

LSGS - SION

LSGS AD 2.1 AERODROME LOCATION INDICATOR AND NAME

LSGS - SION

LSGS AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at Aerodrome	46 13 09 N 007 19 37 E - RWY midpoint
2	Direction and distance from the CITY	2.5 km SW Sion
3	Elevation/Reference temperature	1582 ft AMSL - 25.5° C
4	MAG VAR/Annual change	2° E (2016.5) / 0°10' eastwards
5	AD Administration, address, telephone, telefax, telex, AFS	Post: Aéroport de Sion Route de l'aéroport CH-1950 Sion Phone: +41 (0) 27 329 06 00 Fax: +41 (0) 27 329 06 16 AFS: LSGSZPZX - LSGSYDYX SITA: SIRAPXH Email: aeroport@sion.ch URL: http://www.sionairport.ch/
6	Types of traffic permitted (IFR/VFR)	IFR/VFR
7	Remarks	Geodetic undulation reference for ARP: 169.9 ft

LSGS AD 2.3 OPERATIONAL HOURS

1	AD Administration	APR-SEP: 0500 - HRH, MAX 1800 OCT-MAR: 0700 - HRH, MAX 1900 HRH = Day and night limits. REF: GEN 2.7 .
2	Customs and immigration	AD OPR HR
3	Health and sanitation	AD OPR HR
4	AIS Briefing Office	AD OPR HR
5	ATS Reporting Office (ARO)	AD OPR HR
6	MET Briefing Office	AD OPR HR
7	ATS	HX
8	Fuelling	AD OPR HR
9	Handling	AD OPR HR
10	Security	AD OPR HR
11	De-icing	AD OPR HR
12	Remarks	Outside AD administration hours - OPS and services O/R. Special permission is required for flights outside of the opening hours. APR-SEP: 1800 - 1900, PPR until 1000 OCT-MAR: 0600 - 0700, PPR until 1600 the preceding day, HRH - 2000, PPR until 1100 Special Flights inside CTR and TMA Special FLTs are subject to coordination requirements. Refer to VFR Manual, VFR RAC 4-0-7 Or via URL: http://www.skyguide.ch/en/services/aim-services/special-flights-activities/

LSGS AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	Handling possible O/R
2	Fuel/oil types	JET A1, AVGAS 100LL, AVGAS UL91 MOBIL 2, W80, W100, 15W50
3	Fuelling facilities/capacity	JET A1: 2 trucks 20'000 litres AVGAS 100LL: 2 trucks 2'500 litres AVGAS UL91: 1 trailer 2'000 litres
4	De-icing facilities	NOV 01 - APR 30: De-icing assured De-icing fluids available: Type I Kilfrost DF-Plus; Type II Kilfrost ABC K-Plus On-stand de-icing: Sion Airport Clean Aircraft Concept as defined in ICAO Doc 9640 is applied; aircraft are de-iced according to the requirements of SAE AS6285. Airport Authority can intervene in case of non-adherence.
5	Hangar space available for visiting aircraft	For ACFT up to 77'000 kg, type A320
6	Repair facilities for visiting aircraft	Major and minor aircraft and engine repairs: <ul style="list-style-type: none"> • FARNER (ACFT up to 5700 kg): +41 (0) 27 322 97 31 • TAG Maintenance Services: +351 210 322 824
7	Remarks	For non-based aircraft with MTOM > 3 tons, a handling agent is mandatory. Self-handling is not allowed. The handling agents are: Aéroport de Sion Phone: +41 (0)27 329 06 00 Fax: +41 (0)27 329 06 16 Email: aeroport@sion.ch Signature Flight Support Phone: +41 (0)27 305 24 24 Fax: +41 (0)27 322 14 16 Email: sir@signatureflight.ch Alpine Jet Services Phone: +41 (0)27 327 30 50 Fax: +41 (0)27 327 30 51 Email: handling@alpinejet.ch For such FLT's the name of the handling agent shall be entered in item 18 "other information" of the ICAO flight plan.

LSGS AD 2.5 PASSENGER FACILITIES

1	Hotels	In the city
2	Restaurants	At AD and in the city
3	Transportation	Buses, taxis and car rental from the AD. Trains in city
4	Medical facilities	First aid at AD, Ambulance O/R, Hospitals in the city
5	Bank and Post Office	In the city, Cash dispenser and Letterbox at AD within AD OPS HRS
6	Tourist Office	Office in the city: Phone: +41 (0) 27 327 77 27 Fax: +41 (0) 27 322 77 28 Email: info@siontourisme.ch
7	Remarks	NIL

LSGS AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	Category 5 for charter traffic Category 3 for other traffic HYR than Category 3 (max category 7): O/R 3 HR before ETA/ETD
2	Rescue equipment	4 fire engines, 1 ramp control vehicle
3	Capability for removal of disabled aircraft	Crane, lifting bags and hydraulic jacks up to 20 t.
4	Remarks	RFF not available during snow clearing

LSGS AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Type(s) of clearing equipment	4 snow blowers, 4 snow ploughs, 4 jet sweepers, 3 RWY de-icer, 1 aircraft de-icer
2	Clearance priorities	1. RWY and associated TWY to apron 2. Other TWY and ACFT stands
3	Remarks	Information on snow clearance published from NOV 01 - APR 30 in NOTAM (SNOWTAM) RWY 07/25 de-iced / anti-iced with betaine: BETAFROST (liquid) / NUTRISTIM (solid).

