

## LSZS - SAMEDAN

## LSZS AD 2.1 AERODROME LOCATION INDICATOR AND NAME

LSZS - SAMEDAN

## LSZS AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at Aerodrome	46 32 04 N / 009 53 03 E RWY midpoint
2	Direction and distance from the CITY	1 km E Samedan
3	Elevation/Reference temperature	5602 ft AMSL - 17.8° C
4	Geoid undulation at AD ELEV PSN	158.7 ft
5	MAG VAR/Annual change	3° E (2019.5) / 0°10' eastwards
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Engadin Airport Plazza Aviatica 6b CH-7503 Samendan Phone: +41 (0) 81 851 08 51 Fax: +41 (0) 81 851 08 59 AFS: AFTN: LSZSYDYX LSZSZPZX, LSZSZTZX for PLN Email: info@engadin-airport.ch URL: https://www.engadin-airport.ch
7	Types of traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	NIL

## LSZS AD 2.3 OPERATIONAL HOURS

1	Aerodrome Operator	0700 (0600) - HRH, but not later than 1800 (1700) HRH = Day and night limits. <a href="#">GEN 2.7</a>
2	Customs and immigration	AD OPR HR
3	Health and sanitation	Ambulance O/R; hospital in Samedan
4	AIS Briefing Office	As AD administration
5	ATS Reporting Office (ARO)	NIL
6	MET Briefing Office	NIL
7	ATS	AD OPR HR
8	Fuelling	AD OPR HR
9	Handling	AD OPR HR
10	Security	NIL
11	De-icing	AD OPR HR
12	Remarks	NIL

**LSZS AD 2.4 HANDLING SERVICES AND FACILITIES**

1	Cargo-handling facilities:	NIL
2	Fuel/oil types	JET A1, AVGAS 100LL, no defuelling available
3	Fuelling facilities/capacity	Fuel stations: Jet A1 23 000 litres, AVGAS 20 000 litres Trucks: Jet A1 23 000 litres, 10 000 litres
4	De-icing facilities	NOV 01 - APR 30: De-icing assured De-icing fluids available: Type I Clariant Safewing MP I LFD 80 "Aircraft are de-iced according to the requirements of SAE AS6285." Clean Aircraft Concept as defined in ICAO Doc 9640 is applied; Airport Authority can intervene in case of non-adherence.
5	Hangar space for visiting aircraft	Limited, by prior arrangement only Contact Engadin Airport AG: Phone: +41 (0) 81 851 08 51 Fax: +41 (0) 81 851 08 59 Email: info@engadin-airport.ch URL: https://www.engadin-airport.ch/
6	Repair facilities for visiting aircraft	Not AVBL
7	Remarks	Ground handling agent for general aviation Engadin Airport AG Phone: +41 (0) 81 851 08 48 Fax: +41 (0) 81 851 08 50 Email: handling@engadin-airport.ch URL: https://www.engadin-airport.ch/

**LSZS AD 2.5 PASSENGER FACILITIES**

1	Hotels	Samedan, St. Moritz, Engadin
2	Restaurants	At AD, Samedan and VCY
3	Transportation	Taxis at AD
4	Medical facilities	First aid at AD, Ambulance O/R; Hospital in Samedan
5	Bank and Post Office	Samedan, St. Moritz
6	Tourist Office	Samedan Phone: +41 (0) 81 851 00 60 URL: https://www.engadintourismus.ch/ St. Moritz Phone: +41 (0) 81 837 33 33 URL: https://www.stmoritz.com/
7	Remarks	NIL

**LSZS AD 2.6 RESCUE AND FIRE FIGHTING SERVICES**

1	AD category for fire fighting	Category 2 Category 3 - 4: O/R FLT 3 HR before ETA/ETD Category 5 - 6: O/R
2	Rescue equipment	2 fire engines
3	Capability for removal of disabled aircraft	NIL
4	Remarks	NIL

