LQSA - SARAJEVO

Note: The following sections in this chapter are intentionally left blank: AD-4.16, AD-4.21, AD-4.25

LQSA AD 4.1 AERODROME LOCATION INDICATOR AND NAME

LQSA - SARAJEVO INTERNATIONAL AIRPORT

LQSA AD 4.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	434928.1N 0181954.4E
2	Direction and distance from (city)	3.6 NM BRG 234º from railway station
3	Elevation/Reference temperature	519.6 M (1705 ft) / 29.29ºC (AUG)
4	Geoid undulation at AD ELEV PSN	45.8 M (150 ft)
5	MAG VAR/Annual Change	5º E (2020)/0.13° increasing
6	AD Administration Address Telephone Telefax AFS SITA URL	Post: P.C. Sarajevo International Airport L.L.C. Kurta Schorka 36 71210 Ilidža - Sarajevo Phone: +387 33 289 200 Fax: +387 33 289 201 AFS: NIL SITA: SJJAPXH - OPC SJJOCXH - OPC SJJFFXH - Cargo SJJHHXH - Commercial Department SJJLLXH - Lost and Found E-mail: direkcija@sarajevo-airport.ba 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: +387 33 289 120; +387 33 289 123; +387 33 289 125

LQSA AD 4.3 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 4.4 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 and BMB 98 / NIL
3	Fuelling facilities/capacity	3 Fuel trucks 23500 L (A1), 1 Fuel truck 35000 L (A1) 1 Fuel truck 6500 L (BMB 98) De-fuling facility not available, See AD 2.20
4	De-icing facilities	Available 6 trucks, Fluid types I/IV, 15.75 M HGT See AD 2.20
5	Hangar space for visiting aircraft	NIL
6	Repair facilities for visiting aircraft	NIL
7	Remarks	NIL

LQSA AD 4.5 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 4.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 7 [1)]
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. Contact (Duty Officer) +387 33 289 124 (Phone) +387 62 622 888 (Mobile) Email: duty.officer@sarajevo-airport.ba
4	Remarks	[1)] Higher CAT O/R 24 HR prior notice

LQSA AD 4.7 SEASONAL AVAILABILITY - CLEARING

1	Types of clearing equipment	Snow sweepers, Snow ploughs, Snow blowers Liquid and solid spreaders
2	Clearance priorities	1. RWY 2. TWYs 3. APR
3	Remarks	RWY 11/29 DE-ICED/ANTI-ICED with KFOR, NAFO and UREA Latest information from OPS: +387 33 289 124

LQSA AD 4.8 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 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	ACL location and elevation	Apron, 509.9 M (1673 ft)			
4	VOR checkpoints	NIL			
5	INS checkpoints	See Aircraft Parking/Docking Chart-ICAO			
6	Remarks	Speed restrictions; TWY MAX 25 KT, Apron MAX 8 KT [1)] Except stand 1 and 7; Asphalt PCN 60/F/C/X/T			

LQSA AD 4.9 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
2	RWY and TWY markings and LGT	RWY-11/29: Full ICAO RWY designation, Displaced landing THR arrows, THR, Centre line, TDZ, aiming point, edges. Lead-offs from the RWY are marked by a continuous yellow line from the Centre line of the RWY. RWY lights: See AD 2.14
		TWY A: TWY marking aids: Yellow Centre line, edges, holding positions, RWY guard lights TWY lights: See AD 2.15 (see remarks for RWY guard lights)
		TWY B:TWY marking aids: Yellow Centre line, edges, holding positions, RWY guard lights TWY lights: See AD 2.15 (see remarks for RWY guard lights)
		TWY C: TWY marking aids: Yellow Centre line, edges, holding positions, RWY guard lights TWY 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.

LQSA AD 4.10 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 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 4.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	SARAJEVO MET
2	Hours of service MET Office outside hours	MET observation: H24 MET Office Sarajevo: during AD opening hours MWO Banja Luka: outside AD opening hours
3	Office responsible for TAF preparation Periods of validity Interval of issuance	MET Office Sarajevo/*MWO Banja Luka 24 HR NIL
4	Trend forecast Interval of issuance	During AD opening hours 1/2 hour
5	Briefing / Consultation provided	Yes. Personal briefing in MET Office or via telephone: +387 33 779 153: +387 63 352 586: +378 51 337 537 (MWO Banja Luka)
6	Flight documentation Language(s) used	METAR, TAF, SIGMET Charts: *SWC, W/T 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 4.12 RUNWAY PHYSICAL CHARACTERISTICS

RWY Designator	True BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR COORD, RWY end COORD, THR GUND	THR ELEV and highest ELEV of TDZ of precision APP RWY
1	2	3	4	5	6
11	117.35º	2600 X 45	PCN 60/F/C/X/T/ ASPH	434946.37N 0181905.60E 434909.14N 0182044.95E 45.8 M (150 ft)	THR 500.93 M TDZ 506.16 M
29	297.37º	2600 X 45	PCN 60/F/C/X/T/ ASPH	434916.59N 0182025.08E 434947.85N 0181901.62E 45.8 M (150 ft)	THR 515.18 M TDZ 513.3 M

Slope of RWY-SWY (M)	SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	OFZ	Remarks
7	8	9	10	11	12	13
+0.6% (0-1100) +0.7% (1100-1840) +1.1% (1840-2600)	NIL	NIL	2720 X 170	90 X 90	NIL	Displaced THR 11 100 M RESA (Surface type)- CONC and GRASS
-1.1% (0-760) -0.7% (760-1500) -0.6% (1500-2600)	NIL	NIL	2720 X 170	90 X 240	NIL	Displaced THR 29 500 M RESA (Surface type) - CONC and GRASS

