## LQSA - SARAJEVO

Note: The following sections in this chapter are intentionally left blank: AD-2.16, AD-2.21, AD-2.25

## LQSA AD 2.1 AERODROME LOCATION INDICATOR AND NAME

LQSA - SARAJEVO INTERNATIONAL AIRPORT

## LQSA AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

| | | |
|---|---|---|
| 1 | ARP coordinates and site at AD | 434928.1N 0181954.4E<br>On RWY centre line 1228m SE from THR 11 |
| 2 | Direction and distance from (city) | BRG 234º, 6.7 KM from railway station in Sarajevo |
| 3 | Elevation/Reference temperature | 520 M (1705 ft) / 29.95ºC (AUG) |
| 4 | Geoid undulation at AD ELEV PSN | 46 M (150 ft) |
| 5 | MAG VAR/Annual Change | 5º E (2020)/0.13° increasing |
| 6 | Name of AD operator<br>Address<br>Telephone<br>Telefax<br>AFS<br>SITA<br>E-mail<br>URL | Post: P.C. Sarajevo International Airport L.L.C.<br>Kurta Schorka 36<br>71210 Ilidža - Sarajevo<br>Phone: +387 33 289 200<br>Fax: +387 33 289 201<br>AFS: NIL<br>SITA: SJJAPXH - OPC<br>SJJOCXH - OPC<br>SJJFFXH - Cargo<br>SJJHHXH - Commercial Department<br>SJJLLXH - Lost and Found<br>E-mail: direkcija@sarajevo-airport.ba<br>URL: http://www.sarajevo-airport.ba |
| 7 | Types of traffic permitted (IFR/VFR) | IFR-VFR |
| 8 | Remarks | INFO about airport slot allocation and form AVBL via TEL:<br>+387 33 289 120;<br>+387 33 289 123; |

## LQSA AD 2.3 OPERATIONAL HOURS

| | | |
|---|---|---|
| 1 | AD operator | Upon NOTAM |
| 2 | Customs and immigration | Upon NOTAM |
| 3 | Health and sanitation | Upon NOTAM |
| 4 | AIS Briefing Office | Upon NOTAM |
| 5 | ATS Reporting Office (ARO) | Upon NOTAM |
| 6 | MET Briefing Office | H24 |
| 7 | ATS | Upon NOTAM |
| 8 | Fuelling | Upon NOTAM |
| 9 | Handling | Upon NOTAM |
| 10 | Security | H24 |
| 11 | De-icing | Upon NOTAM |
| 12 | Remarks | NIL |

## LQSA AD 2.4 HANDLING SERVICES AND FACILITIES

| | | |
|---|---|---|
| 1 | Cargo-handling facilities | AVBL: For details please contact Cargo Department on TEL: +387 33 289 146. |
| 2 | Fuel/oil types | Jet A1 / NIL |
| 3 | Fuelling facilities/capacity | 4 Fuel trucks 23500 L (A1), 1 Fuel truck 35000 L (A1) - HIFA OIL;<br>De-fuling facility not available, see AD 2.20 |
| 4 | De-icing facilities | Available 6 trucks, Fluid types I/IV, 17 M HGT;<br>See AD 2.20 |
| 5 | Hangar space for visiting aircraft | NIL |
| 6 | Repair facilities for visiting aircraft | NIL |
| 7 | Remarks | NIL |

## LQSA AD 2.5 PASSENGER FACILITIES

| | | |
|---|---|---|
| 1 | Hotels | Hotels in Sarajevo |
| 2 | Restaurants | At AD and in Sarajevo |
| 3 | Transportation | Bus, taxi, rent a car at AD |
| 4 | Medical facilities | First aid at AD, hospitals in Sarajevo |
| 5 | Bank and Post Office | At AD and in Sarajevo |
| 6 | Tourist Office | At AD and in Sarajevo |
| 7 | Remarks | NIL |

## LQSA AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

| | | |
|---|---|---|
| 1 | AD category for fire fighting | CAT 7;<br>CAT 8 and 9 on request. See remarks. |
| 2 | Rescue equipment | According to ICAO Annex 14 |
| 3 | Capability for removal of disabled aircraft | In the event of an incident, light aircraft can be removed using airport resources. Large aircraft can be removed using outside sources in conjunction with aircraft operators.<br>Contact (Duty Officer) +387 33 289 124 (Phone)<br>+387 62 622 888 (Mobile)<br>Email: duty.officer@sarajevo-airport.ba |
| 4 | Remarks | Higher CAT O/R 24 HR prior notice sent via<br>e-mail: opc@sarajevo-airport.ba |

## LQSA AD 2.7 RUNWAY SURFACE CONDITION ASSESSMENT AND REPORTING, AND SNOW PLAN

| | | |
|---|---|---|
| 1 | Types of clearing equipment | Snow sweepers, Snow ploughs, Snow blowers<br>Liquid and solid spreaders |
| 2 | Clearance priorities | 1. RWY<br>2. TWYs<br>3. APR |

| | | |
|---|---|---|
| 3 | Use of material for movement area surface treatment | RWY 11/29 DE-ICED/ANTI-ICED with KFOR and NAFO |
| 4 | Specially prepared winter runways | NIL |
| 5 | Remarks | Latest information from OPS: +387 33 289 124 and +387 62 622 888 |