**LSZS AD 2.7 SEASONAL AVAILABILITY - CLEARING**

1	Type(s) of clearing equipment	3 wheel loaders, 4 snow ploughs, 2 snow sweeper, 1 de-icing vehicle
2	Clearance priorities	RWY / Apron / TWY
3	Remarks	Check of ACT SNOWTAM during winter period is essential

**LSZS AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA**

1	Designation, surface and strength of Aprons	CONC and ASPH / PCR 300/F/C/X/U
2	Designation, width, surface and strength of Taxiways	10 m / CONC and ASPH / PCR 300/F/C/X/U
3	ACL location and elevation	NIL
4	Location of VOR checkpoints	NIL
5	Location of INS checkpoints	NIL
6	Remarks	NIL

**LSZS 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	NIL
2	RWY/TWY markings and LGT	RCL and THR marked, not lighted. Holding positions RWY 03/21, intermediate holding positions and TWY centre lines marked, not lighted.
3	Stop bars and RWY guard lights	NIL
4	Other RWY protection measures	NIL
5	Remarks	NIL

**LSZS AD 2.10 AERODROME OBSTACLES**

In approach/TKOF areas				In circling area and at aerodrome		3
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	
	<i>ft</i>			<i>ft</i>		
AOC 03 (1)	Bridge 5584	46 32 32 N 009 53 21 E	Anemometer LGTD 5627	46 31 35 N 009 52 46 E	B0743/06	
AOC 03 (2)	Pole 5588	46 32 33 N 009 53 25 E	Anemometer marked/LGTD 5611	46 32 29 N 009 53 17 E	B0914/07	
AOC 03 (3)	Pole 5589	46 32 33 N 009 53 28 E	Aerial railway 306 AGL	46 30 29 N 009 49 06 E 46 30 20 N 009 47 16 E	B0339/02	
AOC 03 (4)	Pole 5597	46 32 32 N 009 53 30 E	Power line 70 m AGL	46 31 11 N 009 50 54 E 46 31 08 N 009 50 54 E	B0100/06	
AOC 03 (5)	Tree/Trees 5598	46 32 39 N 009 53 35 E	Antenna 5655	46 31 48 N 009 52 43 E	B1213/17	
AOC 03 (6)	Tree/Trees 5607	46 32 39 N 009 53 36 E				
AOC 03 (7)	Tree/Trees 5726	46 33 54 N 009 54 10 E				
AOC 03 (8)	Tree/Trees 6026	46 34 07 N 009 54 21 E				
AOC 03 (9)	Power line 6128	46 34 19 N 009 54 36 E				
AOC 03 (10)	Tree/Trees 6252	46 35 09 N 009 55 37 E				
AOC 03 (11)	Tree/Trees 6377	46 35 10 N 009 55 39 E				
AOC 21 (1)	Torch 5616	46 31 33 N 009 52 36 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
AOC 21 (2)	Pole	5638	46 31 28 N 009 52 27 E			
AOC 21 (3)	Pole	5641	46 31 27 N 009 52 28 E			
AOC 21 (4)	Pole	5648	46 31 26 N 009 52 28 E			
AOC 21 (5)	Tree/Trees	5667	46 31 12 N 009 52 20 E			
AOC 21 (6)	Tree/Trees	5707	46 31 11 N 009 52 21 E			
AOC 21 (7)	Tree/Trees	5712	46 31 10 N 009 52 19 E			
AOC 21 (8)	Tree/Trees	5734	46 31 11 N 009 52 17 E			
AOC 21 (9)	Tree/Trees	5746	46 31 01 N 009 52 19 E			
AOC 21 (10)	Tree/Trees	5862	46 30 58 N 009 52 18 E			
AOC 21 (11)	Tree/Trees	5906	46 30 29 N 009 51 53 E			
AOC 21 (12)	Tree/Trees	6374	46 30 00 N 009 51 33 E			
AOC 21 (13)	Tree/Trees	6461	46 29 45 N 009 49 59 E			
AOC 21 (14)	Tree/Trees	6628	46 29 41 N 009 49 52 E			
AOC 21 (15)	Cable railway	6846	46 29 30 N 009 49 30 E			
Refer also to AOC 03, <a href="#">LSZS AD 2.24.4 - 1</a> AOC 21, <a href="#">LSZS AD 2.24.4 - 3</a>						

