

LRSB AD 2.1 AERODROME LOCATION INDICATOR AND NAME
LRSB - SATU MARE / Satu Mare**LRSB AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

1	ARP coordinates and site at AD	474212N 0225308E Runway center.
2	Direction and distance from city	14 km South from Satu Mare
3	Elevation/Reference temperature/mean low temperature	414 FT / 30.4°C / -11.0°C
4	Geoid undulation at AD ELEV PSN	128 FT
5	MAG VAR/ Annual rate of change	6°E (2020) / 6.6°E
6	AD Operator, address, telephone, telefax, e-mail, AFS, website	Aeroportul Satu Mare Satu Mare, Șos. Satu Mare - Zalău, km 9.5. Tel: +40-(0)261-768640; +40-(0)261-768846 Fax: +40-(0)261-768776 AFS: LRSBMRAYD
7	Types of traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	NIL

LRSB AD 2.3 OPERATIONAL HOURS

1	AD Operator	W: 0500 - 1700; S: 0400 - 1600 Days of operation: MON - SAT
2	Customs and immigration	As AD Operator
3	Health and sanitation	As AD Operator
4	AIS Briefing Office	As AD Operator (See GEN 3.1-5)
5	ATS Reporting Office (ARO)	As AD Operator (See ENR 1.10-3)
6	MET Briefing Office	As AD Operator
7	ATS	W: 0500 - 1700; S: 0400 - 1600 Days of operation: MON - SAT
8	Fuelling	As AD Operator
9	Handling	As AD Operator
10	Security	H24
11	De-icing	As AD Operator
12	Remarks	Outside these hours, services are available O/R. Request to be submitted to the AD with 24 hours in advance.

LRSB AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	3 self-propelled passenger stairs, 1 towed passenger stairs, 1 self-propelled conveyorbelt, 1 equipment towing tractor, 6 baggage trailers, 2 mobile GPU 115/200V-400HZ and 28V, 1 mobile GPU 28V, 1 air start unit, 1 air cabin heater unit, 1 lavatory service trailer, 1 forklift
2	Fuel/Oil types	JET A1 / NIL
3	Fuelling facilities/capacity	JET A1 - 1 refueling truck 20000 l
4	De-icing facilities	2 de-icing units with fluid type I and type II
5	Hangar space for visiting aircraft	NIL
6	Repair facilities for visiting aircraft	NIL
7	Remarks	Handling services available within AD hours, or by arrangement with the AD.

LRSB AD 2.5 PASSENGER FACILITIES

1	Hotels	Hotels in the city.
2	Restaurants	Snack bar on the airport, restaurants in the city.
3	Transportation	Buses, taxis from the AD.
4	Medical facilities	First aid at AD. Hospitals in the city.
5	Bank and Post Office	Bank and Post Office in the city.
6	Tourist Office	In the city.
7	Remarks	NIL

LRSM AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	<i>AD category for fire fighting</i>	Within AD HR: CAT 5, O/R CAT 7 not later than 24 hours before.
2	<i>Rescue equipment</i>	1 hydraulic rescue tools kit - spreader, cutter, rescue ram; 1 battery driven rescue tools kit - spreader, cutter, rescue ram;
3	<i>Capability for removal of disabled aircraft</i>	Cranes AVBL via contractor. Local Action Coordinator: +40-744 615 674 for substitute: +40-723 250 296 e-mail: ops@aeroportulsm.ro
4	<i>Remarks</i>	NIL

LRSM AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	<i>Types of clearing equipment</i>	2 snow ploughs with brush and blower; 1 snow plough; 2 snow blowers; 1 spreader for liquid de-icing materials.
2	<i>Clearance priorities</i>	1. RWY 01/19 and associated TWY to Apron 2. Apron 3. ACFT stands
3	<i>Use of material for movement area surface treatment</i>	Generic fluids used for movement area de/anti-icing: 1. KFOR (potassium formate fluid); 2. KAC (potassium acetate fluid).
4	<i>Specially prepared winter runways</i>	NIL
5	<i>Remarks</i>	Information regarding Runway surface condition provided by Runway Condition Report (RCR) and SNOWTAM, according to Global Reporting Format (GRF) method. See also the snow plan in section AD 1.2.2.