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

| | | | | | |
|---|---|---|---|---|---|
| 1 | Apron designation, surface and strength | **APRON** | | **SURFACE** | **STRENGTH** |
| | | APRON | | CONC | PCN 70/R/C/W/T [1)] |
| 2 | Taxiway designation, width, surface and strength | **TAXIWAY** | **WIDTH** | **SURFACE** | **STRENGTH** |
| | | A | 23 M | ASPH | PCN 60/F/C/X/T |
| | | B | 18 M | ASPH | PCN 60/F/C/X/T |
| | | C | 18 M | ASPH | PCN 60/F/C/X/T |
| 3 | Altimeter checkpoint location and elevation | Apron, 510 M (1673 FT) | | | |
| 4 | VOR checkpoints location | NIL | | | |
| 5 | Points of INS checkpoints | See Aircraft Parking/Docking Chart-ICAO | | | |
| 6 | Remarks | Speed restrictions; TWY MAX 25 KT, Apron MAX 8 KT<br>[1)] Except stands 10, 10A, 11 and 11A; Asphalt PCN 60/F/C/X/T. | | | |

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

| | | |
|---|---|---|
| 1 | Use of aircraft stand ID signs, TWYguide lines and visual docking/parking guidance system of aircraft stands | Nose-in maneuvering aircraft stands, TWY guidance signs. Guide lines at apron, Follow me, Marshaller, Visual Guidance Docking System at ACFT stands 6, 7 and 8. Multi Choice Aprons use multiple centre-lines to allow the operation of a variety of different combination of parked aircraft. Follow-me will guide airline to the assigned stand equipped with Advanced Visual Docking Guidance System (A-VDGS) to allow the aircraft to park, or a marshaller shall assist with the aircraft parking. Flight crew must not attempt to self-park if the A-VDGS is not activated or calibrated for their aircraft type.<br><br>In the event of there being no activated A-VDGS displayed upon approach to the stand, flight crew must:<br>- Hold position on the TWY centre-line, and wait to marshaller signal.<br>In the event of a failure of the A-VDGS during parking, flight crew must:<br>- Stop and wait for a marshaller. |
| 2 | RWY and TWY markings and LGTs | RWY-11/29: Full ICAO RWY designation, Displaced landing THR arrows, THR, Centre line, TDZ, aiming point, edges, RWY turn pad marking THR 29 (See remarks), THR 11 180-degree turn marking for continuous guidance (See remarks). Lead-off from the RWY are marked by a continuous yellow line from the Centre line of the RWY.<br>RWY lights: See AD 2.14 |
| | | TWY A: TWY marking aids: Centre line, enhanced centre line, edges/lighted, holding positions;<br>TWY lights: RWY guard lights, See AD 2.15 (see remarks for RWY guard lights) |
| | | TWY B:TWY marking aids: Centre line, enhanced centre line, edges/lighted, holding positions;<br>TWY lights: RWY guard lights, See AD 2.15 (see remarks for RWY guard lights) |
| | | TWY C: TWY marking aids: Centre line, enhanced centre line, edges/lighted, holding positions;<br>TWY lights: RWY guard lights, See AD 2.15 (see remarks for RWY guard lights) |
| 3 | Stop bars | NIL |
| 4 | Remarks | Pairs of alternately flashing ground mounted yellow lights at each side of the taxiways (A,B,C). Operate when RWY edge lights are in use.<br>Turn pads are not lighted, only day use allowed.<br>RWY turn pad THR 29 restrictions: See AD 2.20.<br>RWY marking for continuous guidance THR 11 restrictions: (See AD 2.20). |

## LQSA AD 2.10 AERODROME OBSTACLES

### 1. OBSTACLES IN AREA 2

| Obstacle ID | Obstacle type | Coordinates | ELEV at TOP/ HGT | Marking / LGT type / colour | Remarks |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| NIL | NIL | NIL | NIL | NIL | NIL |
| See: AD LQSA 2.24.04-1 and AD LQSA 2.24.04-3 | | | | | |

### 2. OBSTACLES DATA ABSENCE OF AN AREA 2 DATA SET FOR THE AERODROME

#### 2.1 OBSTACLES THAT PENETRATE THE OBSTACLE LIMITATION SURFACES

NIL

#### 2.2 OBSTACLES THAT PENETRATHE TAKE-OFF FLIGHT PATH AREA OBSTACLE IDENTIFICATION SURFACE

NIL

#### 2.3 OTHER OBSTACLES ASSESSED AS BEING HAZARDOUS TO AIR NAVIGATION

NIL

### 3. OBSTACLES IN AREA 3

| Obstacle ID | Obstacle type | Coordinates | ELEV at TOP/ HGT | Marking / LGT type / colour | Remarks |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| NIL | NIL | NIL | NIL | NIL | NIL |