**LSZS 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, Zurich 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 and hard copy En, Ge, Fr
7	Charts and other information available for briefing or consultation	All area FCST charts AVBL worldwide
8	Supplementary equipment available for providing information	do.
9	ATS units provided with information	Samedan AFIS
10	Additional information (limitation of service, etc.)	Phone: Weather briefing: 0900 162 737 (Ge); accessible within Switzerland

**LSZS AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS**

Designations RWY NR	TRUE & MAG BRG	Dimensions of RWY (m)	Strength (PCR) 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
03	029° GEO 026° MAG	1840 x 40	PCR 300/F/C/X/U	46 31 37.28N 009 52 41.13E	5602 ft	refer to: LSZS AOC RWY 03/21
21	209° GEO 206° MAG			46 32 26.27N 009 53 20.85E	5573 ft	

Designations RWY NR	SWY dimensions (m)	CWY dimensions (m)	Strip dimensions (m)	OFZ	Remarks
1	8	9	10	11	12
03	NIL	NIL	1960 x 80	NIL	Non-instrument RWY
21					Non-instrument RWY

**LSZS AD 2.13 DECLARED DISTANCES**

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
03	1840 m	1840 m	1840 m	1840 m	NIL
21	1840 m	1840 m	1840 m	1730 m	NIL

**LSZS AD 2.14 APPROACH AND RUNWAY LIGHTING**

RWY Designator	APCH LGT type LEN INTST	THR LGT colour WBAR	VASIS (MEHT) PAPI	TDZ LGT LEN	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour WBAR	SWY LGT LEN (m) colour	Remarks
1	2	3	4	5	6	7	8	9	10
03	NIL	NIL	PAPI 4.49°, R, (13.67 m)	NIL	NIL	NIL	NIL	NIL	1)
21	NIL	NIL	PAPI 4.4°, L, (8.27 m)	NIL	NIL	NIL	NIL	NIL	2)

1) PAPI 03 light beam offset 5° west from runway axis. ICAO obstacle protection surface penetrated by a hill between ZS705 and THR 03.  
2) PAPI 21 light beam offset 5° east from runway axis.

**LSZS 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	AVBL / MAX 1 sec.
5	Remarks	NIL

**LSZS AD 2.16 HELICOPTER LANDING AREA**

1	Coordinates TLOF or THR of FATO	FATO (aiming point): 46 31 52.98 N 009 52 53.88 E
	Geoid undulation	NIL
2	TLOF and/or FATO elevation	5600 ft / 1707 m
3	TLOF and FATO area dimensions, surface, strength, marking	<p><b>HEL with overall LEN &lt;13 m or an overall WID &lt;11 m</b> TLOF: Whole year 5 HEL CONC/ASPH, 5000 kg, white marked circles with a diameter of 6.5 m; Winter only: 7 additional HEL stands, SNOW, 5000 kg, blue marked circles with a diameter of 6.5 m. FATO: 40 x 40 m, ASPH, 5000 kg, aiming point marked on RWY 03/21.</p> <p><b>HEL with overall LEN &gt;13 m or an overall WID &gt;11 m</b> TLOF: Parking on main apron with marshaller FATO: 1840 x 40 m, ASPH, 5000 kg, aiming point marked on RWY 03/21.</p>
4	True BRG of FATO	029° - 209°
5	Declared distance available	REF: VFR Manual Samedan HEL AD INFO, § 10
6	APP and FATO lighting	NIL
7	Remarks	<p>REF: VFR Manual Samedan HEL AD INFO 7 HEL with overall LEN &gt;13 m or an overall WID &gt;11 m use VAC ARRIVAL and VAC DEPARTURE for operations on paved RWY. PPR TEL +41 (0) 81 851 08 51 PPR FAX +41 (0) 81 851 08 59 Email: <a href="mailto:handling@engadin-airport.ch">handling@engadin-airport.ch</a> - contact AFISO (AD Flight Information Service Officer) for start-up - report crossing of IFR APCH and DEP route to AFIS</p>