LQSA AD 4.13 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 4.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT type, LEN, INTST	THR LGT, colour, WBAR	VASIS (MEHT), PAPI	TDZ LGT LEN
1	2	3	4	5
11	CAT I 900 M W VRB LIH	G VRB LIH YES	PAPI Both/3.2° (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 30 M NIL 0–100 M W 100-1500 M R/W 1500–2100 M R 2100–2600 M LIH	2600 M 60 M R 0–100 M W 100–2000 M Y 2000–2600 M LIH	R VRB LIH NIL	NIL	PAPI distance from THR: 271 M

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 30 M W 0-1500 M R/W 1500–2100 M R 2100–2600 M LIH	2600 M 60 M R 0–500 M W 500–2000 M Y 2000–2600 M LIH	R VRB LIH NIL	NIL	NIL

LQSA AD 4.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN:Top of TWR, W/G light, 10 RPM (HR of OPS: As needed) IBN: N/A
2	LDI location and LGT Anemometer location and LGT	LDI: N/A Anemometer: At TDZ 11 and top of TWR
3	TWY edge and centre line lighting	Edge: AVBL CL: NIL
4	Secondary power supply/switch-over time	AVBL: 15 SEC 375 KVA "short break" diesel generator 0 SEC - UPS 160 KVA ("by-pass") Full load autonomy - 20 MIN
5	Remarks	Apron floodlighting Obstacle lighting

LQSA AD 4.16 HELICOPTER LANDING AREA

NIL

LQSA AD 4.17 ATS AIRSPACE

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

LQSA AD 4.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP	SARAJEVO APP/ SARAJEVO PRILAZNA KONTROLA	136.450 MHZ	As ATS	Primary FREQ
		119.775 MHZ	As ATS	Spare FREQ
	SARAJEVO RADAR	121.500 MHZ	As ATS	EMERG FREQ
TWR	SARAJEVO TWR/ SARAJEVO TORANJ	118.250 MHZ	As ATS	Primary FREQ
		121.500 MHZ	As ATS	EMERG FREQ
GND	SARAJEVO GROUND	121.900 MHZ	As ATS	Primary FREQ
ATIS	SARAJEVO INFORMATION	124.125 MHZ	H24	Coverage: 60 NM Output: 20 W

LQSA AD 4.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR, Type of supported OPS (for VOR/ILS/MLS, give declination)	ID	Frequency	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
NDB (5°E/2020)	IL	405 KHZ	H24	434928.06N 0182002.43E	522.99 M	Coverage 25 NM Not comply with Annex 10, Vol.1, 2.3.1 (no information of the operational status on APP/ TWR position)
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 4.20 LOCAL TRAFFIC REGULATIONS

1. LANDING / DEPARTURE (ADDITIONAL INFORMATION)

1.1 LANDING

Delayed flights out of operating hours shall be performed after prior Airport Operator approval obtained only.

After landing RWY11 to prevent damage to the RWY surface during the period of the year when the air temperature exceeds 30 degrees Celsius, all aircraft must leave RWY via TWY A. When this is not possible due to other traffic, the crew will be instructed to make U-turn using TURN PAD and leave RWY via TWY B.
This applies to aircraft type A,B and C (A321 max). The TURN PAD can only be used in daylight conditions.

1.2 DEPARTURE

A pilot in command (ready to start the engines) could expect to receive a departure clearance at least 10 minutes before the end of operating hours only. Delayed departures could be tolerated 30 minutes after the end of operating hours. Prior Airport Operator approval shall be obtained. Departures shall not be permitted after the end of operating hours. Exemptions shall be authorized by Airport Operator only.
Start-up procedure for all aircraft on apron is under guidance of the apron marshaller, following clearance from ATC. It is strictly forbiden for aircraft crews to remove safety cones and wheel chocks by them self. Aircraft Commander must advise ATC and ask for assistance if marshaler is not in position for start up engines.

1.2.1 DE-ICING

Service provider: Sarajevo International Airport. De-icing available during winter season from 01.11 until 30.4. De-icing performed on parking stand/gate position. De-icing have to be requested -20 MIN scheduled time of departure.

1.3 EXEMPTIONS

Airport Operator may grant exceptions on request for:

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

Rescue and fire fighting personnel is reduced, CAT 3 is declared. An application for such requests shall be submitted to Airport Operator.

2. SLOT AND HANDLING REQUEST FORM

Application form available on:
URL: http://www.sarajevo-airport.ba/tekst.php?lang=eng&id=8&kat=2&sub_kat=0
SARAJEVO - SLOT and HANDLING REQUEST FORM

All companies or private aircraft must have a fuelling supplier selected prior arrival/departure of the flight. It have to be noted in slot request.

Fuelling supplier:

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

3. 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. Helicopter unable to ground taxi will be escorted by Follow me car whilst in the hover.

4. 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**.

4.1 Criteria for the implementation LVTO

LVTO only is conducted when RVR is below 400 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”.

4.2 Details of runway entries

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

4.3 Details of holding points to be used

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

4.4 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 4.21 NOISE ABATEMENT PROCEDURES

NIL

LQSA AD 4.22 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.
Required authorisation from BHDCA for Special ILSs RWY 11. Ref AIC A003/2020.
In case of complete communication failure, ATC signal light gun is available on Sarajevo TWR.
Pilots shall observe light signals from TWR.

LQSA AD 4.23 ADDITIONAL INFORMATION

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

LQSA AD 4.24 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 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
Visual Approach Chart - ICAO	LQSA AD 2.24.13 - 1