## LQSA AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

| | | |
|---|---|---|
| 1 | Associated MET Office | SARAJEVO MET |
| 2 | Hours of service<br>MET Office outside hours | MET observation: H24;<br>MET Office Sarajevo: during AD opening hours;<br>MWO Banja Luka: outside AD opening hours |
| 3 | Office responsible for TAF preparation<br>Periods of validity<br>Interval of issuance | MET Office Sarajevo/*MWO Banja Luka<br>24 HR<br>NIL |
| 4 | Trend forecast<br>Interval of issuance | During AD opening hours<br>1/2 hour |
| 5 | Briefing / Consultation provided | Yes. Personal briefing in MET Office or via telephone:<br>+387 33 779 153: +387 63 352 586:<br>+378 51 337 537 (MWO Banja Luka) |
| 6 | Flight documentation<br><br>Language(s) used | METAR, TAF, SIGMET<br>Charts: *SWC, W/T<br>English |
| 7 | Charts and other information available for briefing or consultation | Diagnostic and prognostic surface and upper-level charts of meteorological fields, Satellite images |
| 8 | Supplementary equipment available for providing information | Internet access |
| 9 | ATS units provided with information | Sarajevo TWR, Sarajevo APP |
| 10 | Additional information (limitation of service, etc.) | NIL |

## LQSA AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

| RWY Designator | True BRG | Dimensions of RWY (M) | Strength of pavement (PCR) and surface of each RWY and associated SWY | THR COORD, RWY end COORD, THR GUND | THR ELEV and highest ELEV of TDZ of precision APP RWY | Slope of RWY-SWY |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11 | 117.35º | 2600 X 45 | PCR 740/F/D/X/T/ ASPH | 434946.37N 0181905.60E<br>434909.14N 0182044.95E<br>45.8 M (150 ft) | THR 500.93 M<br>TDZ 506.16 M | +0.6% (0-1100)<br>+0.7% (1100-1840)<br>+1.1% (1840-2600) |
| 29 | 297.37º | 2600 X 45 | PCR 740/F/D/X/T/ ASPH | 434916.59N 0182025.08E<br>434947.85N 0181901.62E<br>45.8 M (150 ft) | THR 515.18 M<br>TDZ 513.3 M | -1.1% (0-760)<br>-0.7% (760-1500)<br>-0.6% (1500-2600) |

| SWY dimensions (M) | CWY dimensions (M) | Strip dimensions (M) | RESA dimensions (M) | Location/ description of arresting system | OFZ | Remarks |
|---|---|---|---|---|---|---|
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| NIL | NIL | 2720 X 170 | 90 X 90 | NIL | NIL | Displaced THR 11<br>100 M<br>RESA (Surface type)-<br>CONC and GRASS |
| NIL | NIL | 2720 X 170 | 90 X 240 | NIL | NIL | Displaced THR 29<br>500 M<br>RESA (Surface type) -<br>CONC and GRASS |

## LQSA AD 2.13 DECLARED DISTANCES

| RWY Designator | TORA (M) | TODA (M) | ASDA (M) | LDA (M) | Remarks |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 11 | 2600 | 2600 | 2600 | 2500 | NIL |
| | 1280 | 1280 | 1280 | NIL | Take OFF from intersection TWY C |
| 29 | 2600 | 2600 | 2600 | 2100 | NIL |
| | 1730 | 1730 | 1730 | NIL | Take OFF from intersection TWY B |
| | 1140 | 1140 | 1140 | NIL | Take OFF from intersection TWY C |

## LQSA AD 2.14 APPROACH AND RUNWAY LIGHTING

| RWY Designator | APCH LGT type, LEN, INTST | RWY THR LGT, colour and WBAR | VASIS (MEHT), PAPI | TDZ LGT LEN |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| 11 | CAT I<br>900 M<br>W VRB LIH | G VRB LIH<br>YES | PAPI Both/3.2°<br>(50 FT) | NIL |
| 29 | NIL | NIL | NIL | NIL |

| RWY Centre Line LGT LEN, spacing, colour, INTST | RWY edge LGT LEN, spacing, colour, INTST | RWY End LGT colour, WBAR | SWY LGT LEN, colour | Remarks |
|---|---|---|---|---|
| 6 | 7 | 8 | 9 | 10 |
| 2500 M<br>30 M<br>NIL 0–100 M<br>W 100-1500 M<br>R/W 1500–2100 M<br>R 2100–2600 M<br>LIH | 2600 M<br>60 M<br>R 0–100 M<br>W 100–2000 M<br>Y 2000–2600 M<br>LIH | R VRB LIH<br>NIL | NIL | PAPI distance from THR: 271 M<br>LED lights used for the THR LGT, RWY END LGT (LED type without IR emitter); APCH and RWY LGT adjustable in 5 stages |

| RWY Centre Line LGT LEN, spacing, colour, INTST | RWY edge LGT LEN, spacing, colour, INTST | RWY End LGT colour, WBAR | SWY LGT LEN, colour | Remarks |
|---|---|---|---|---|
| 6 | 7 | 8 | 9 | 10 |
| 2600 M<br>30 M<br>W 0-1500 M<br>R/W 1500–2100 M<br>R 2100–2600 M<br>LIH | 2600 M<br>60 M<br>R 0–500 M<br>W 500–2000 M<br>Y 2000–2600 M<br>LIH | R VRB LIH<br>NIL | NIL | LED lights used for the RWY END LGT (LED type without IR emitter);<br>RWY LGT adjustable in 5 stages |