## LSZS AD 2.17      ATS AIRSPACE

1	Designation and lateral limits	<b>FIZ SAMEDAN</b> 46 34 46 N / 009 53 01 E - Arc of circle clockwise with radius 2.70 NM, centred on 46 32 04 N / 009 53 02 E - 46 33 23 N / 009 56 27 E - 46 32 35 N / 009 55 59 E - 46 29 23 N / 009 52 36 E - Arc of circle clockwise with radius 2.70 NM, centred on 46 32 04 N / 009 53 02 E - 46 31 15 N / 009 49 18 E - 46 34 46 N / 009 53 01 E
2	Vertical limits	10'000 ft AMSL (3050 m)
3	Airspace classification	G (at and below 2000 ft AGL); E (above 2000 ft AGL)
4	ATS unit call sign Language(s)	Samedan Information: En; En and Ge for Non-Commercial VFR traffic.
5	Transition altitude	16'000 ft AMSL
6	Remarks	NIL

## LSZS AD 2.18      ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of Operation	Remarks
1	2	3	4	5
AFIS	Samedan Information	135.325 MHz	HO	Language: En; En and Ge for Non-Commercial VFR traffic.
ATIS		136.600 MHz	HO	Phone Service +41 (0) 81 834 93 24
CLR DEL	Samedan Delivery	121.880 MHz	HX	Start-up clearance. Check status on ATIS

## LSZS 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						

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## LSZS AD 2.20 LOCAL AERODROME REGULATIONS

### 1. Local flying restrictions and remarks

Aerodrome in mountainous area: familiarisation mandatory. Pilots must be qualified to operate at LSZS and fulfill the requirements mentioned in "Betriebsreglement" Annex 5 (See <https://www.engadin-airport.ch/piloten>)

RWY CLSD for fixed wing ACFT with APCH Category A on VFR procedures if VIS BLW 2000 m and/or ceiling below 1000 ft AGL.

RWY CLSD for fixed wing ACFT with APCH Category B and higher on VFR procedures if VIS BLW 5 km and/or ceiling BLW 2200 ft AGL.

RWY CLSD for arriving fixed wing ACFT on IFR procedures if VIS BLW 5 km and/or ceiling BLW 2200 ft AGL.

RWY CLSD for departing fixed wing ACFT on IFR procedures according AD 2.22 § 1.5 (TKOF Minima).

**15 OCT - 15 APR** It is essential to enquire about RWY conditions (SNOWTAM, ATIS or TEL).

Limited apron

**08 DEC - 14 APR**

Limited apron space during winter period for general aviation ACFT.

Apron is mostly reserved for ACFT of commercial air TFC, as well as for general aviation ACFT over 14 tonnes MTOM. ACFT will be placed also on the limited AVBL frozen SN PRKG. Ground time more than a quick turnaround cannot be guaranteed. For longer ground time, it is urgently recommended to enquire about expected PRKG possibilities with Samedan AP Authority one day before planned FLT.

Corresponding enquiries have to contain:

- Applicant
- Date of ARR and DEP
- Call sign
- ACFT type
- ETA LSZS UTC
- EOBT LSZS UTC

and shall be addressed to:

Email: [handling@engadin-airport.ch](mailto:handling@engadin-airport.ch)

Phone: +41 (0) 81 851 08 51

Modifications and cancellations of already coordinated FLT shall be immediately notified.

CTN GLD ACT: **MAY - OCT**

CTN: Cars moving W of RWY 03/21.