LRSM AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	<i>Apron designation, surface and strength</i>	Surface: Concrete Strength: PCN 61/R/CW/T
2	<i>Taxiway designation, width, surface and strength</i>	Width: 23 M Surface: Concrete Strength: PCN 61/R/CW/T
3	<i>ACL location and elevation</i>	Location: Apron THR01 THR19 Elevation: 407FT(124M) 414FT(126M) 407FT(124M)
4	<i>VOR checkpoints</i>	NIL
5	<i>INS checkpoints</i>	See AD 2.12-22
6	<i>Remarks</i>	RWY turning bay: Location: THR 01, THR 19 Surface: Asphalt Dimensions: 100 M x 15 M Strength: PCN 61/R/CW/T

LRSM AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	<i>Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands</i>	Taxiing guidance signs at intersection with TWY. Mandatory instructions markings. Guide lines at apron. For all stands parking guidance provided by marshalls. Visual docking guidance system for aircraft stands: NIL.
2	<i>RWY and TWY markings and LGT</i>	RWY: - markings: designation, THR, TDZ, aiming point, centre line, side stripes; - lights: THR, centre line, edge, runway end, TDZ lights on RWY19; TWY A: - markings: centre line, enhanced centre line, edge, holding position at TWY/RWY intersection; - lights: centre line, edge;
3	<i>Stop bars and runway guard lights</i>	TWY A: Stop bar and runway guard lights at holding position
4	<i>Other RWY protection measure</i>	NIL
5	<i>Remarks</i>	RWY turn pads: - markings: color yellow: centre line, edge line; - lights: centre line, edge;