## LQSA AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

| | | |
|---|---|---|
| 1 | ABN/IBN location, characteristics and hours of operation | ABN:Top of TWR, W/G light, 10 RPM<br>(HR of OPS: As needed)<br>IBN: N/A |
| 2 | LDI location and LGT<br>Anemometer location and LGT | LDI: NIL<br>Anemometer:<br>RWY 11 - 43.829246565N 18.321634540E (LGTD)<br>RWY 29 - 43.822230851N 18.340823077E (LGTD) |
| 3 | TWY edge and centre line lighting | Edge: AVBL<br>CL: NIL |
| 4 | Secondary power supply/switch-over time | AVBL:<br>15 SEC 375 KVA "short break" diesel generator<br>0 SEC - UPS 160 KVA ("by-pass")<br>Full load autonomy - 20 MIN |
| 5 | Remarks | LED lights used for the TWY EDGE LGT, adjustable in 5 stages<br>Apron floodlighting<br>Obstacle lighting |

## LQSA AD 2.16 HELICOPTER LANDING AREA

NIL

## LQSA AD 2.17 ATS AIRSPACE

| | | |
|---|---|---|
| 1 | Designation and lateral limits | SARAJEVO CTR<br>435500N 0175700E;<br>440000N 0180100E;<br>435500N 0181900E;<br>434920N 0182730E;<br>434520N 0182430E;<br>435500N 0175700E. |
| 2 | Vertical limits | GND - 6500 FT AMSL |
| 3 | Airspace classification | D |
| 4 | ATS unit call sign<br>Language(s) | SARAJEVO TOWER/ SARAJEVO TORANJ<br>English/ Bosnian/ Croatian/ Serbian |
| 5 | Transition altitude | 10000 FT AMSL |
| 6 | Hours of applicability | NIL |
| 7 | Remarks | NIL |

## LQSA AD 2.18 ATS COMMUNICATION FACILITIES

| Service designation | Call sign | Channel (s) | SAT-VOICE number (s) | Logon address | Hours of operation | Remarks |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| APP | SARAJEVO APP/ SARAJEVO PRILAZNA KONTROLA | 136.450 MHZ | NIL | NIL | As ATS | Primary FREQ |
| | | 119.775 MHZ | NIL | NIL | As ATS | Spare FREQ |
| | | 121.500 MHZ | NIL | NIL | As ATS | EMERG FREQ |
| TWR | SARAJEVO TWR/ SARAJEVO TORANJ | 118.250 MHZ | NIL | NIL | As ATS | Primary FREQ |
| | | 121.500 MHZ | NIL | NIL | As ATS | EMERG FREQ |
| GND | SARAJEVO GROUND | 121.900 MHZ | NIL | NIL | As ATS | Primary FREQ |
| ATIS | SARAJEVO INFORMATION | 124.125 MHZ | NIL | NIL | H24 | Coverage: 60 NM Output: 20 W |

## LQSA AD 2.19 RADIO NAVIGATION AND LANDING AIDS

| Type of aids, MAG VAR, type of supported OPS for ILS/MLS/ GLS, basic GNSS and SBAS, classification for ILS, facility classification and approach facility designation(s) for GBAS (for VOR/ILS/MLS give declination) | ID | Frequency Channel number Service provider | Hours of operation | Position of transmitting antenna coordinates | Elevation of DME transmitting antenna | Remarks |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| DVOR/DME (5°E/2020) | KEB | 116.7 MHZ CH 114X | H24 | 435601.91N 0182659.38E | 1541.07 M DME | Coverage 150 NM |
| VOR/DME (5°E/2020) | KIS | 116 MHZ CH 107X | H24 | 440105.79N 0180346.79E | 768.55 M DME | Range 25 NM |
| L (5°E/2020) | KG | 357.5 KHZ | H24 | 435253.08N 0181037.25E | 663.22 M | Coverage 25 NM |

| Type of aids, MAG VAR, type of supported OPS for ILS/MLS/ GLS, basic GNSS and SBAS, classification for ILS, facility classification and approach facility designation(s) for GBAS (for VOR/ILS/MLS give declination) | ID | Frequency<br><br>Channel number<br><br>Service provider | Hours of operation | Position of transmitting antenna coordinates | Elevation of DME transmitting antenna | Remarks |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| NDB (5°E/2020) | IL | 405 KHZ | H24 | 434928.06N 0182002.43E | 522.99 M | Unsatisfactory coverage (Flight profile orbit radius 25 NM, Alt 9100 feet QNH). Unsatisfactory coverage (Flight profile orbit radius 15 NM, Alt 9100 feet QNH) between R060 and R280 CW, due to terrain. |
| LOC 11 (5°E/2020) | BHS | 110.7 MHZ | H24 | 434906.43N 0182052.16E | 521.05 M | ILS CAT I |
| GP 11 (5°E/2020) | - | 330.2 MHZ | H24 | 434945.92N 0181918.48E | 519.85 M | NIL |
| DME 11 (5°E/2020) | BHS | 110.7 MHZ CH 44X | H24 | 434945.92N 0181918.48E | 519.85 M | Collocated with GP 11 |

