | 27.0 |

Remark: Distance from end of RWY05 to GC610 is 2.67 NM

HLDG BOMEK:

INBD TR052, turns left, OUBD leg 1 min, MNM HLDG ALT 7000ft, MAX HLDG FL110. MAX IAS 150kt.

HLDG PALLU:

INBD TR052, turns right, OUBD leg 1 min, MNM HLDG ALT 7000ft, MAX HLDG FL110. MAX IAS 150kt.

1.1.0.2 Visual SID RWY 23 - RNAV (see chart LSGC AD 2.24.7 - 3)

| DESIGNATOR | RWY 23 | | | | |
|--|---|--|-----|---|--------|
| | ROUTE | | | Contact | Remark |
| | Lateral | Vertical | | | |
| FRIBOURG 5B (FRI 5B) PDG 4.8% to 4900ft MNM climb gradient 5.9% to 4900ft from LSGC DER23 and 5.0% thereafter for airspace | Maintain visual GND contact until GC630 (Long industrial building followed by a sports field). At 4900ft, but not before GC630, turn left (MAX IAS 150kt during turn). Climb in the PALLU HLDG pattern to FL110. Proceed to FRI | INITIAL CLIMB CLEARANCE FL080 Cross GC630 at 4100ft or above, PALLU at 7000ft or above. | NIL | No turn before DER. RNAV applicable when passing GC630 | |
| DEKAM 3A PDG 4.8% to 4900ft MNM climb gradient 5.9% to 4900ft from LSGC DER23 and 5.0% thereafter for airspace | Maintain visual GND contact until GC630 (Long industrial building followed by a sports field). At 4900ft, but not before GC630, turn left (MAX IAS 150kt during turn). Proceed via PALLU, BOMECE to DEKAM. | INITIAL CLIMB CLEARANCE FL080 Cross GC630 at 4100ft or above, BOMECE at 7000ft or above. | NIL | No turn before DER. RNAV applicable when passing GC630 | |
| SAINT-PREX 5A (SPR 5A) PDG 4.8% to 4700ft MNM climb gradient 5.0% for airspace | Maintain visual GND contact until GC630 (Long industrial building followed by a sports field). Proceed via GC631, FLORY to SPR | INITIAL CLIMB CLEARANCE FL080 Cross GC630 at 4100ft or above, GC631 at 6500ft or above. | NIL | No turn before DER. RNAV applicable when passing GC630 | |
| SAINT-PREX 5B (SPR 4B) PDG 4.8% to 4900ft MNM climb gradient 5.9% to 4900ft from LSGC DER23 and 5.0% thereafter for airspace | Maintain visual GND contact until GC630 (Long industrial building followed by a sports field). At 4900ft, but not before GC630, turn left (MAX IAS 150kt during turn). Climb in the PALLU HLDG pattern to FL110. Proceed via FLORY to SPR. | INITIAL CLIMB CLEARANCE FL080 Cross GC630 at 4100ft or above, PALLU at 7000ft or above. | NIL | No turn before DER. RNAV applicable when passing GC630 | |

Visual SID FRI 5B - RNAV

| Path terminator | Waypoint | Flyover | Turn direction | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
|-----------------|----------|---------|----------------|---------------|------------------|----------------|---------------|
| DF | GC630 | Y | - | +4100 | - | - | - |
| CA | - | N | - | +4900 | - | 226° (228.6°T) | - |
| DF | PALLU | Y | L | +7000 | -150 | - | - |
| HA | PALLU | Y | R | FL110 | -150 | 052° (054.1°T) | 1 min |
| DF | FRI | N | - | - | - | 134° (135.9°T) | 25.5 |

Visual SID DEKAM 3A - RNAV

| Path terminator | Waypoint | Flyover | Turn direction | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
|-----------------|----------|---------|----------------|---------------|------------------|----------------|---------------|
| DF | GC630 | Y | - | +4100 | - | - | - |
| CA | - | N | - | +4900 | - | 226° (228.6°T) | - |
| DF | PALLU | N | L | - | -150 | - | - |
| TF | BOMECE | N | - | +7000 | - | 052° (054.1°T) | 10.0 |
| TF | DEKAM | N | - | - | - | 052° (054.4°T) | 6.1 |

Visual SID SPR 5A - RNAV

| Path terminator | Waypoint | Flyover | Turn direction | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
|-----------------|----------|---------|----------------|---------------|------------------|----------------|---------------|
| DF | GC630 | Y | - | +4100 | - | - | - |
| TF | GC631 | N | - | +6500 | - | 226° (228.6°T) | 3.2 |
| TF | FLORY | N | - | - | - | 207° (209.5°T) | 6.9 |
| TF | SPR | N | - | - | - | 190° (192.2°T) | 27.0 |

| Visual SID SPR 5B - RNAV | | | | | | | |
|--------------------------|----------|---------|----------------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Turn direction | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
| DF | GC630 | Y | - | +4100 | - | - | - |
| CA | - | N | - | +4900 | - | 226° (228.6°T) | - |
| DF | PALLU | Y | L | +7000 | -150 | - | - |
| HA | PALLU | Y | R | FL110 | -150 | 052° (054.1°T) | 1 min |
| TF | FLORY | N | - | - | - | 217° (219.3°T) | 13.5 |
| TF | SPR | N | - | - | - | 190° (192.1°T) | 27.0 |

HLDG BOMEK:

INBD TR052, turns left, OUBD leg 1 min, MNM HLDG ALT 7000ft, MAX HLDG FL110. MAX IAS 150kt.