LRSM AD 2.10 AERODROME OBSTACLES

In Area 2					
OBST ID/ Designation	OBST type	OBST position	ELEV/HGT	Markings/ Type, colour	Remarks
a	b	c	d	e	f
LRSM 147	POLE	474304.0N 0225326.0E	415/10FT	NIL	Electronic form of obstacle data sets for Area 2 are available (see GEN 3.1.6)
LRSM 148	POLE	474305.0N 0225326.3E	416/13FT	NIL	
LRSM 149	POLE	474305.9N 0225326.6E	416/13FT	NIL	
LRSM 150	POLE	474306.8N 0225326.9E	417/14FT	NIL	
LRSM 151	POLE	474307.8N 0225327.3E	417/15FT	NIL	
LRSM 152	POLE	474308.7N 0225327.6E	418/15FT	NIL	
LRSM 153	POLE	474309.7N 0225327.9E	417/13FT	NIL	
LRSM 154	POLE	474310.6N 0225328.2E	417/13FT	NIL	
LRSM 155	POLE	474311.6N 0225328.6E	419/16FT	NIL	
LRSM 156	POLE	474312.5N 0225328.9E	417/14FT	NIL	
LRSM 157	POLE	474313.5N 0225329.2E	419/19FT	NIL	
LRSM 159	POLE	474315.4N 0225329.9E	420/19FT	NIL	
LRSM 160	POLE	474316.3N 0225330.2E	422/20FT	NIL	
LRSM 170	TREE	474320.6N 0225321.3E	427/26FT	NIL	
LRSM 171	SIGN	474321.7N 0225321.9E	427/26FT	NIL	
LRSM 196	POLE	473936.3N 0225439.5E	600/129FT	NIL	
LRSM 197	POLE	473934.2N 0225435.6E	592/129FT	NIL	
LRSM 198	POLE	473932.7N 0225431.2E	591/129FT	NIL	
LRSM 199	POLE	473931.2N 0225427.6E	590/129FT	NIL	
LRSM 200	POLE	473929.7N 0225424.1E	572/129FT	NIL	
LRSM 201	POLE	473928.1N 0225420.3E	607/129FT	NIL	
LRSM 256	ANTENNA	474314.1N 0225341.7E	480/75FT	NIL	
LRSM 258	ANTENNA	474243.6N 0225324.3E	425/21FT	Marked/ LGTD R	
LRSM 260	ANTENNA	475115.4N 0225829.6E	856/446FT	Marked/ LGTD R	
LRSM 261	ANTENNA	475117.8N 0225824.3E	862/452FT	Marked/ LGTD R	
LRSM 263	POLE	474240.4N 0225311.2E	439/35FT	Marked/ LGTD R	
LRSM 264	POLE	474239.9N 0225311.0E	440/36FT	Marked/ LGTD R	
LRSM 286	ANTENNA	474719.2N 0225222.2E	745/339FT	NIL	
LRSM 287	ANTENNA	474223.0N 0225253.9E	472/62FT	NIL	
LRSM 288	ANTENNA	474222.9N 0225254.1E	485/76FT	NIL	
LRSM 293	BUILDING	474222.8N 0225254.7E	485/77FT	NIL/ LGTD R	
LRSM 351	BUILDING	474200.9N 0225449.6E	506/95FT	NIL	
LRSM 353	BUILDING	474059.9N 0225150.9E	489/76FT	NIL	
LRSM 354	BUILDING	474107.2N 0225101.2E	538/133FT	NIL	
LRSM 355	BUILDING	473816.6N 0225312.5E	639/155FT	NIL	
LRSM 356	BUILDING	473858.1N 0225641.9E	836/61FT	NIL	
LRSM 357	BUILDING	473949.5N 0225720.6E	691/115FT	NIL	
LRSM 521	BUILDING	473912.0N 0225725.5E	691/58FT	NIL	
LRSM 563	ANTENNA	473910.2N 0225323.4E	594/112FT	Marked/ LGTD R	
LRSM 564	ANTENNA	473857.5N 0225640.9E	878/108FT	NIL/ LGTD R	
LRSM 570	ANTENNA	474346.7N 0225231.5E	502/100FT	NIL/ LGTD R	
LRSM 571	ANTENNA	474342.6N 0225233.2E	513/111FT	NIL/ LGTD R	
LRSM 596	ANTENNA	474241.0N 0225323.5E	452/48FT	Marked/ LGTD R	
LRSM 598	VEGETATION	474119.3N 0225340.0E	475/66FT	NIL	
LRSM 602	POLE	474223.4N 0225256.9E	471/66FT	Marked/ LGTD R	
LRSM 603	POLE	474221.4N 0225256.1E	474/67FT	Marked/ LGTD R	
LRSM 604	TREE	474315.6N 0225341.6E	477/72FT	NIL	
LRSM 605	TREE	474315.0N 0225339.7E	464/59FT	NIL	
LRSM 614	POLE	474347.9N 0225217.7E	498/97FT	NIL	
LRSM 645	POLE	473820.4N 0225829.3E	774/135FT	NIL	
LRSM 647	POLE	474348.2N 0225213.2E	494/92FT	NIL	
LRSM 657	NAVAID	474338.7N 0225337.9E	451/48FT	NIL/ LGTD R	
LRSM 772	POLE	474243.0N 0225312.3E	427/23FT	Marked/ LGTD R	
LRSM 773	POLE	474141.0N 0225303.8E	432/23FT	Marked/ LGTD R	
LRSM 983	ANTENNA	474057.2N 0225111.6E	510/105FT	NIL/ LGTD R	