## LQSA AD 2.20 LOCAL TRAFFIC REGULATIONS

### 1. LOCAL FLYING RESTRICTIONS

#### 1.1 SCHEDULED, NON-SCHEDULED AND GENERAL AVIATION AIR TRAFFIC

Departures and landings may be planned between MON and SUN upon NOTAM about working hours of AD and ATS (see para 2). Departures and landings of delayed ACFT may be tolerated up to 30 minutes after the end of working hours. Prior approval from the Airport Operator must be obtained. Additional charges will be applied. A pilot in command may only expect a clearance for departure if he is ready to taxi at least 10 minutes before the end of operating hours. Departures and landings are not permitted out of working hours upon NOTAM. Exemptions can only be authorised by the Airport Operator.

#### 1.1.1 LANDING

After landing on RWY 11, to prevent RWY surface damage, all aircraft with design code C that can stop at TWY B will exit via TWY B (see Notice 1); otherwise, exit the RWY via TWY A. When this is not possible due to other traffic and occupancy of TWY A by departing aircraft, the crew will be instructed to execute a 180-degree turn using the TURN PAD located forward of THR 29 and exit the RWY via TWY B. This applies to aircraft with design codes A, B and C (maximum A321). Aircraft with design codes A and B may execute a 180-degree turn on the runway, in accordance with air traffic control instructions.

Pilots must use the TURN PAD for 180-degree turns, following the yellow marking for continuous guidance at all times. Only right turns are permitted to ensure safe maneuvering and prevent damage. Left 180-degree turns are

not permitted.

**NOTICE 1**: Pilots must strictly follow the TWY guide line and Follow-me vehicle when exiting via TWY B to the right, heading toward parking stands numbered from 1 to 5. Deviation of the nose wheel from the TWY guide line may result in exiting the TWY surface, creating a risk of possible damage.
All aircraft with design codes D and E must exit the RWY via TWY A.

After landing on RWY 29, to prevent RWY surface damage, aircraft with design code C (maximum A321) that can stop at TWY C shall exit the RWY via TWY C; otherwise, they must use the continuous guidance mark at the end of RWY 29 to execute a 180-degree turn and align with the RWY centreline and exit the RWY via TWY C.
Aircraft with design codes A and B may execute a 180-degree turn on the runway, in accordance with air traffic control instructions.
All aircraft with design codes D that are not able to make a safe 180-degree turn on a 45m width runway are strictly prohibited to land RWY 29 due to no TURN PAD and no exit TWY at the end of RWY 29.

**NOTICE**: The continuous guidance marking at the end of RWY 29 is not designed for aircraft with design code D. In case of landing RWY 29, all aircraft with design code D must make 180 turn at the end of RWY 29 and exit the RWY via TWY A.

### 1.1.2 DEPARTURE

The standard outbound taxi route for take-off is via TWY A to RWY 29.
**NOTICE**: Alternate taxi route only under ATC instruction.
Aircraft design code up to C using RWY 11 for take-off must use a marking for continuous guidance at the THR 11 to complete a 180-degree turn and align with the RWY center line.

**NOTICE**: Aircraft design code D, which can make a safe 180-degree turn on a 45 m RWY width, must use TWY A to enter the RWY and proceed taxi to the end of RWY 29 to make 180 turn. The continuous guidance marking at the end of RWY 29 is not designed for aircraft with design code D. In case of take-off RWY 11, all aircraft with design code D must make 180 turn at the end of RWY 29 and align with the RWY center line.

### 1.1.3 DE-ICING

Service provider: Sarajevo International Airport. De-icing is available during the winter season from 01.11 until 30.4.
De-icing performed on the parking stand/gate position. De-icing has to be requested at least 20 minutes before the scheduled/estimated time of departure.

## 1.2 EXEMPTIONS

### 1.2.1 URGENT FLIGHTS

Airport Operator may grant exceptions on request for:

- Search and rescue flights;
- Flights for providing medical assistance and emergencies in disasters;
- Medical flights.

An application for such requests shall be submitted to the Airport Operator.

### 1.2.2 PERMISSION REQUESTS

Other exemptions not stipulated in para 1.2.1 may be authorised by the Airport Operator. (see LQSA AD 2.20.2.)

## 1.3 ALTERNATE

For aircraft returning to the aerodrome of departure LQSA due to weather, mechanical, radio failure, forced landing or emergency landing, LQSA can be alternate if a request for returning is announced 15 minutes after departure.
For delayed departures and departures after the end of working hours of AD and ATS published by NOTAM, with prior approval from Airport Operator LQSA can be alternate if a request for returning is announced within 15 minutes after take-off.