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

1	Apron surface and strength	CONC / ASPH PCN 40 F/B/X/T
2	Taxiway width, surface and strength	15/20 m CONC / ASPH PCN 40 F/B/X/T Details: Ref to LSGS AD 2.24.1/2
3	ACL location and elevation	No ACL markings
4	VOR/INS checkpoints	NIL
5	Remarks	NIL

LSGS 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	ACFT stand identification markings. Lead-in, stop and lead-out lines. Apron safety lines. Marshalling available on sectors North, Grély and South-East.
2	RWY/TWY markings and LGT	RWY markings: D-THR, designation, centre line and pre-THR area, side stripe. RWY LGT: see LSGS AD 2.14 TWY markings: Centre line, intermediate holding positions, runway holding position and mandatory instruction at all intersections with RWY. TWY LGT: Edge lights on TWY A*, B, C, D, F, G and S* (*: near runway only). Runway guard lights on TWY A and B. Mandatory instruction signs at all RWY holding positions. Information signs on the movement area.
3	Stop bars	NIL
4	Remarks	The portion of TWY A east of TWY B is located within the runway strip. No use without ATC instructions.

LSGS 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 07 (1)	Enclosure	1591	46 13 22 N 007 20 23 E	Power line	85m AGL	46 15 47 N 007 14 30 E 46 15 27 N 007 14 14 E	B0060/02
AOC 07 (2)	Pole	1592	46 13 23 N 007 20 24 E	Building	1677	46 13 31 N 007 21 26 E	
AOC 07 (3)	Tree/Trees	1649	46 13 24 N 007 20 29 E	Antenna marked	4216	46 11 30 N 007 20 04 E	
AOC 07 (4)	Tree/Trees	1681	46 13 33 N 007 20 59 E	Building LGTD	1624	46 13 29 N 007 20 53 E	
AOC 07 (5)	Tree/Trees	1689	46 13 33 N 007 20 59 E	Tree/trees	1804	46 13 04 N 007 18 26 E	
AOC 07 (6)	Tree/Trees	1711	46 13 37 N 007 21 14 E	Tree/trees	1844	46 13 11 N 007 18 44 E	
AOC 07 (7)	Antenna	1750	46 13 45 N 007 21 57 E	Crane/cranes	1686	46 12 55 N 007 17 53 E	B0032/04
AOC 07 (8)	Power line	1920	46 14 03 N 007 24 46 E	Tower/Mast marked	1693	46 12 51 N 007 18 41 E	
AOC 07 (9)	Tree/Trees	1940	46 14 05 N 007 24 52 E	Building	1614	46 13 20 N 007 20 08 E	
AOC 07 (10)	Tree/Trees	2081	46 14 05 N 007 24 57 E	Building	1670	46 13 29 N 007 20 36 E	
AOC 07 (11)	Tree/Trees	2200	46 14 07 N 007 25 04 E	Building	1690	46 13 21 N 007 19 54 E	
AOC 07 (12)	Tree/Trees	2337	46 14 09 N 007 25 09 E	Tree/trees	1634	46 13 15 N 007 19 43 E	
AOC 07 (13)	Tree/Trees	2501	46 14 10 N 007 25 15 E	Power line	90 m AGL	46 13 13 N 007 14 50 E 46 13 20 N 007 14 43 E 46 13 28 N 007 14 43 E	B0059/02
AOC 07 (14)	Tree/Trees	2590	46 14 12 N 007 25 24 E	Building LGTD	1611	46 13 19 N 007 20 01 E	B0391/14
AOC 07 (15)	Tree/Trees	2735	46 14 14 N 007 25 30 E	Crane/cranes marked/LGTD	1670	46 13 12 N 007 20 19 E	B0411/05
AOC 07 (16)	Tree/Trees	2865	46 14 21 N 007 25 50 E				
AOC 25 (1)	Enclosure	1585	46 13 01 N 007 18 49 E	Aerial railway marked	3649	46 10 16 N 007 13 17 E 46 09 52 N 007 14 39 E	B0360/09
AOC 25 (2)	Tree/Trees	1590	46 13 01 N 007 18 49 E	Crane/cranes marked/LGTD	1759	46 13 44 N 007 21 40 E	B0910/20
AOC 25 (3)	Tree/Trees	1591	46 13 01 N 007 18 44 E	Antenna	1697	46 13 40 N 007 21 32 E	B0512/06
AOC 25 (4)	Pole	1592	46 12 56 N 007 18 45 E	Crane marked/LGTD	1664	46 12 52 N 007 17 43 E	B1102/07
AOC 25 (5)	Pole	1596	46 12 56 N 007 18 41 E	Antenna LGTD	1631	46 13 11 N 007 19 12 E	B0488/08

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 25 (6)	Building	1600	46 12 59 N 007 18 39 E	Chimney LGTD	1629	46 13 30 N 007 20 55 E	B1240/13
AOC 25 (7)	Building	1602	46 13 00 N 007 18 36 E	Tower/Mast LGTD	1613	46 13 07 N 007 19 49 E	B0629/05
AOC 25 (8)	Building	1608	46 13 00 N 007 18 35 E				
AOC 25 (9)	Pole	1628	46 13 00 N 007 18 30 E	Crane/Cranes marked/LGTD	1663	46 13 22 N 007 20 01 E	B0882/14
AOC 25 (10)	Pole	1631	46 12 59 N 007 18 27 E	Crane/Cranes marked/LGTD	1657	46 12 51 N 007 17 55 E	B0105/15
AOC 25 (11)	Tree/Trees	1641	46 12 59 N 007 18 24 E	Crane/Cranes marked/LGTD	1739	46 13 21 N 007 21 57 E	B0653/19
AOC 25 (12)	Tree/Trees	1669	46 12 52 N 007 18 27 E	Crane/Cranes marked/LGTD	1750	46 13 44 N 007 21 36 E	B0641/21
AOC 25 (13)	Power line	1696	46 12 46 N 007 18 10 E				
				Crane/Cranes marked/LGTD	1658	46 12 52 N 007 18 01 E	B0321/21
				Crane/Cranes marked/LGTD	1699	46 13 28 N 007 21 35 E	B1286/20
				Mast	1922	46 12 32 N 007 19 51 E	B1236/20
Refer also to LSGS AOC 07/25, LSGS AD 2.24.4 - 1 Number in brackets is equivalent to identification number on AOC.							