In Area 3					
OBST ID/ Designation	OBST type	OBST position	ELEV/HGT	Markings/ Type, colour	Remarks
a	b	c	d	e	f
LRSM 2	BUILDING	474220.3N 0225256.6E	415.1/9.0FT	NIL	Electronic form of obstacle data sets for Area 3 are available (see GEN 3.1.6)
LRSM 3	TREE	474220.2N 0225257.5E	429.5/23.3FT	NIL	
LRSM 4	TREE	474219.7N 0225257.4E	431.1/25.2FT	NIL	
LRSM 5	TREE	474219.6N 0225257.0E	417.9/12.0FT	NIL	
LRSM 6	TREE	474219.6N 0225256.6E	426.0/19.8FT	NIL	
LRSM 7	BUILDING	474219.8N 0225256.4E	421.1/14.8FT	NIL	
LRSM 8	BUILDING	474219.0N 0225255.5E	425.8/15.7FT	NIL	
LRSM 41	OTHER	474222.0N 0225258.2E	416.5/9.4FT	NIL	
LRSM 49	SIGN	474220.2N 0225304.9E	408.9/3.4 FT	NIL	
LRSM 50	OTHER	474218.7N 0225301.5E	415.1/7.9FT	NIL	
LRSM 54	NAVAID	474142.3N 0225256.0E	414.0/2.9FT	NIL	
LRSM 55	NAVAID	474142.3N 0225255.6E	413.7/3.6FT	NIL	
LRSM 56	NAVAID	474142.4N 0225255.2E	413.9/3.5FT	NIL	
LRSM 57	NAVAID	474142.5N 0225254.8E	413.9/3.6FT	NIL	
LRSM 58	SIGN	474133.8N 0225250.5E	418.4/7.7FT	NIL	
LRSM 92	NAVAID	474241.8N 0225320.2E	408.7/3.0FT	NIL	
LRSM 93	NAVAID	474241.7N 0225320.6E	408.5/3.5FT	NIL	
LRSM 94	NAVAID	474241.7N 0225321.0E	408.3/3.5FT	NIL	
LRSM 95	NAVAID	474241.6N 0225321.4E	408.5/3.5FT	NIL	
LRSM 290	POLE	474223.9N 0225304.7E	428.6/23.6FT	MARKED/LGTD R	
LRSM 602	POLE	474223.4N 0225256.9E	471.4/66.0FT	MARKED/LGTD R	
LRSM 603	POLE	474221.4N 0225256.1E	474.0/67.2FT	MARKED/LGTD R	
LRSM 619	POLE	474222.5N 0225256.9E	418.2/11.3FT	NIL	
LRSM 620	POLE	474222.3N 0225257.9E	418.3/11.3FT	NIL	
LRSM 623	POLE	474222.1N 0225257.9E	418.6/11.3FT	NIL	
LRSM 624	POLE	474221.8N 0225258.3E	418.3/11.3FT	NIL	
LRSM 626	POLE	474222.3N 0225256.9E	418.0/11.3FT	NIL	
LRSM 627	POLE	474222.4N 0225258.5E	418.4/11.3FT	NIL	
LRSM 770	BUILDING	474225.2N 0225303.3E	421.4/16.4FT	NIL	
LRSM 1159	SIGN	474221.9N 0225305.5E	408.5/3.3FT	NIL	
LRSM 1160	SIGN	474216.5N 0225307.9E	411.2/3.3FT	NIL	
LRSM 1161	SIGN	474224.4N 0225310.6E	409.8/3.3FT	NIL	
LRSM 1162	FENCE	474226.0N 0225258.1E	411.9/6.6 FT	NIL	

LRSM AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	SATU MARE
2	Hours of service MET Office outside hours	As ATS -
3	Office responsible for TAF preparation Periods of validity Interval of issuance	LRSM 9 HR 3 HR, during aerodrome operational hours
4	Type of landing forecast Interval of issuance	NIL -
5	Briefing / consultation provided	Self-briefing; briefing/consultation on request (see row 8)
6	Flight documentation Language(s) used	Charts, tabular form, abbreviated plain language text Romanian, English
7	Charts and other information available for briefing or consultation	SWC, W/T Charts, SIGMET, METAR, TAF.
8	Supplementary equipment available for providing information	Tel: +40-(0)261-770010 Fax: +40-(0)261-770010
9	ATS units provided with information	SATU MARE TWR
10	Additional information (limitation of service, etc.)	NIL