Circuit and local flights of less than 20 MIN duration, ground running of engines, helicopter test and training flights daily between **1100 - 1300 (1000 - 1200)** and on SUN/HOL are prohibited.

### 2. Procedure for taxiing ACFT

Taxi with minimum possible engine power due to jet blast on tarmac.

## LSZS AD 2.21 NOISE ABATEMENT PROCEDURES

### 1. Jet and turbo-prop ACFT

For deceleration, it is recommended that the entire RWY LEN AVBL is used. Reverse thrust shall be used for safety or operational reasons only.

APU can be started 30 MIN before EOBT, at the earliest, and shall be shut off 15 MIN after the RCH parking PSN at the latest.

### 2. Propeller aeroplanes

Aircraft of the noise category A (FAL 3-1 APP B1-B7) are generally not allowed. Exceptions are subject to authorization.

**LSZS AD 2.22 FLIGHT PROCEDURES****1. Special regulations for IFR approach and departure****1.1 IFR Procedures General**

The use of IFR APCH or DEP procedures in LSZS is limited to pilots, operators and ACFT fulfilling the AP Qualifications in accordance with § 1.4. and the specific requirements below.

Availability of the IFR Procedures depending on the military activity in the temporary reserved areas (TRA) REF: ENR 5.2

The non-availability of the ATS Route can be checked under “**European AUP/UUP**” on

URL: <https://www.public.nm.eurocontrol.int/PUBPORTAL/>

The availability of the IFR Procedures can also be suspended by good weather conditions due to high traffic density.

Check NOTAM about IFR-status and for further information the pilot briefing on

URL: <https://www.engadin-airport.ch/piloten>

The published altitudes of the IFR procedures are not corrected for any pressure and temperature errors.

The flight crew is responsible for these corrections. The altimeter error may be significant in extremely cold temperatures and at high altitudes.

The following table indicates the minimum correction value to be applied to the flight altitude in relation to the aerodrome temperature.

Aerodrome Temperature LSZS							
Altitude ft	0° C	-5° C	-10° C	-15° C	-20° C	-25° C	-30° C
16000	+153 ft	+348 ft	+543 ft	+738 ft	+933 ft	+1128 ft	+1323 ft
14000	+122 ft	+279 ft	+435 ft	+591 ft	+748 ft	+904 ft	+1060 ft
13000	+107 ft	+245 ft	+382 ft	+519 ft	+656 ft	+793 ft	+931 ft
12700	+103 ft	+234 ft	+366 ft	+497 ft	+629 ft	+760 ft	+892 ft
12400	+99 ft	+224 ft	+350 ft	+476 ft	+602 ft	+727 ft	+853 ft
11800	+90 ft	+204 ft	+319 ft	+433 ft	+547 ft	+662 ft	+776 ft
11400	+84 ft	+191 ft	+298 ft	+404 ft	+511 ft	+618 ft	+725 ft
10600	+72 ft	+164 ft	+256 ft	+348 ft	+440 ft	+531 ft	+623 ft
9500	+56 ft	+127 ft	+199 ft	+270 ft	+342 ft	+413 ft	+484 ft
8680	+44 ft	+100 ft	+157 ft	+213 ft	+269 ft	+325 ft	+381 ft

The IFR procedures are partly within airspace class E and G. Watch out for VFR traffic.

**1.2 IFR Departures**

Any departing ACFT must comply with the relevant procedures published on the SID charts. Due to high terrain, any non-adherence to the published PDG will result in an infringement of the minimum obstacle clearance.

Contingency procedures (e.g. for OEI operations) must be provided by the operator and must be available to the pilot.