HLDG PALLU:

INBD TR052, turns right, OUBD leg 1 min, MNM HLDG ALT 7000ft, MAX HLDG FL110. MAX IAS 150kt.

2. STAR Descriptions**2.1 STAR ARPUS TO PALLU - RNAV (see chart LSGC AD 2.24.9.1 - 1)**

| DESIGNATOR | ARPUS TO PALLU - RNAV | | |
|------------|---|--|--------------------------------|
| | ROUTE | | |
| | Lateral | Vertical | Remark |
| ARPUS 3E | From ARPUS proceed via HR, ARNOT, DEKAM (MAX IAS 150kt), BOMEK to PALLU | HR MIN FL090, ARNOT MAX FL090, PALLU MNM 7000ft. | HLDG ARPUS: Ref: AIP France |

| STAR ARPUS 3E - RNAV | | | | | | | |
|----------------------|----------|---------|----------------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Turn direction | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
| IF | ARPUS | Y | - | - | - | - | - |
| TF | HR | N | L | +FL090 | - | 156° (157.9°T) | 7.2 |
| TF | ARNOT | N | - | -FL090 | - | 139° (141.3°T) | 12.2 |
| TF | DEKAM | N | R | +7000 | -150 | 139° (141.0°T) | 12.5 |
| TF | BOMEK | N | - | +7000 | - | 232° (234.4°T) | 6.1 |
| TF | PALLU | Y | - | +7000 | - | 232° (234.3°T) | 10.0 |

2.2 STAR TO PALLU - RNAV (see chart LSGC AD 2.24.9.2 - 1)

| DESIGNATOR | TO PALLU | | |
|---------------------------|---------------------------------------|---|--------|
| | ROUTE | | Remark |
| | Lateral | Vertical | |
| FRIBOURG 2R (FRI 2R) | Proceed from FRI to PALLU. | Maintain MNM FL110 to PALLU. | NIL |
| DEKAM 3R | From DEKAM proceed via BOMEK to PALLU | Cross BOMEK at 7000ft or above, PALLU at 7000ft or above | NIL |
| SAINT-PREX 3R (SPR 3R) | From SPR proceed via FLORY to PALLU | Maintain MNM FL110 to PALLU | NIL |

| STAR FRI 2R - RNAV | | | | | | |
|--------------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
| IF | FRI | N | - | - | - | - |
| TF | PALLU | N | +FL110 | - | 314° (316.2°T) | 25.5 |

| STAR DEKAM 3R - RNAV | | | | | | |
|----------------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
| IF | DEKAM | N | - | - | - | - |
| TF | BOMEK | N | +7000 | - | 232° (234.5°T) | 6.1 |
| TF | PALLU | N | +7000 | - | 232° (234.3°T) | 10.0 |

| STAR SPR 3R - RNAV | | | | | | |
|--------------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
| IF | SPR | N | - | - | - | - |
| TF | FLORY | N | - | - | 010° (012.0°T) | 27.0 |
| TF | PALLU | N | +FL110 | - | 037° (039.1°T) | 13.5 |

HLDG PALLU:

INBD TR052, turns right, OUBD leg 1 min, MNM HLDG ALT 7000ft, MAX HLDG FL110. MAX IAS 150kt.

2.3 Approach procedures:

APAPI has to be strictly followed in visual segment of all IFR-approaches due to obstacles on short final.

2.3.1 Procedure description of RNP RWY 05 (see chart LSGC AD 2.24.10 - 1)

| From PALLU | | | | | | |
|-----------------|----------|---------|-----------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
| IF | PALLU | N | -FL110 +7000 | -150 | - | - |
| TF | FLORY | N | +7000 | -150 | 217° (219.3°T) | 13.6 |
| TF | GC750 | N | +7000 | -150 | 336° (338.3°T) | 2.8 |
| TF | GC751 | N | +7000 | - | 048° (050.1°T) | 3.3 |
| TF | GC752 | Y | - | - | 048° (050.2°T) | 8.6 |
| TF | GC753 | Y | +7000 | - | 048° (050.3°T) | 10.3 |
| DF | PALLU | Y | -FL110 +7000 | -130 | - | - |
| HM | PALLU | Y | -FL110 +7000 | -150 | 052° (054.1°) | - |

| From FLORY | | | | | | |
|-----------------|----------|---------|-----------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
| IF | FLORY | N | +7000 | -150 | - | - |
| TF | GC750 | N | +7000 | -150 | 336° (338.3°T) | 2.8 |
| TF | GC751 | N | +7000 | - | 048° (050.1°T) | 3.3 |
| TF | GC752 | Y | - | - | 048° (050.2°T) | 8.6 |
| TF | GC753 | Y | +7000 | - | 048° (050.3°T) | 10.3 |
| DF | PALLU | Y | -FL110 +7000 | -130 | - | - |
| HM | PALLU | Y | -FL110 +7000 | -150 | 052°(054.1°) | - |