**LRSM AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS**

Designations RWY NR	TRUE BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coord RWY end coord THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY	Slope of RWY-SWY
1	2	3	4	5	6	7
01	013.03°	2500 x 45	61/R/C/W/T Asphalt	474132.87N 0225254.64E 474251.72N 0225321.73E GUND 128 FT	THR 414 FT	0% (1250 M) -0.1% (1250 M)
19	193.03°	2500 x 45	61/R/C/W/T Asphalt	474251.72N 0225321.73E 474132.87N 0225254.64E GUND 128.4 FT	THR 407.5 FT TDZ 408.6 FT	0.1% (1250 M) 0% (1250 M)
SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of ARST system		Remarks
8	9	10	11	12	13	14
NIL	400 x 240	2620 x 280	180 x 90	NIL	NIL	NIL
NIL	400 x 240	2620 x 280	180 x 90	NIL	NIL	NIL

LRSM AD 2.13 DECLARED DISTANCES

RWY designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
01	2500	2900	2500	2500	NIL
19	2500	2900	2500	2500	NIL

LRSM AD 2.14 APPROACH AND RWY 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
01	SALS 420M, LIH	Green -	PAPI Left/3° (46 FT)	Nil	1600M, 15M, White, LIH 600M, 15M, Red/White, LIH 300M, 15M, Red, LIH	1900M, 59M, White, LIH 600M, 59M, Yellow, LIH	Red -	NIL	LED lights are exclusively used for lighting systems described in columns 2,3,7,8
19	CAT II 900M, LIH	Green WBAR	PAPI Left/3° (49 FT)	White 900M	1600M, 15M, White, LIH 600M, 15M, Red/White, LIH 300M, 15M, Red, LIH	1900M, 59M, White, LIH 600M, 59M, Yellow, LIH	Red -	NIL	

LRSM 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 Anemometer at 150 M from THR 19, HJ.
3	TWY edge and centre line lighting	TWY edge blue omnidirectional lights LIL. TWY centre line green/green; yellow/green lights, 15M (7.5M) spacing.
4	Secondary power supply/switch-over time	Secondary power supply to all lighting at AD. Switch-over time: 1 SEC.
5	Remarks	NIL

**LRSM AD 2.16 HELICOPTER LANDING AREA**

1	Coordinates TLOF or THR of FATO Geoid undulation	NIL NIL
2	TLOF and/or FATO elevation M/FT	NIL
3	TLOF and FATO area dimensions, surface, strength, marking	NIL
4	True and MAG BRG of FATO	NIL
5	Declared distance available	NIL
6	APP and FATO lighting	NIL
7	Remarks	NIL

LRSM AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	SATU MARE CTR 474738N 0222632E - FIR boundary - 474437N 0222510E - 473332N 0223120E - 472706N 0224758E - 472929N 0230730E - 474140N 0230939E - 475910N 0230200E - FIR boundary - 474738N 0222632E
2	Vertical limits	SFC to FL55
3	Airspace classification	C
4	ATS unit call sign Language(s)	Satu Mare Tower English, Romanian
5	Transition altitude	4000 FT (1200 M) AMSL
6	Hours of aplicability	W: 0500-1700 S: 0400-1600 Days of operation: MON-SAT
7	Remarks	1. CTR established during hours of operation of ATS. See NOTAMs for changes. 2. Outside hours of operation of ATS airspace classification is G. 3. Outside hours of operation of ATS it is recommended to monitor Satu Mare TWR FREQ and check on FIS FREQ about CTR status.