(see chart LSZS AD 2.24.7 - 1)

DESIGNATOR	RWY 03 - HIGH PERFORMANCE RNAV 1			
	ROUTE			Remark
	Lateral	Vertical	Contact	
RONAG 1E PDG 16.6% to 10200ft	Proceed via ZS500, ZS711, ZS710 to RONAG. Enter the RONAG holding pattern. MAX IAS 210 kt to RONAG.	Climb to 16000ft. Cross RONAG at 14000ft or above. Shuttle climb as required to MEA.	When instructed contact ALPS RADAR 119.225	NIL

Close-in obstacles right of track up to 5715 ft shortly after end of RWY 03.

(see chart LSZS AD 2.24.7 - 1)

RNAV 1 SID RONAG 1E						
Path terminator	Waypoint	Flyover	Altitude (ft)	Speed limit (kt)	Track	Distance (NM)
DF	DER03	Y	-	-	026° (029.2°T)	-
TF	ZS500	Y	-	-	030° (033.3°T)	5.9
DF	ZS711	N	-	-	-	-
TF	ZS710	N	-	-	041° (044.4°T)	5.4
TF	RONAG	N	+14000	210	053° (056.3°T)	5.3

(see chart LSZS AD 2.24.7 - 3)

DESIGNATOR	RWY 03 - HIGH PERFORMANCE RNAV 1 VISUAL				
	ROUTE				Remark
	Lateral	Vertical	Contact	Remark	
<b>RONAG 1V</b> Set your VISUAL climb rate as required to avoid obstacles, but not below 10% ~ 610 ft/NM. At 10000 ft continue climb to 10600 ft with MNM PDG of 10%.	Proceed via ZS501, ZS711, ZS710 to RONAG. Enter the RONAG holding pattern. MAX IAS 180 kt to ZS711, MAX IAS 210 kt to RONAG.		Climb to 16000ft. Cross RONAG at 14000ft or above. Shuttle climb as required to MEA.	When instructed contact ALPS RADAR 119.225	Maintain visual ground contact to 10000ft.

Close-in obstacles right of track up to 5715 ft shortly after end of RWY 03.

(see chart LSZS AD 2.24.7 - 3)

RNAV 1 SID RONAG 1V						
Path terminator	Waypoint	Flyover	Altitude (ft)	Speed limit (kt)	Track	Distance (NM)
DF	DER03	Y	-	-	026° (029.2°T)	-
TF	ZS501	Y	-	-	030° (033.3°T)	2.4
TF	ZS711	N	-	180	043° (046.2°T)	7.9
TF	ZS710	N	-	-	041° (044.4°T)	5.4
TF	RONAG	N	+14000	210	053° (056.3°T)	5.3

(see chart LSZS AD 2.24.7 - 5)

DESIGNATOR	RWY 21 - HIGH PERFORMANCE RNAV 1				
	ROUTE				Remark
	Lateral	Vertical	Contact	Remark	
<b>PELAD 1W</b> PDG 15.6% to 10700ft	Proceed via ZS510, ZS511 to PELAD. Enter the PELAD holding pattern. MAX IAS 210 kt to PELAD.		Climb to 16000ft. Cross PELAD at 16000ft or above.	When instructed contact ALPS RADAR 119.225	NIL

Close-in obstacles right of track up to 5630 ft shortly after end of RWY 21.

(see chart LSZS AD 2.24.7 - 5)

RNAV 1 SID PELAD 1W						
Path terminator	Waypoint	Flyover	Altitude (ft)	Speed limit (kt)	Track	Distance (NM)
DF	DER21	Y	-	-	206° (209.2°T)	-
TF	ZS510	Y	-	-	216° (219.1°T)	10.3
DF	ZS511	N	-	-	-	-
TF	PELAD	N	+16000	210	036° (039.0°T)	10.3

(see chart LSZS AD 2.24.7 - 7)

DESIGNATOR	RWY 21 - HIGH PERFORMANCE RNAV 1 VISUAL			
	ROUTE			
	Lateral	Vertical	Contact	Remark
<b>PELAD 1V</b> Set your VISUAL climb rate as required to avoid obstacles, but not below 10% ~ 610 ft/NM. At 10600 ft continue climb to 11500ft with MNM PDG of 10%.	Proceed via ZS510, ZS511 to PELAD. Enter the PELAD holding pattern. MAX IAS 210 kt to PELAD.	Climb to 16000ft. Cross PELAD at 16000ft or above.	When instructed contact ALPS RADAR 119.225	Maintain visual ground contact to 10600ft.