2.3.2 Procedure description of RNP RWY 23 (see chart LSGC AD 2.24.10 - 3)

| From BALIR | | | | | | |
|-----------------|----------|---------|-----------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
| IF | BALIR | N | +7000 | - | - | - |
| TF | GC701 | N | +7000 | - | 241° (243.2°T) | 4.4 |
| TF | DEKAM | N | +7000 | - | 232° (234.7°T) | 3.7 |
| TF | BOMEK | N | +7000 | - | 232° (234.5°T) | 6.1 |
| TF | RW23 | Y | - | - | 232° (234.4°T) | 9.7 |
| DF | GC704 | Y | - | - | 232° (234.3°T) | 4.0 |
| DF | PALLU | Y | -FL110 +7000 | -150 | - | - |
| HM | PALLU | Y | -FL110 +7000 | -150 | 052°(054.1°) | - |

| From PALLU | | | | | | |
|-----------------|----------|---------|-----------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track | Distance (NM) |
| IF | PALLU | N | -FL110 +7000 | -150 | - | - |
| TF | BOMEK | N | +7000 | - | 052° (054.1°T) | 10.0 |
| TF | GC706 | N | +7000 | - | 024° (026.2°T) | 6.8 |
| TF | DEKAM | N | +7000 | - | 139° (141.3°T) | 3.2 |
| TF | BOMEK | N | +7000 | - | 232° (234.5°T) | 6.1 |
| TF | RW23 | Y | - | - | 232° (234.4°T) | 9.7 |
| TF | GC704 | Y | - | - | 232° (234.3°T) | 4.0 |
| DF | PALLU | Y | -FL110 +7000 | -150 | - | - |
| HM | PALLU | Y | -FL110 +7000 | -150 | 052°(054.1°) | - |

LSGC AD 2.23 ADDITIONAL INFORMATION**1. List of significant points (Terminal)**

| NAV point | COORD WGS84 | | Back-up Definition | | | Purpose |
|-----------|--------------|---------------|--------------------|-----|-----|---------------|
| | LAT | LONG | Radial | DME | NAV | |
| 1 | 2 | | 3 | | | 4 |
| ARPUS | N 47 40 21.3 | E 006 39 56.8 | --- | --- | --- | STAR LSGC |
| BOMEK | N 47 10 50.4 | E 006 59 26.9 | --- | --- | --- | STAR/SID LSGC |
| FRI VOR | N 46 46 39 | E 007 13 25 | --- | --- | --- | STAR/SID LSGC |
| GC610 | N 47 06 47.5 | E 006 51 09.6 | --- | --- | --- | SID LSGC |
| GC611 | N 47 09 58.1 | E 006 57 39.6 | --- | --- | --- | SID LSGC |
| GC630 | N 47 02 41.4 | E 006 43 37.2 | --- | --- | --- | SID LSGC |
| GC631 | N 47 00 33.2 | E 006 40 05.0 | --- | --- | --- | SID LSGC |
| GC701 | N 47 16 31.0 | E 007 11 08.4 | --- | --- | --- | IAC LSGC |
| GC704 | N 47 02 51.0 | E 006 43 07.8 | --- | --- | --- | IAC LSGC |
| GC706 | N 47 16 54.1 | E 007 03 49.5 | --- | --- | --- | IAC LSGC |
| GC750 | N 46 57 07.2 | E 006 33 35.2 | --- | --- | --- | IAC LSGC |
| GC751 | N 46 59 13.5 | E 006 37 16.3 | --- | --- | --- | IAC LSGC |
| GC752 | N 47 04 41.6 | E 006 46 53.0 | --- | --- | --- | IAC LSGC |
| GC753 | N 47 11 16.7 | E 006 58 31.9 | --- | --- | --- | IAC LSGC |
| SPR VOR | N 46 28 07 | E 006 26 53 | --- | --- | --- | STAR/SID LSGC |

LSGC AD 2.24 AERONAUTICAL CHARTS RELATED TO AN AERODROME

| Name | Page |
|---|----------------------|
| Aerodrome Chart | LSGC AD 2.24.1 - 1 |
| Aircraft Parking Chart | LSGC AD 2.24.2 - 1 |
| Aerodrome Obstacle Chart - Type A - RWY 05/23 | LSGC AD 2.24.4 - 1 |
| Visual SID RWY 05 - RNAV | LSGC AD 2.24.7 - 1 |
| Visual SID RWY 23 - RNAV | LSGC AD 2.24.7 - 3 |
| STAR ARPUS TO PALLU - RNAV | LSGC AD 2.24.9.1 - 1 |
| STAR TO PALLU - RNAV | LSGC AD 2.24.9.2 - 1 |
| IAC RNP RWY 05 CAT A, B | LSGC AD 2.24.10 - 1 |
| IAC RNP RWY 23 CAT A, B | LSGC AD 2.24.10 - 3 |

LSGC AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

NIL

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