LRSM AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Channel/ Frequency	SATVOICE	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
TWR	Satu Mare Tower	119.655 118.800 MHz ALTN	NIL	NIL	W: 0500 - 1700 S: 0400 - 1600	Days of operation: Monday - Saturday Exempted 8.33 kHz State aircraft.
APP	Satu Mare Tower	121.500 MHz EMERG 118.800 MHz	NIL	NIL	W: 0500 - 1700 S: 0400 - 1600	Procedural service Days of operation: Monday - Saturday

LRSM AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR Type of supported OPS ILS classification GBAS classification (For VOR/ILS/MLS give declination)	ID	Frequency / Channel	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna / ELEV of GBAS reference point	Service volume radius from the GBAS reference point	Remarks
1	2	3	4	5	6	7	8
DVOR/DME (6°E/2020)	SAT	108.400 MHz (CH 21X)	H24	474338.7N 0225337.9E	500 FT	NIL	007° MAG / 0.8 NM from THR 19 Coverage 150 NM (assumed)
LOC 19 (6°E/2020) ILS CAT I (II.T.3)	ISM	110.950 MHz	H24	474123.7N 0225251.5E	-	NIL	Front course angle 4.31°
GP 19	-	330.650 MHz	H24	474241.1N 0225323.5E	-	NIL	GP Angle 3° ILS RDH 54 FT
DME 19	ISM	CH 46Y	H24	474240.9N 0225323.7E	400 FT	NIL	NIL
GPS NPA	-	1575.420 MHz	H24	-	-	NIL	Transmitting antennas are satellite based. Maintained by the U.S. Department of Defense.
EGNOS LPV	-	1575.420 MHz	H24	-	-	NIL	Transmitting antennas are satellite based. Maintained by the European Satellite Services Provider – ESSP.

LRSM AD 2.20 LOCAL AERODROME REGULATIONS

To prevent runway pavement damage, aircraft with wingspan of 28 M or greater are not allowed to perform 180 degrees turn on the runway. The 180 degree turn shall be made only on runway turn pads located at each runway end. Aircraft should follow turn pad markings.

Pentru a preveni deteriorarea pavajului pistei, pentru aeronavele cu anvergura de 28 M sau mai mare, nu este permisă efectuarea de întoarceri de 180 grade pe pistă. Întoarcerile de 180 grade sunt permise doar pe platformele de întoarcere situate la capetele pistei. Aeronava trebuie să urmărească marcajul platformelor de întoarcere pe pistă.

LRSM AD 2.21 NOISE ABATEMENT PROCEDURES

See AD 1.1-3

LRSM AD 2.22 FLIGHT PROCEDURES

- NIL -

LRSB AD 2.23 ADDITIONAL INFORMATION

- NIL -

LRSB AD 2.24 CHARTS RELATED TO THE AERODROME

Aerodrome Chart - ICAO	AD 2.12-20
Aircraft Parking/Docking Chart - ICAO	AD 2.12-22
Aerodrome Obstacle Chart - ICAO - Type A	
RWY 01.....	AD 2.12-25
RWY 19.....	AD 2.12-26
Precision Approach Terrain Chart – ICAO	
RWY 19.....	AD 2.12-28
Standard Departure Chart - Instrument - ICAO	
RWY 19.....	AD 2.12-30
RWY 01.....	AD 2.12-31
Bird concentrations in the vicinity of the aerodrome	AD 2.12-46
Instrument Approach Charts - ICAO	
RWY 19 ILS Y A/B.....	AD 2.12-51
RWY 19 ILS Z C/D.....	AD 2.12-52
RWY 19 RNP	AD 2.12-71
RWY 01 RNP	AD 2.12-72
RWY 19 VOR Y A/B.....	AD 2.12-81
RWY 19 VOR Z C/D.....	AD 2.12-82
RWY 01 VOR.....	AD 2.12-83

LRSB AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

Not applicable