LSGS 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	Issuance: HH+20, HH+50
5	Briefing/consultation provided	Self Briefing Service (www.skybriefing.com)
6	Flight documentation Language(s) used	Digital and hard copy 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	Sion TWR
10	Additional information (limitation of service, etc.)	Phone: Weather briefing: 0900 162 767 (Fr), 0900 162 737 (Ge); accessible within Switzerland

LSGS 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
07	073° GEO 072° MAG	2000 x 40	PCN 40 F/ B/ X/ T ASPH	46 13 00.73N 007 18 55.42E	1575 ft	Refer to: AOC 07/25
25	253° GEO 252° MAG			46 13 18.56N 007 20 19.05E	1582 ft	
07 GRASS	073° GEO 072° MAG	660 x 30	0.25 MPa 5700 kg MPW ¹ GRASS	NIL	NIL	NIL
25 GRASS	253° GEO 252° MAG		0.25 MPa 5700 kg MPW ¹ GRASS			

¹ Maximum permissible weight

Designations RWY NR	SWY dimensions (m)	CWY dimensions (m)	Strip dimensions (m)	OFZ	Remarks
1	8	9	10	11	12
07	NIL	60	2120 x 150	NIL	Non-instrument runway FCT: 0.91/0.86 not grooved RESA: 90 m
25		60			Non-instrument runway FCT: 0.90/0.84 not grooved RESA: 90 m
07 GRASS	NIL	NIL	720 x 60	NIL	Only VFR operations (see LSGS AD INFO)
25 GRASS					

LSGS AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
07	2000	2060	2000	1935	MAX length
	1500	1560	1500	Not applicable	Intersection H
	1150	1210	1150	Not applicable	Intersection G
25	2000	2060	2000	1940	MAX length
	1800	1860	1800	Not applicable	Intersection E
	1625	1685	1625	Not applicable	Intersection B
	1355	1415	1355	Not applicable	Intersection C
	1330	1390	1330	Not applicable	Intersection F
07 GRASS	560	560	560	660	Only VFR operations (see LSGS AD INFO)
25 GRASS	660	660	660	560	

LSGS 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	RMK
1	2	3	4	5	6	7	8	9	10
07	SALS 540 m LIH	RTHL G LIH WBAR	PAPI 4.0°, L, 12.33 m	NIL	NIL	65 m, 50 m, R, LIH; 1335 m, 50 m, W, LIH; 600 m, 50 m, Y, LIH	R, LIH	NIL	NIL
25	SALS 540 m LIH	RTHL G LIH WBAR	PAPI 4.0°, L, 12.12 m	NIL		60 m, 50 m, R, LIH; 1340 m, 50 m, W, LIH; 600 m, 50 m, Y, LIH	R, LIH	NIL	NIL

PAPI 07 light beam is offset 2° south from runway axis. CTN: ICAO obstacle protection surface and PAPI light beam are penetrated by topography starting west of Chamoson village (D3.8 ISI).

PAPI 25 light beam is offset 5° north from runway axis. CTN: ICAO obstacle protection surface and PAPI light beam are penetrated by topography starting east of Bramois village (D4.0 ISI).

LSGS 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	Edge: TWY A*, B, C, D, F, G and S* (* near RWY only)
4	Secondary power supply/switch-over time	25 Seconds (above ICAO Standard)
5	Remarks	NIL

LSGS AD 2.16 HELICOPTER LANDING AREA

1	Coordinates TLOF or THR of FATO	<p>Sector North: 46 13 19N / 007 20 23E</p> <p>Sector Grély: 46 13 10N / 007 19 37E</p> <p>Sector South-East: 46 13 19N / 007 20 43E</p>
2	TLOF and/or FATO elevation M/FT	<p>Sectors North and South-East: 485 m / 1591 ft</p> <p>Sector Grély: 483 m / 1584 ft</p>
3	TLOF and FATO area dimensions, surface, strength, marking	<p>All sectors: HEL PRKG stands basically designed for rotor diameter 11.00 m and overall length 13.15 m. No simultaneous hover operations allowed on HEL stands.</p> <p>Sector North: FATO at THR 25, ASPH, runway markings. 2 HEL stands for non-based HEL: Stand 21: 46 13 19.757N / 007 20 09.281E Stand 22: 46 13 20.479N / 007 20 08.967E 2 HEL stands 81, 82 for Air Glaciers MAINT. ASPH, touchdown markings.</p> <p>Sector Grély: FATO at midpoint RWY 07-25 (ARP), ASPH, runway markings. 2 HEL stands: Stand 71: 46 13 05.189N / 007 19 36.843E Stand 72: 46 13 05.407N / 007 19 37.873E ASPH, touchdown markings. 2 HEL stands for taxiing HEL. ASPH lead-in and stop line</p> <p>Sector South-East: FATO 20 m x 20 m, grass, identification and perimeter markings. Based HEL only. 9 HEL stands 1 to 9, ASPH, touchdown markings. 1 HEL stand 1A for larger HEL (rotor diameter 16 m and overall length 19 m, e.g. Super Puma).</p>
4	True and MAG BRG of FATO	<p>Sectors North and Grély: RWY 07: 073° GEO / 072° MAG; RWY 25: 253° GEO / 252° MAG</p> <p>Sector South-East: RWY 07: 078° GEO / 077° MAG; RWY 25: 261° GEO / 260° MAG</p>
5	Declared distance available	<p>Sectors North and Grély: Ref: LSGS AD 2.13</p> <p>Sector South-East: FATO 20 m x 20 m</p>
6	APP and FATO lighting	<p>Sectors North and Grély: Ref: LSGS AD 2.14</p> <p>Sector South-East: NIL</p>
7	Remarks	<p>All sectors: HEL REP - Refer to VFR Manual.</p> <p>Sector North: In order to optimise the coordination of HEL traffic at Sion, PPR for non-based HEL. Parking up to 7 days maximum via: Email: aeroport@sion.ch or Phone: +41 27 329 06 00 For non-based HEL larger than rotor diameter 11.00 m or overall length 13.15 m, an authorisation is required before any ARR or DEP. Phone: +41 27 329 06 00</p> <p>Sector Grély: Handling with Signature Flight Support mandatory. ARR HEL must be towed away from the stand immediately after touchdown. Departing HEL must lift-off as soon as they have been positioned on the stand. For HEL larger than rotor diameter 11.00 m or overall length 13.15 m, coordination is required with Signature Flight Support before any ARR or DEP. Phone: +41 27 305 24 24</p> <p>Sector South-East: Based HEL only.</p>