## 2. PERMISSION REQUEST PROCEDURE

### 2.1 GENERAL

Scheduled and Non-scheduled commercial air traffic and General aviation traffic are subject to coordination requirement: PPR
For General aviation traffic, prior permission is mandatory at least 24 HR before arrival.
All carriers may not expect authorisation systematically for the flights after the end of the working hours of AD and ATS published by NOTAM. All requests will be finally authorised by the Airport Operator.
**Notice:** Possible restrictions for GA and Training flights during the summer season due to high traffic volumes, check the NOTAM.

### 2.2 SCHEDULED, NON-SCHEDULED, COMMERCIAL AND GENERAL AVIATION AIR TRAFFIC

### 2.2.1 REQUEST

Slot and Handling Request Form

Application form available on URL: https://www.sarajevo-airport.ba/Slotreq SARAJEVO - SLOT and HANDLING REQUEST FORM
All carriers or private aircraft must have a fuelling supplier selected prior arrival/departure of the flight. It has to be noted in the slot request form.
Fuelling supplier(s):

HIFA OIL: E-mail: mas@hifaoil.ba
TEL: +387 60 310 1363 and +387 62 188 391

### 2.2.2 REQUEST FOR OPERATION OUTSIDE WORKING HOURS

Outside AD HR SER up to 60 min, upon AD Operator approval only, request sent via mail to opc@sarajevo-airport.ba till 1800LT.
All carriers must submit a request for an extension of airport operating hours until 18:00LT on:

| | |
|---|---|
| Post: | Sarajevo International Airport Airport Duty Officer |
| Phone: | +387 33 289 124 |
| Mob: | +387 62 600 888 |
| E-mail | duty.officer@sarajevo-airport.ba and opc@sarajevo-airport.ba |

## 3. GENERAL REGULATIONS FOR AIR TRAFFIC HANDLING ON THE APRONS

All rotary-wing aircraft will be treated as fixed wing operations and will be instructed to land and take-off on a runway. Helicopter unable to ground taxi will be escorted by Follow me car whilst in the hover.

### 3.1 USE OF APRON

Use of the apron, the assignment of parking positions, as well as towing of ACFT are subject of the Airport Operator. Taxiing and towing of ACFT are subject to permission by the Air Traffic Control (BHANSA JPAKL).
Ground Movement Control on the main apron is provided by Air Traffic Control - BHANSA JPAKL on behalf of Sarajevo International Airport. Pilots shall check for the respective frequency on ATIS. If ATIS is not available, "SARAJEVO GROUND" shall be contacted on FREQ 121.900MHZ. If there is no response, contact " SARAJEVO TOWER" on FREQ 118.250 MHZ.

Parking of ACFT on the assigned positions is performed either by VDGS (for parking positions 6, 7 and 8), or by signals from the marshaller for the rest of the parking positions.
When an apron is used by larger than ICAO design code "C" aircraft, appropriate restrictions and limitations are provided by the Airport Operator. See LQSA AD 2.24.02-1 TAXIING AND PARKING RESTRICTIONS AND NOTES.

ACFT design code “D” and “E” must use TWA “A” for entering the apron or taxi to take-off.

ACFT are permitted to taxi on the apron only at the indispensable minimum engine speed. As a rule, when taxiing (especially in turns), it shall be ensured that the engine power of engines in operation is as synchronous as possible.

When taxiing into ACFT stands, ACFT shall generally not stop in curves between the centrelines of apron taxiways or ACFT stand taxi lanes, and the centrelines of ACFT stands, so to avoid the further appliance of break-away power.
On the whole of the apron, taxiing by ACFT that do not proceed to a take-off and/or follow a landing may be conducted only with the aid of ACFT tractors and not with power output.
Before push-back or entering the apron, the red anti-collision lights (beacon) of an ACFT shall be switched on. If one anti-collision light (beacon) on the ACFT is inoperative, the pilot shall inform Ground Movement Control and, additionally, switch on the white wing-tip strobe lights in accordance with EASA Appendix 1 to GM1 MMEL.145, ATA 33 LIGHTS

### 3.2 TAXIING OF ACFT ON THE MAIN APRON

When taxiing, ACFT shall maintain permanent radio contact with Air Traffic Control - BHANSA JPAKL "SARAJEVO GROUND" or “SARAJEVO TOWER”. Any requested changes of frequency shall be made immediately.
Follow me car is employed to guide the taxiing ACFT, the pilot shall observe its signals. Pilots may also request a follow-me car for guidance to take-off during LVTO.
ACFT may taxi on the apron only on and along the taxi guide lines. Deviations and/or shortcuts are not permitted.
In exceptional cases, taxiing manoeuvres aside of the guidelines are only possible under the supervision of a marshaller and/or Follow-me cars.

#### 3.2.1 JET BLAST PROTECTION

Pilots are to use the minimum power necessary when manoeuvring on the taxiway system. This is of particular importance when manoeuvring in the apron, where jet blast can affect adjacent stands and service roads.

