AD 2 AERODROMES

ESNN 2.1 AERODROME LOCATION INDICATOR AND NAME

ESNN – SUNDSVALL-TIMRÅ

ESNN 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1.	ARP coordinates and site at AD	623146N 0172634E BRG 160.2° GEO 800 m from THR 16
2.	Direction and distance from (city)	NNE 9 NM from Sundsvall
3.	Elevation/Reference temperature	17 ft/+21.3°C
4.	Geoid undulation at AD ELEV PSN	86 ft
5.	MAG VAR/Annual change	7° E 2020/+0.2 increasing
6.	Administration, address, telephone, fax, AFS	Midlanda Flygplats AB SE-851 85 Sundsvall TEL: +46 (0)60 658 39 00 AFS: ESNNZTZX Website: www.sdlairport.se
7.	Types of traffic permitted (IFR/VFR)	IFR/VFR. Max RWY ref code 4C
8.	Remarks	PPR outside TWR HR of OPS. Request and changes shall be made during AD HR of Administration. Application form on AD website

ESNN 2.3 OPERATIONAL HOURS

1.	AD Administration AD Operating hours	MON-FRI 0700-1500 (0600-1400) Ref AIP SUP/NOTAM
2.	Customs and immigration	O/R TEL +46(0)8 456 66 20
3.	Health and sanitation	-
4.	AIS Briefing Office	FPC H24, +46 (0)8 797 63 40, www.lfv.se/fpc
5.	ATS Reporting Office (ARO)	As ATS
6.	MET Briefing Office	FPC H24, +46 (0)8 797 63 40, www.lfv.se/fpc
7.	ATS	Ref AIP SUP/NOTAM
8.	Fuelling	As AD Operating hours
9.	Handling	O/R
10.	Security	O/R
11.	De-Icing	O/R
12.	Remarks	Increased charges outside TWR HR of OPS

ESNN 2.4 HANDLING SERVICES AND FACILITIES

1.	Cargo-handling facilities	Available O/R
2.	Fuel/oil types	Fuel Jet A1, 100LL Oil -
3.	Fuelling facilities/discharge capacity	Jet A1: No limitations 100LL: No limitations
4.	De-icing facilities	Available, Type I and II. ACFT height: max 13.5 m
5.	Hangar space for visiting ACFT	Limited O/R
6.	Repair facilities for visiting ACFT	Limited
7.	Remarks	Fuel supplier Air BP. Fuel sales only against Air BP Carnet Card or with requisition via Air BP Out of Hours Service.

ESNN 2.5 PASSENGER FACILITIES

1.	Hotels	In Sundsvall or Timrå
2.	Restaurants	At AD
3.	Transportation	Buses, taxis, rental cars
4.	Medical facilities	In Sundsvall or Timrå
5.	Bank and Post Office	In Sundsvall or Timrå
6.	Tourist Office	In Sundsvall
7.	Remarks	-

ESNN 2.6 RESCUE AND FIRE FIGHTING SERVICES

1.	AD category for fire fighting	CAT 7 for SKED traffic. Other traffic O/R. Higher level O/R. During periods of reduced aerodrome activity, RFFS level of protection may be lowered to a level corresponding to the largest aircraft using the aerodrome during that period.
2.	Rescue equipment	Tracked vehicle, rescue boat
3.	Capability for removal of disabled aircraft	Suitable for aircraft up to B757. Contact: Aerodrome coordinator +46 (0)70 522 03 12.
4.	Remarks	-

ESNN 2.7 SEASONAL AVAILABILITY – CLEARING

1.	Types of clearing equipment	Snowploughs, sweepers, blowers, slingers, spreaders
2.	Clearance priorities	RWY, Emergency access road, TWY, Apron
3.	Remarks	RWY de-iced with KFOR/NAFO/UREA TWY de-iced with KFOR/NAFO/UREA Apron de-iced with SAND

ESNN 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1.	Apron surface and strength	Apron M ASPH PCN 50 F/B/X/T Apron N ASPH PCN 50 F/B/X/T Apron S ASPH PCN 10 F/B/X/T
2.	Taxiway width, surface and strength	TWY A 23 m ASPH PCN 29 F/B/X/T TWY B 18 m ASPH PCN 50 F/B/X/T TWY C 15 m ASPH PCN 50 F/B/X/T TWY D 23 m ASPH PCN 50 F/B/X/T
3.	ACL, location and elevation	See ESNN 2-1
4.	VOR checkpoints	See ESNN 2-1
5.	INS checkpoints	See ESNN 2-1
6.	Remarks	-