LSGS AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	SION CTR 46 16 41N 007 26 05E - 46 14 00N 007 28 02E - 46 12 04N 007 23 51E - 46 10 20N 007 14 21E - arc of circle 1.62 NM on - 46 11 54N 007 13 45E - clockwise 46 13 27N 007 13 04E - 46 15 06N 007 20 51E - 46 16 41N 007 26 05E
2	Vertical limits	FL 130
3	Airspace classification	D
4	ATS unit call sign Language(s)	En; En and Fr for Non-Commercial VFR traffic.
5	Transition altitude	17000 ft AMSL except 13000 ft AMSL for SIDs GOLEB
6	Remarks	ACT: HX - ATIS (monitoring compulsory)

LSGS AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of Operation	Remarks
1	2	3	4	5
ATIS	NIL	130.630 MHz	HX	Phone: Service: +41 (0) 22 417 40 80
APP	SION RADAR	126.825 MHz	HO	Languages: En
TWR	Sion Tower	118.275 MHz	HX	Languages: En; En and Fr for Non-Commercial VFR traffic.
FIC	Geneva Information	126.350 MHz	H24	NIL
GND	Sion Ground	121.705 MHz	HX	NIL

LSGS 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
SION DVOR/DME (VAR 3° E)	SIO	112.15 MHz 58Y	H24	46 12 55.8N 007 17 19.6E	1594 ft	PSN: 260° MAG, 2.2 NM FM THR 25. DOC 40 NM / 25'000 ft. Service range outside published IAC and SID PROC unreliable.
LOC 25	ISI	110.70 MHz	H24	46 12 57.1N 007 18 40.4E		LOC PSN: 252° MAG, 2214 m FM THR 25. LOC course 244° MAG. Front course sector width 2°. Restricted coverage: 6 to 30 NM - +/- 8° from CL above 5° elevation from LOC.
GP 25		330.20 MHz	H24	46 13 54.7N 007 23 07.2E		GP Angle 6°. PSN: 072° MAG 3774 m before THR 25. Restricted coverage: 6 to 30 NM - +/- 8° from CL above 5° elevation from LOC.
DME 25	ISI	44X	H24	46 12 54.7N 007 18 46.2E	1609 ft	DME Co-located with LOC. 1.2 NM DME THR 25. Restricted coverage: 6 to 30 NM - +/- 8° from CL above 5° elevation from LOC.

LSGS AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Local flying restrictions and remarks

AD is for joint use: CIV and MIL.

Use is only by ACFT carrying SVCBL RTF equipment. Exemption from this restriction is granted in exceptional cases. Special permission to be requested by TEL prior to TKOF.

Use of paved RWY is compulsory for all aeroplanes during GLD ACT.

Reserved GLD SECT:

PJE: Refer to VFR Manual, LSGS VAC.

Use of reverse thrust:

For deceleration, it is recommended that the entire RWY LEN AVBL is used; use of reverse thrust shall be limited unless particular safety or operational reasons require it.

MON-SAT: 0600 - 0700 (0500 - 0600), 1100 - 1200 (1000 - 1100), 1700 - 1900 (1600 - 1800) and SUN-HOL, following operations are prohibited:

- AD circuits for
 - non based ACFT
 - noise Category A and B ACFT
 - multi engine ACFT
- aerobatics FLT in the CTR (except gliders) and in the TMA
- engine and reactors control
- technical FLT
- LDG, APCH with go-around, TKOF of ACFT noise Category I/II/III and civil registered fighters are subject to special AUTH.

2. MIL Equipment

- The runway is equipped with 2 retractable MIL arresting cables, located between the thresholds. Cables are retracted when CIV ACFT use RWY. The distance between the cables is 1250 m. If those are not retracted, CIV aircraft are prohibited from rolling over them.

3. Airport regulation

At Sion AP, a number of local regulations apply. The regulations are included in a manual which is AVBL at the AIS briefing office. This manual includes, among other subjects, the following:

- a. the meaning of markings and signs;
- b. information about ACFT parking;
- c. HEL operations;
- d. GLD ACT;
- e. PJE;
- f. aerobatics;
- g. marshaller assistance and towing;
- h. engine start-up and use of APU.

Departing IFR FLT's shall always contact Sion Ground 121.705 MHz to obtain start-up and ATC clearance.

Marshaller assistance or "Follow me" vehicles can be requested and further information about the regulation can be obtained from Sion Ground or the AIS.

When a local regulation is of importance for the safe operation of ACFT on the apron, the information will be given to each ACFT by Sion Ground or the AIS.

"Local regulations" may be requested, in writing, from:

Post: Aéroport de Sion
Route de l'aéroport
CH-1950 Sion

4. ACFT guidance on apron

4.1 General

For taxi instruction, contact GND on FREQ 121.705 MHz. Pilot in command remains responsible for avoidance of collision with ACFT and objects outside of the ATS responsibility BDRY.

4.2 Area of responsibility

The exact ATS responsibility BDRY is shown on the AD-chart [LSGS AD 2.24.1 - 1](#).

4.3 Operational hours

HO; REF: [LSGS AD 2.3](#).

5. Aircraft parking SECTOR NORTH

Parking on north apron dedicated to non-based ACFT and scheduled FLTs only (7 days maximum).

Except parking "GVM", dedicated to the Air Club Sion.

Transit parking dedicated to ACFT with a MTOM over 3 tons. Permission are allowed only by the airport authority at least 24 H in advance.

Phone: +41 (0) 27 329 06 00 or

Email: aeroport@sion.ch

6. High-visibility equipment

All crew on the movement area must wear yellow high-visibility safety equipment (jacket or vest) compliant with the EN 471 standard.