Close-in obstacles right of track up to 5630 ft shortly after end of RWY 21.

(see chart LSZS AD 2.24.7 - 7)

RNAV 1 SID PELAD 1V						
Path terminator	Waypoint	Flyover	Altitude (ft)	Speed limit (kt)	Track	Distance (NM)
DF	DER21	Y	-	-	206° (209.2°T)	-
TF	ZS510	Y	-	-	216° (219.1°T)	10.3
DF	ZS511	N	-	-	-	-
TF	PELAD	N	+16000	210	036° (039.0°T)	10.3

**1.3 IFR Approach Procedures**

**VISUAL APCH with RNP guidance RWY 03:**

The final approach track is 9.1 degrees offset to the left of the RWY CL, and must be flown in visual conditions due to high terrain in the region of ZS702 (FAF).

**RNP RWY 21:**

Due to close proximity of high terrain in the final and missed approach phase, a strict adherence to the published procedures is required.

The final approach is based on a continuous descent (CDA principle). When reaching the OCA(H) and no visual contact to the landing RWY is established and can be maintained, start the missed approach climb without delay, proceed to the MAPt and follow the missed approach procedure. Obstacle clearance is calculated with RNP 0.3 until MAPt.

**Level flight to MAPt at OCA(H) prohibited.**

**VISUAL APCH with RNP guidance RWY 03 and RNP RWY 21:**

The flight crew is required to perform a position report at the FAF.

**Communication Failure Procedure**

In case of COM failure prior to IAF without approach clearance received:

- Set transponder on 7600.
- Maintain last assigned and acknowledged flight level.
- Enter PELAD/RONAG holding.
- Hold for 20 minutes, then start the approach.

In case of COM failure after having passed the IAF:

- Set transponder on 7600.
- Continue approach
- In case of missed approach perform maximum two holding patterns. If radio contact is not re-established, proceed to alternate aerodrome.

(see chart LSZS AD 2.24.7.10 - 1)

VISUAL APCH with RNP guidance RWY 03						
Path terminator	Waypoint	Flyover	Altitude (ft)	Speed limit (kt)	Track	Distance (NM)
IF	PELAD	N	+16000	240	-	-
TF	ZS700	N	+13000	-	268° (271.0°T)	11.3
TF	ZS716	N	-	160	160° (162.6°T)	12.3
TF	ZS701	N	+12400	-	160° (162.7°T)	5.0
TF	ZS702	N	+11800	-	065° (068.2°T)	5.0
TF	ZS705	Y	-	-	035° (038.3°T)	10.9
TF	ZS706	N	-	-	030° (033.5°T)	4.9
TF	RONAG	N	+14000	210	045° (048.0°T)	19.0

(see chart LSZS AD 2.24.7.10 - 3)

RNP RWY 21						
Path terminator	Waypoint	Flyover	Altitude (ft)	Speed limit (kt)	Track	Distance (NM)
IF	RONAG	N	+14000	210	-	-
TF	ZS710	N	+13000	160	233° (236.4°T)	5.3
TF	ZS712	Y	-	-	221° (224.4°T)	15.0
TF	ZS702	N	+12700	-	214° (216.9°T)	14.6
TF	ZS713	N	-	-	304° (306.7°T)	7.4
TF	PELAD	N	+16000	240	034° (036.6°T)	12.6

CTN: Step down fix at 9.9 NM to ZS712 not to be coded as WPT.