### 3.3 PROCEDURES FOR DEPARTING ACFT

Permission for push back or taxiing from a position may only be requested if the pilot can perform the manoeuvre immediately or if the push-back tractor is connected.
Pilots shall state their parking position number and call sign.
ATC departure clearance is available at start-up, see chapter 3.3.4.

#### 3.3.1 PUSH BACK PROCEDURE

ACFT parked in a "Nose-in" position (see LQSA AD 2.24.02-1 - Aircraft parking/docking chart ICAO) may leave the parking position in push-back procedure only (exceptions may be applied in special situations under the supervision of a marshaller and wing walkers).
Pilots are instructed to obtain start-up and push-back clearance on the respective frequency of Sarajevo Ground.

**Notice:** PIC of GA aircraft must have marshaller in sight before requesting start-up.
In case of jet blast impact on adjacent aircraft parking stands, pilots will be advised to start engines when aligned with the apron TWY by ground crew via intercom.
When using standard push back procedures nose of the ACFT from PSN 1 - 11 is facing easterly (south-east).
Pilots may receive instructions for a non-standard push-back direction from the controller if using RWY 11 for take-off.
After completion of the push-back, "ready to taxi" shall be reported to the respective frequency of Sarajevo Ground.

#### 3.3.2 PROCEDURE FOR DEPARTING AIRCRAFT PARKED OTHER THAN NOSE-IN PARKING POSITIONS

Pilots are instructed to obtain start-up clearance and taxi instructions on the respective frequency of Sarajevo Ground. Parking stands G1-G5 and 10A are self-maneuvering parking stands. See LQSA AD 2.24.02 – 1 TAXIING AND PARKING RESTRICTIONS AND NOTES.

#### 3.3.3 USAGE OF INCREASED ENGINE POWER FOR THE STARTING-UP PROCEDURE (CROSS-BLEED START)

The procedure for ACFT intending to increase the engine power for starting up another engine (cross-bleed start) shall be in two (2) stages:

- I. Stage - Obtain permission from Sarajevo Ground for the first engine start with the aircraft power unit (APU) and ground power unit (GPU) on the parking stand

- II. Stage - Obtain permission from the Ground Crew to start all other engines after the push back procedure is completed.

#### 3.3.4 DEPARTURE PROCEDURES

ATC clearance will be delivered from Sarajevo Ground. Pilots shall request ATC clearance on stand at request for start-up and/or push-back clearance.

**Example:** SARAJEVO GROUND, “call sign”, stand “number”, Information “letter”, request clearance, and start up, or request clearance, start-up and push-back.

### 3.4 PROCEDURES FOR ARRIVING AIRCRAFT

The traffic dispatcher assigns the ACFT parking stand on the apron. Pilots may be informed about the assigned parking position by Sarajevo Tower on request.
Arriving ACFT are assisted in taxiing on the main apron to the assigned parking position by a “Follow-me car”.
Each parking position has an individual number and a yellow centre-line.

#### 3.4.1 PARKING POSITIONS

ACFT are guided with marshalling assistance. Parking stands 6,7, and 8 are equipped with VDGS.

### 3.5 NON-MARKED PARKING AREAS AND SPECIAL-PURPOSE PARKING POSITIONS

Non-marked parking areas may also be assigned for parking only in special situations with restrictions.

### 3.6 HELICOPTER OPERATIONS

All rotary-wing aircraft will be treated as fixed-wing operations and will be instructed to land and take-off on a runway. The helicopter, unable to ground taxi, will be escorted by a Follow-me car whilst in the hover.

**Notice:** In accordance with the traffic situation and ATC instructions, some helicopters may be permitted to use taxiways for landing and departure.

### 3.7 HIGH VISIBILITY JACKETS

All persons walking on the airport movement area (incl. flight crew during aircraft walk-around/outside check) shall wear a high visibility jacket.

## LQSA AD 2.21 NOISE ABATEMENT PROCEDURES

NIL

## LQSA AD 2.22 FLIGHT PROCEDURES

Sarajevo International Airport classified as CAT B which requires a specific briefing to crews prior to operation into Sarajevo. Ref. AIC A025/2006.
Descriptions of arrival and departure procedures are on the charts.
Required authorisation from BHDCA for Special ILSx RWY 11. Ref AIC A002/2020.
In case of complete communication failure, ATC signal light gun is available on Sarajevo TWR.
Pilots shall observe light signals from TWR.

### 1. LOW VISIBILITY TAKE-OFF (LVTO)

RWY 29 is suitable for non guided Low Visibility Take Off.
RWY 11 is not suitable for Low Visibility Take Off.
The fixed minimum required RVR value for LVTO at Sarajevo airport is: **200 M for non-guided LVTO**.

#### 1.1 Criteria for the implementation LVTO

LVTO only is conducted when RVR is below 550 M. The aircraft operator shall request LVTO procedures to be provided. LVTO must be required a minimum 30 minutes in advance to permit appropriate preparations by aerodrome authority. When Low Visibility Take Off (LVTO) is in operation the message should read: “Low Visibility Take Off Procedures in operation”.