LSGS AD 2.21 NOISE ABATEMENT PROCEDURES

1. Auxiliary Power Units (APU)

1.1 The following regulations are applicable to use of APU:

- a MAX of 15 MIN prior to ACFT DEP
- a MAX of 10 MIN after ACFT ARR

The use of APU for MAINT shall be restricted to a MNM DUR.

LSGS AD 2.22 FLIGHT PROCEDURES

1. Special regulations for IFR approach and departure

1.1 IFR procedures

The use of IFR APCH or DEP procedures in Sion is limited to pilots, operators and ACFT fulfilling the respective airport qualifications. Pilots must hold a type A or B qualification.

- **Type A** qualification is obtained by achieving a self-Airport Briefing performed on the website:
URL: www.sion-qualification.ch
- **Type B** qualification is obtained by achieving a flight program performed either on the ACFT or on a simulator. The flight program has to be submitted to an organisation authorized by Sion Airport Authority to deliver the type B qualification.

Referring to the type B qualification for multi crew, only the PIC, who must be the Pilot Flying, has to hold a type B qualification while the Pilot Non Flying only needs to hold a type A qualification.

1.1.1 IFR approach procedures

Any approaching ACFT must comply with the requirements of the ACFT, as well as with the relevant procedures published on the approach charts.

a. Approach to RWY 25

Initial APCH at 6.0° and final APCH and LDG at 4.0°. This approach is not considered as a "steep approach", as the last 7 NM are calculated with an APCH angle of 4.0° and are performed visually.

b. Circling Procedures RWY 07

Initial APCH to RWY 25 at 6.0° followed by circling procedure, which is available to ACFT categories A, B with speed limit of 125KT and C with speed limit of 135KT. Only available for pilot type B qualification.

c. Instrument approach procedures available for pilot **type A** qualification

IGS RWY 25, DA 8000 ft Conditions: VIS 8000m and ceiling 6500 ft AGL, day only.

d. Instrument approach procedures available for pilot **type B** qualification

IGS RWY 25, DA according to ACFT PER

- **IGS RWY 25 Day** Conditions: VIS 5000 m.

- **IGS RWY 25 Night** Conditions: VIS 5000 m, ACFT able to fly a high PER DEP, only when RWY 25 in use.

RNP RWY 25 (AR), DA according to ACFT CAT

- **RNP RWY 25 (AR) Day** Conditions: NAA approved (Special aircraft and aircrew authorisation required)

- **RNP RWY 25 (AR) Night** Conditions: ACFT able to fly a high PER DEP, only when RWY 25 in use.
NAA approved (Special aircraft and aircrew authorisation required).

1.1.2 IFR departure procedures

Any departing ACFT must comply with the requirements of the ACFT as well as with the relevant procedures published on the SID charts.

a. Instrument departure procedures available for pilot **type A** qualification

Standard SID (via GRANA) Conditions: VIS 8000 m and ceiling 6500 ft AGL, VMC must be maintained until GRANA, day only.

High PER VMC SID Conditions: VMC until reaching the final SID altitude, day only.

b. Instrument departure procedures available for pilot **type B** qualification

Standard SID (via GRANA) Conditions: VIS 8000 m and ceiling 6500 ft AGL, VMC must be maintained until GRANA, day only.

High PER SID Conditions: RVR 550 m, day and night.

1.1.3 Requirements overview

REQUIREMENTS OVERVIEW				
Flight operation & procedures		Requirements & Conditions		
		Pilot Qualification	Conditions	Aircraft Performance
VFR departure		NIL	VMC	NIL
IFR departure	Standard SID (via GRANA), day only	A / B	VIS 8000 m + ceiling 6500 ft AGL, VMC to GRANA	NIL
	High PER VMC SID, day only	A	VMC until reaching final SID altitude	High PER
	High PER SID, day and night	B	RVR 550 m	High PER
VFR approach & landing		NIL	VMC	NIL
IFR approach & landing	IGS RWY 25, DA 8000 ft, day only	A	VIS 8000 m + ceiling 6500 ft AGL	OEI ceiling for APCH 14500 ft AMSL. Able for a 6° glide path angle. OEI missed APCH climb gradient
	IGS RWY 25, DA according to ACFT PER, day only	B	VIS 5000 m	
	IGS RWY 25, DA according to ACFT PER, night only	B	VIS 5000 m, high PER DEP, only if RWY 25 in use	
	RNP RWY 25 (AR) DA according to ACFT CAT day only	B	NAA approved*	
	RNP RWY 25 (AR), DA according to ACFT CAT night only	B	High PER DEP, only if RWY 25 in use NAA approved*	
	Circling RWY 07, day only	B	AVBL for ACFT categories A, B with speed limit of 125KT and C with speed limit of 135KT	
Note:	1) MNM climb gradient in accordance with LSGS AD 2.24.10.1 (go-around missed APCH climb gradient) 2) The conditions given by this table allow any ACFT category to operate, provided it fulfils the MAX IAS			
Legend:	NIL = not required NAA = National Aviation Authority * (Special aircraft and aircrew authorisation required)			

1.1.4 SID Descriptions

GENERAL INFORMATION FOR ALL SIDS

- MAX ALT applicable when MIL ON
- Contact Sion Ground 121.705 5 MIN prior to start-up
- INITIAL CLIMB CLEARANCE: BY ATC

1.1.4.1 SID RWY 07/25 (see chart LSGS AD 2.24.7 - 1)

DESIGNATOR	RWY 07/25			
	ROUTE			
	Lateral	Vertical	Contact	Remark
ROCCA 2J/K/L	Proceed to GRANA (large factory, south of Sierre) maintaining visual ground contact. Arrange your visual climb to pass GRANA at 6000ft or above, established on R066 SIO (TR246) to SIO. At SIO intercept R233 SIO, proceed via BERAR to D30 SIO. At D30 SIO turn left (MAX IAS 250KT during turn), establish TR190, proceed to ROCCA.	Cross: D7.2 SIO MAX 11000ft, D12.2 SIO MAX 13000ft, D20 SIO MNM 13000ft, BERAR MNM 16000ft, D30 SIO MNM FL according chart.		RNAV 5 certification required.
SAINT-PREX 2J (SPR 2J)	Proceed to GRANA (large factory, south of Sierre) maintaining visual ground contact. Arrange your visual climb to pass GRANA at 6000ft or above, established on R066 SIO (TR246) to SIO. At SIO intercept R233 SIO, proceed to BERAR. At BERAR turn right (MAX IAS 250KT during turn), intercept R155 SPR inbound, proceed to SPR.	Cross: D7.2 SIO MAX 11000ft, D12.2 SIO MAX 13000ft, D20 SIO MNM 13000ft, BERAR MNM 16000ft.		