**1.4 Aircraft, Airport and Pilot Qualification**

To operate at Samedan under IFR, the following airport requirements must be fulfilled:

- a. For piston engine aircraft and multiple IFR APCH (training) PPR required. ppr.smv@engadin-airport.ch
- b. Operator's contingency procedures (if required by the type of FLT operation) must be calculated and available.
- c. The pilot in command must hold a valid pilot qualification for the applicable type of operation and flight procedures.
- d. LSZS briefing not older than 24 months.

**1.5 Minima for IFR Departures (TKOF Minima)**

RWY	SID	VIS (m) / Ceiling (ft AGL)	RMK
03	RONAG 1E	2000 / ---	Ceiling means BKN or OVC. VMC must be maintained up to the ALT stated in the table.
	RONAG 1V	5000 / 4400	
21	PELAD 1W	2000 / ---	
	PELAD 1V	5000 / 5100	

**LSZS AD 2.23 ADDITIONAL INFORMATION**

High Visibility Jackets and Crew ID badge:

All pilots walking on the AP movement area must wear a high-visibility jacket which complies with the EN 471 standard class 2 or 3.

Persons not wearing a high-visibility jacket have to use the AP shuttle or ask the ground staff or ground handling agents for assistance.

All crew members must ensure their ID badge is clearly visible, above the waist and shall produce the Crew ID badge upon request of the control agents of the AP.

1. List of significant points (Terminal)

NAV point	COORD WGS84		Purpose
	LAT	LONG	
1	2		3
DER03	N 46 32 29.4	E 009 53 23.4	SID LSZS
DER21	N 46 31 37.3	E 009 52 41.1	SID LSZS
ZS500	N 46 37 23.3	E 009 58 03.2	SID LSZS
ZS501	N 46 34 28.6	E 009 55 16.7	SID LSZS
ZS510	N 46 23 35.3	E 009 43 15.1	SID LSZS
ZS511	N 46 27 55.9	E 009 34 08.3	SID LSZS
ZS700	N 46 36 06.5	E 009 27 06.2	IAC LSZS
ZS701	N 46 19 35.4	E 009 34 33.4	IAC LSZS
ZS702	N 46 21 26.7	E 009 41 15.5	IAC LSZS
ZS705	N 46 30 00.0	E 009 51 02.4	IAC LSZS
ZS706	N 46 34 04.0	E 009 54 56.4	IAC LSZS
ZS710	N 46 43 49.1	E 010 09 06.0	IAC LSZS, SID LSZS
ZS711	N 46 39 57.6	E 010 03 36.4	SID LSZS
ZS712	N 46 33 05.8	E 009 53 53.0	IAC LSZS
ZS713	N 46 25 52.1	E 009 32 40.7	IAC LSZS
ZS716	N 46 24 21.8	E 009 32 24.7	IAC LSZS

LSZS AD 2.24 AERONAUTICAL CHARTS RELATED TO AN AERODROME

Name	Page
Aerodrome Chart	LSZS AD 2.24.1 - 1
Aerodrome Obstacle Chart - Type A - RWY 03	LSZS AD 2.24.4 - 1
Aerodrome Obstacle Chart - Type A - RWY 21	LSZS AD 2.24.4 - 3
SID RWY 03 - RNAV 1 High Performance	LSZS AD 2.24.7 - 1
Visual SID RWY 03 - RNAV 1 High Performance	LSZS AD 2.24.7 - 3
SID RWY 21 - RNAV 1 High Performance	LSZS AD 2.24.7 - 5
Visual SID RWY 21 - RNAV 1 High Performance	LSZS AD 2.24.7 - 7
IAC Visual APCH PROC RWY 03 (RNP Guidance) (CAT A/B/C)	LSZS AD 2.24.10 - 1
IAC RNP RWY 21 (CAT A/B/C)	LSZS AD 2.24.10 - 3
VFR Area Chart for Y and Z ATC FPL	LSZS AD 2.24.11 - 1
Visual Approach Chart RWY 03/21	LSZS AD 2.24.12 - 1

LSZS AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

To be completed. See relevant approach charts for details.