#### 1.2 Details of runway entries

Entry to RWY 29 is permitted only via taxiway ALFA (A).

**1.3 Details of holding points to be used**

The holding position to be used for RWY 29 is Holding position on taxiway ALFA (A).

**1.4 Ground movement restrictions**

Operations of vehicles on the manoeuvring area are to be restricted to minimum when LVTO is in progress. Aircraft movements on the apron must only be carried out according to the directions of the marshaller. Only one ACFT movement on the apron at the time is allowed when LVTO is in place (including ACFT in push-back procedure).

| Low Visibility Take-Off | | |
|---|---|---|
| **System considered** | **Failures to be reported by ATC** | **Expected effect on Flight Operations** |
| **1** | **2** | **3** |
| **ILS** | ILS out of service[1)] | No effect |
| | Far field monitor unserviceable | No effect |
| **LIGHTING SYSTEMS** | Runway lighting system unserviceable | Restriction depending on flight operation rules |
| | Runway edge lighting system unserviceable | Restriction depending on flight operation rules |
| | Runway centreline lighting unserviceable[2)] | Restriction depending on flight operation rules |
| | Taxiway lighting system unserviceable | Restriction depending on flight operation rules |
| | Standby power supply unserviceable | LVTO not permitted |
| **RVR** | Rollout RVR unserviceable | No effect if visibility can be assigned by the pilot |
| | Other RVR measuring points unserviceable | Restriction depending on flight operation rules |
| **ANCILLARY** | Anemometer unserviceable | No effect if other sources available |
| | Ceilometer unserviceable | No effect |

[1)] This may be caused by the failure of a component or the complete ILS system (e.g. failure of the Localizer, Glide path, Status monitoring equipment or Far field monitor)
[2)] When the failure results in a spacing of serviceable lights larger than 30 M, the Runway centreline lights system must be reported as unserviceable.

## LQSA AD 2.23 ADDITIONAL INFORMATION

Bird concentration on and in the vicinity of RWY. Caution advised.

## LQSA AD 2.24 CHARTS RELATED TO AN AERODROME

| Name | Page |
|---|---|
| Aerodrome Chart - ICAO | LQSA AD 2.24.01 - 1 |
| Aircraft Parking/Docking Chart - ICAO | LQSA AD 2.24.02 - 1 |
| Aerodrome Ground Movement Chart - ICAO | NIL |
| Aerodrome Obstacle Chart - ICAO Type A (RWY 29) | LQSA AD 2.24.04 - 1 |
| Aerodrome Obstacle Chart - ICAO Type A (RWY 11) | LQSA AD 2.24.04 - 3 |
| Aerodrome Terrain and Obstacle Chart - ICAO (Electronic) | NIL |
| Precision Approach Terrain Chart - ICAO | NIL |
| Area Chart – ICAO (departure and transit routes) | NIL |
| Standard Departure Chart - Instrument (SID) - ICAO (BOSNA 1A RWY 29) | LQSA AD 2.24.08 - 1 |
| Standard Departure Chart - Instrument (SID) - ICAO (BOSNA 1B, GACMO 1B, MITNO 1B, OSLUD 1B, SOMUN 1B, VRANA 1B RWY 29) CONV SID | LQSA AD 2.24.08 - 9 |
| Standard Departure Chart - Instrument (SID) - ICAO (BOSNA 1J, GACMO 1J, MITNO 1J, OSLUD 1J, SOMUN 1J, VRANA 1J) RNAV SID RWY 29 | LQSA AD 2.24.08 - 11 |
| Standard Departure Chart - Instrument (SID) - ICAO (BOSNA 1M, GACMO 1M, MITNO 1M, OSLUD 1M, SOMUN 1M, VRANA 1M) RNAV SID RWY 11 | LQSA AD 2.24.08 - 15 |
| Area Chart – ICAO (arrival and transit routes) | NIL |
| Standard Arrival Chart - Instrument (STAR) - ICAO (BOSNA 1H, GACMO 1H, PODOB 1H, VEBAR 1H, VRANA 1B) CONV STAR RWY 11 | LQSA AD 2.24.10 - 3 |
| Standard Arrival Chart Instrument (STAR) ICAO (BOSNA 1G, GACMO 1G, PODOB 1G, VEBAR 1G, VRANA 1G) RNAV STAR RWY 11 | LQSA AD 2.24.10 - 5 |
| ATC Surveillance Minimum Altitude Chart - ICAO | LQSA AD 2.24.11 - 1 |
| Instrument Approach Chart - ICAO (Special ILSx RWY 11) | LQSA AD 2.24.12 - 13 |
| Instrument Approach Chart - ICAO (ILS RWY 11) | LQSA AD 2.24.12 - 19 |
| Instrument Approach Chart - ICAO (LOC RWY 11) | LQSA AD 2.24.12 - 21 |
| Instrument Approach Chart - ICAO (RNP Y RWY 11) | LQSA AD 2.24.12 - 23 |
| Visual Approach Chart - ICAO | LQSA AD 2.24.13 - 1 |
| Bird concentrations | NIL |

## LQSA AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

NIL