1.1.4.2 SID RWY 25 - HIGH PERFORMANCE (see chart LSGS AD 2.24.7 - 3)

DESIGNATOR	RWY 25 - HIGH PERFORMANCE			
	ROUTE			
	Lateral	Vertical	Contact	Remark
ROCCA 3U/V/W PDG: 13.6% to 9500ft	Climb straight ahead. At the end of the RWY proceed on TR242, intercept R233 SIO. Proceed via BERAR to D30 SIO. At D30 SIO turn left (MAX IAS 250KT during turn), establish TR190, proceed to ROCCA	Cross: D7.2 SIO MAX 11000ft, D12.2 SIO MAX 13000ft, D20 SIO MNM 13000ft, BERAR MNM 16000ft, D30 SIO MNM FL according chart.		RNAV 5 certification required.
SAINT-PREX 3U (SPR 3U) PDG: 13.6% to 8500ft	Climb straight ahead. At the end of the RWY proceed on TR242, intercept R233 SIO. Proceed to BERAR. At BERAR turn right (MAX IAS 250KT during turn), intercept R155 SPR inbound, proceed to SPR.	Cross: D7.2 SIO MAX 11000ft, D12.2 SIO MAX 13000ft, D20 SIO MNM 13000ft, BERAR MNM 16000ft.		

1.1.4.3 SID RWY 07/25 - ONLY FOR DEST WITHIN TMA LSGG OR LFLB (see chart LSGS AD 2.24.7 - 5)

DESIGNATOR	RWY 07/25 - ONLY FOR DEST WITHIN TMA LSGG OR LFLB			
	ROUTE			
	Lateral	Vertical	Contact	Remark
GOLEB 2J/K/L	Proceed to GRANA (large factory, south of Sierre) maintaining visual ground contact. Arrange your visual climb to pass GRANA at 6000ft or above, established on R066 SIO (TR246) to SIO. At SIO intercept R233 SIO, proceed to BERAR. At BERAR turn right (MAX IAS 250KT during turn), intercept R122 GVA inbound to GOLEB.	Cross: D7.2 SIO MAX 11000ft, D12.2 SIO MAX 13000ft, D20 SIO MNM 13000ft, GOLEB MNM FL according chart.		- For TFC DEST LSGG, join KINES arrival route. - For TFC DEST LFLB/LFLP, follow route Y52.
GOLEB 3U/V/W PDG: 13.6% to 8500ft, 4.8% to 12300ft	Climb straight ahead. At the end of the RWY proceed on TR242, intercept R233 SIO. Proceed to BERAR. At BERAR turn right (MAX IAS 250KT during turn) and proceed to GOLEB.	Cross: D7.2 SIO MAX 11000ft, D12.2 SIO MAX 13000ft, D20 SIO MNM 13000ft, GOLEB MNM FL according to the chart		HIGH PERFORMANCE DEPARTURE (RWY 25 only) - For TFC DEST LSGG, join KINES arrival route. - For TFC DEST LFLB/LFLP, follow route Y52.

1.1.5 STAR Description**1.1.5.1 STAR TO GRANA - RNAV 5 (see chart LSGS AD 2.24.9 - 1)**

DESIGNATOR	STAR TO GRANA - RNAV 5		
	ROUTE		Remark
	Lateral	Vertical	
VADAR 2N	From VADAR proceed via SOSAL to GRANA.	Refer to chart	
VALOR 1W	From VALOR proceed to GRANA.	Refer to chart	

Procedure Description of RNAV STAR VADAR 2N						
Path terminator	Waypoint	Flyover	Altitude (ft)	Speed limit (kt)	Track	Distance (NM)
-	VADAR	N	+FL190	-	-	-
TF	SOSAL	N	+17000	-	136° (137.7°T)	8.0
TF	GRANA	N	+17000	-	119° (121.3°T)	31.5

Procedure Description of RNAV STAR VALOR 1W						
Path terminator	Waypoint	Flyover	Altitude (ft)	Speed limit (kt)	Track	Distance (NM)
-	VALOR	N	+17000	-	-	-
TF	GRANA	N	+17000	-	058° (059.8°T)	26.9

1.2 RNP (AR) Approach description**1.2.1 Approved users, equipment and operations**

- For the LSGS RNP (AR) Instrument Approach Procedure, the operators shall ensure that they hold all the necessary operational approvals as part of the Operations Specifications from its authority including the Baro-VNAV approval in order to conduct the RNP (AR) approach to LSGS (ref ICAO PBN Manual document 9613).
- Final Approach track offset by 8° right from RWCL intercepting the RWCL 480m before the THR.
- The operator must have a Special Authorization from its authority in order to use the RNP AR approaches to LSGS (ref EASA AMC 20-26).
- The operator is responsible of conducting a Flight Operation Safety Assessment (FOSA).
- The RNP (AR) approach procedures require a navigation accuracy of RNP 0.3 and RF-leg capability.
- The vertical guidance is based on Baro-VNAV with GNSS and requires RNAV equipment which uses barometric altimeter input.

1.2.2 Limitations of the procedure

- The procedure is designed for temperature from -20°C to +47°C at Sion. (Temperature correction of the barometric altimeter is not required).
- The Sion RNP Approach RWY 25 (AR) is only available each year from 01 November until the last day of February and outside of MIL OPR HRS.

1.2.3 RNP RWY25 (AR) (see chart LSGS AD 2.24.10-5)

Path terminator	Waypoint ID	Flyover	Altitude (ft)	Speed limit (kt)	Turn direction	Track	DIST (NM)	Descent gradient	RNP	Radius (NM)	Arc center ID
IF	GRANA (IAF)	N	+17000	210	-	-	-	-	1.0	-	-
TF	GS615	N	-	-	-	042° (044.2°T)	30.9	-	1.0	-	-
RF	GS616 (IF)	N	-	-	R	-	22.1	-	1.0	6.85	GS623
TF	GS608 (FAF)	N	+17000	-	-	227° (228.9°T)	3.8	-	1.0	-	-
TF	GS607	N	-	160	-	228° (229.7°T)	10.7	-3.6°	0.3	-	-
RF	GS606	N	-	-	R	-	3.6	-3.6°	0.3	5.21	GS618
TF	GS605	N	-	-	-	268° (269.6°T)	12.9	-3.6°	0.3	-	-
RF	GS604	N	-	-	L	-	2.0	-3.6°	0.3	4.86	GS619
TF	GS617	Y	-	160	-	243° (245.1°T)	10.9	-3.6°	0.3	-	-
TF	GS609	N	-	165	-	243° (244.9°T)	3.8	-	0.5	-	-
RF	GS610	N	-	-	L	-	1.0	-	0.5	5.87	GS620
TF	GS611	N	-	-	-	233° (235.4°T)	17.2	-	0.5	-	-
RF	GS612	N	-	165	R	-	17.0	-	1.0	4.34	GS621
TF	GS613	N	-	-	-	097° (099.0°T)	10.8	-	1.0	-	-
TF	SIO	N	-	-	L	052° (054.1°T)	9.2	-	1.0	-	-
TF	GRANA	N	+17000	220	R	066° (068.0°T)	10.9	-	1.0	-	-

1.3 Airport Qualification

To operate at Sion AP under IFR, the following AP requirements must be fulfilled:

- The ACFT must meet the PER: 6° INA, 4.0° final APCH and LDG.
- Operator's contingency procedures (if required by the type of FLT operation) must be calculated and AVBL.
- The PIC must hold a valid pilot qualification for the applicable type of operation and FLT procedures.

Note: When the PIC is not in a position to land, an EMERG must be declared.

To apply for the AP qualification, operators shall contact the Sion airport authority, CH-1950 Sion:

Phone: +41 (0) 27 329 06 00

Fax: +41 (0) 27 329 06 16

Email: aeroport@sion.ch

1.3.1 Aircraft Requirements

Any ACFT to be operated under IFR at Sion AP shall be able to comply with the published IFR procedures § 2.22.1.1 or with approved company contingency procedures.

The MAX IAS, as published on the relevant charts, shall not be exceeded during the corresponding FLT manoeuvres. The procedures are designed for speed of ACFT categories A, B and C. Additional speed restrictions shall be OBS during APCH and missed APCH.

ACFT to be operated on an instrument APCH procedure shall be able to fly a 6° GP in INA and a 4.0° in LDG configuration.

Note: GP 25 antenna is located 2 NM in front of THR 25.

1.3.2 Pilot Qualification

Pilots intending to operate under IFR rules at Sion AP shall hold a valid pilot qualification in accordance with the requirements of IFR procedures § 2.22.1.1.

1.3.2.1 Pilot Qualification type A

The Pilot Qualification type A is directly controlled by the Sion AP Authority and includes:

A theoretical self-instruction on:

- Sion general operational requirements (FOCA & Sion AP Authority),
- Local weather phenomena and dangers,
- Sion orographic and topographic situation, including all relevant obstacles,

- APCH and DEP procedures (VFR and IFR),

To apply for the Pilot Qualification type A, the pilot shall contact Sion AP Authority or consult Sion AP's qualification web site at URL: <http://www.sion-qualification.ch/>

1.3.2.2 Pilot Qualification type B

MNM training requirements for the AP Qualification are included in a so called "Training Requirements Application Manual (TRAM)" that can be requested from the Sion AP Authority. It also can be found at URL: <http://www.sion-qualification.ch/>

Be aware: The Sion Type B Qualification obtained on a propeller aircraft is not valid for a Jet Aircraft. However, a Type B Qualification obtained on a jet is valid for a propeller aircraft, starting from the principle that the propeller aircraft is able to comply with the requested performances.

1.3.3 Airport qualification recency

It is the operator/pilot's responsibility to comply at all times with the AP qualification recency requirements.

1.3.3.1 Pilots part of private operator

PICs are recent for IFR procedures and IGS operations, regardless of position, rank and function, if at least one APCH into and one DEP from Sion are conducted within a 12 months period (valid until the end of the month), under normal IFR operations.

In case of an interruption of the recency of more than 12 months, a new qualification type A or B is required.

2. VFR procedure

Refer to VFR Manual, LSGS AD INFO.

3. Description of Instrument Guidance System (IGS)

IGS RWY 25 components:

- SIO VOR/DME for missed APCH and initial line-up
- ILS (LOC/GP/DME) for final line-up and from MASAB to MAPT LOC OPN angle: 2°
- GP PSN: 5988 m before LOC antenna

3.1 Restrictions

LOC and GP may only be used in the following area: angle of +/-8° of APCH axis and DIST of 30 - 6 NM DME LOC during APCH. MNM ELEV angle 5° from LOC.

3.2 Procedure

Due to the restricted coverage of the LOC, the initial line-up uses SIO. When inside the useable LOC area, establish on LOC.

IGS PROC may be flown as ILS PROC. The published ALT at DME LOC 22, 19, 14.2 and 11.8 are to be strictly OBS.

After RCH D7 ISI, PCD to RWY maintaining terrain clearance visually. At D7 ISI the RWY may not yet be in sight. LOC track is 6.5° offset from RWY axis. APSG D7 ISI, CONT on track 244° until D6 SIO (ABM village St. Léonard, 3.9 NM to the RWY). Then turn left to visually intercept the EXT D RWY axis PSG slightly south of Sion hospital. Follow the PAPI RWY 25 for final descent segment (4.0°).

Note: GP 25 antenna is located 2 NM in front of THR 25.

4. Minima for IFR departures (TKOF minima) - Pilot Qualification type A

RWY	ACFT CAT	VIS (m) / Ceiling (ft AGL)			RMK
		No LGT AVBL	REDL or RCLL AVBL	REDL and RCLL AVBL	
All	A	5000/6500	5000/6500	---	
	B	5000/6500	5000/6500	---	
	C	5000/6500	5000/6500	---	

LSGS AD 2.23 ADDITIONAL INFORMATION

1. List of significant points (Terminal)

NAV point	COORD WGS84		Purpose
	LAT	LONG	
1	2		3
ALETO	N 46 23 18.5	E 007 52 40.4	IAC LSGS
BERAR	N 45 57 22.5	E 006 45 37.4	SID LSGS
GRANA	N 46 17 00.5	E 007 31 56.6	SID / STAR/ IAC LSGS
GS601	N 46 15 20.7	E 007 53 43.3	IAC LSGS
GS602	N 46 18 42.3	E 008 03 31.3	IAC LSGS
GS603	N 46 26 30.6	E 008 02 17.0	IAC LSGS
GS604	N 46 17 52.5	E 007 34 33.8	IAC LSGS
GS605	N 46 18 19.6	E 007 37 26.2	IAC LSGS
GS606	N 46 18 26.2	E 007 56 01.9	IAC LSGS
GS607	N 46 19 40.8	E 008 00 51.8	IAC LSGS
GS608	N 46 26 36.7	E 008 12 39.6	IAC LSGS
GS609	N 46 11 38.9	E 007 15 20.0	IAC LSGS
GS610	N 46 11 10.1	E 007 14 07.9	IAC LSGS
GS611	N 46 01 24.0	E 006 53 50.4	IAC LSGS
GS612	N 46 09 14.8	E 006 51 15.3	IAC LSGS
GS613	N 46 07 32.7	E 007 06 34.5	IAC LSGS
GS615	N 46 39 05.6	E 008 03 12.5	IAC LSGS
GS616	N 46 29 07.5	E 008 16 49.4	IAC LSGS
GS617	N 46 13 16.5	E 007 20 20.2	IAC LSGS
GS618	N 46 23 38.8	E 007 55 58.9	IAC LSGS
GS619	N 46 13 28.1	E 007 37 30.6	IAC LSGS
GS620	N 46 06 20.3	E 007 18 54.9	IAC LSGS
GS621	N 46 04 57.7	E 006 50 16.8	IAC LSGS
GS623	N 46 34 17.0	E 008 10 17.2	IAC LSGS
MASAB	N 46 23 56.0	E 007 54 45.0	IAC LSGS
SANET	N 46 19 54.5	E 007 16 31.7	SID LSGS

2. Table for temperature deviation from ISA

ALT	ISA	ISA + 20°C	ISA + 10°C	ISA - 10°C	ISA - 20°C
		Altimeter reading	Altimeter reading	Altimeter reading	Altimeter reading
17000	- 19°C	OAT + 1°C 15940	OAT - 9°C 16450	OAT - 29°C 17600	OAT - 39°C 18240
16000	- 17°C	OAT + 3°C 15010	OAT - 7°C 15490	OAT - 27°C 16550	OAT - 37°C 17160
13610	- 12°C	OAT + 8°C 12790	OAT - 2°C 13190	OAT - 22°C 14070	OAT - 32°C 14560
11690	- 8°C	OAT + 12°C 11010	OAT + 2°C 11340	OAT - 18°C 12070	OAT - 28°C 12490
8630	- 2°C	OAT + 18°C 8160	OAT + 8°C 8390	OAT - 12°C 8890	OAT - 22°C 9180
7100	+ 1°C	OAT + 21°C 6730	OAT + 11°C 6910	OAT - 9°C 7300	OAT - 19°C 7530
4030	+ 7°C	OAT + 27°C 3870	OAT + 17°C 3950	OAT - 3°C 4120	OAT - 13°C 4220

Note: Pressure altimeters are calibrated to indicate true ALT under ISA conditions. Any DEV from ISA will therefore result in an erroneous reading on the altimeter. In case of a temperature HYR than ISA, the true ALT will be HYR than the figure indicated by the altimeter and the true ALT will be lower when the temperature is lower than ISA. The altimeter error may be significant in extremely cold temperatures.

LSGS AD 2.24 CHARTS RELATED TO AN AERODROME

Name	Page
Aerodrome Chart	LSGS AD 2.24.1 - 1
Aircraft Parking Chart	LSGS AD 2.24.2 - 1
Aerodrome Obstacle Chart - Type A - RWY 07/25	LSGS AD 2.24.4 - 1
SID RWY 07/25	LSGS AD 2.24.7 - 1
SID RWY 25 - HIGH PERFORMANCE	LSGS AD 2.24.7 - 3
SID RWY 07/25 - DEST WITHIN LSGG OR LFLB	LSGS AD 2.24.7 - 5
STAR TO GRANA - RNAV 5	LSGS AD 2.24.9 - 1
IAC - IGS RWY 25 (CAT A/B/C)	LSGS AD 2.24.10 - 1
IAC - IGS RWY 25 VIS APCH	LSGS AD 2.24.10 - 3
IAC - RNP RWY 25 (AR)	LSGS AD 2.24.10 - 5
ATC Surveillance Minimum ALT Chart (AD Temperatures from - 15° to -7°C)	LSGS AD 2.24.13 - 1
ATC Surveillance Minimum ALT Chart (AD Temperatures from - 6°C and above)	LSGS AD 2.24.13 - 3

THIS PAGE INTENTIONALLY LEFT BLANK