ESNN 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1.	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of ACFT stands	Taxi guide lines and signs. Marshalling available.
2.	RWY and TWY markings and LGT	RWY 16/34: Designator, THR, TDZ, CL and edges are day marked. RTHL, REDL, RENL TWY A: CL, HLDG day marked. Edge lights, RGL. B: CL, HLDG day marked. Edge lights, RGL. C: CL, HLDG day marked. Edge lights, RGL. D: CL, HLDG day marked. Edge lights, RGL.
3.	Stop bars	-
4.	Remarks	RWY 16/34: RWY extension guide lines based on MD82

ESNN 2.10 AERODROME OBSTACLES

In Area 2					
OBST ID/Designation	OBST type	OBST position	ELEV/HGT in feet	Markings/ Type, colour	Remarks
a	b	c	d	e	f
ESNN1	Navaid	623111.5N 0172655.7E	17 / -	-	-
ESNN2	Vegetation	623103.2N 0172659.5E	24 / -	-	-
ESNN3	Pole	623100.3N 0172701.3E	29 / -	-	-
ESNN4	Pole	623059.9N 0172700.5E	30 / -	-	-
ESNN5	Sign	623059.3N 0172713.8E	35 / -	-	-
ESNN6	Vegetation	623054.6N 0172722.4E	43 / -	-	-
ESNN7	Vegetation	623054.0N 0172724.6E	46 / -	-	-
ESNN8	Vegetation	623051.9N 0172728.5E	52 / -	-	-
ESNN9	Vegetation	623050.7N 0172731.1E	63 / -	-	-
ESNN10	Vegetation	623048.6N 0172732.3E	68 / -	-	-
ESNN11	Vegetation	623047.8N 0172734.6E	70 / -	-	-
ESNN12	Vegetation	623047.4N 0172733.3E	70 / -	-	-
ESNN13	Vegetation	623037.5N 0172715.1E	79 / -	-	-
ESNN14	Vegetation	623036.7N 0172715.3E	82 / -	-	-
ESNN15	Vegetation	623028.0N 0172716.2E	93 / -	-	-
ESNN16	Navaid	623208.0N 0172623.0E	24 / -	-	-
ESNN17	Vegetation	623223.5N 0172554.2E	51 / -	-	-
ESNN18	Vegetation	623232.1N 0172549.6E	74 / -	-	-
ESNN19	Vegetation	623233.3N 0172545.7E	80 / -	-	-
ESNN20	Vegetation	623235.4N 0172542.5E	85 / -	-	-
ESNN21	Vegetation	623237.4N 0172547.6E	91 / -	-	-
ESNN22	Vegetation	623247.4N 0172536.2E	110 / -	-	-
ESNN23	Vegetation	623303.5N 0172554.6E	131 / -	-	-
ESNN24	Transmission line	623315.4N 0172537.0E	152 / -	-	-
ESNN25	Vegetation	623315.4N 0172531.4E	172 / -	-	-
ESNN26	Vegetation	623316.5N 0172535.1E	179 / -	-	-
ESNN27	Vegetation	623340.2N 0172538.4E	315 / -	-	-
ESNN28	Vegetation	623350.3N 0172532.0E	337 / -	-	-
ESNN29	Vegetation	623709.3N 0172238.6E	708 / -	-	-
ESNN30	Vegetation	623711.3N 0172234.3E	713 / -	-	-

In Area 3					
OBST ID/Designation	OBST type	OBST position	ELEV/HGT	Markings/ Type, colour	Remarks
a	b	c	d	e	f
Not available					

ESNN 2.11 METEOROLOGICAL INFORMATION PROVIDED

1.	Associated MET Office	STOCKHOLM/Arlanda
2.	Hours of service MET Office outside hours	H24
3.	Office responsible for TAF preparation Periods of validity, interval of issuance	STOCKHOLM/Arlanda 9 HR, https://tafplanner.smhi.se/app.php/production-program
4.	Type of landing forecast Interval of issuance	Not issued
5.	Briefing/consultation provided	FPC H24, +46 (0)8 797 63 40, www.lfv.se/fpc
6.	Flight documentation Language(s) used	TAF, METAR, SIGMET, Upper air winds Swedish/English
7.	Charts and other information available for briefing or consultation	SWC, WC, Nordic SIGWX Chart, Low level forecast
8.	Supplementary equipment available for providing information	-
9.	ATS units provided with information	SUNDSVALL-TIMRÅ TWR
10.	Additional information (limitation of service, etc.)	Flight planning room available.

ESNN 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	True BRG and MAG BRG	Dimensions of RWY (m)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APCH RWY
1	2	3	4	5	6
16	160.16° GEO 153° MAG	1954 x 45	PCN 50 F/B/X/T ASPH	623207.12N 0172617.86E BGN RWY: 623211.68N 0172614.36E GUND 84.9 ft	THR 17.1 ft TDZ 17.1 ft
34	340.15° GEO 333° MAG	1954 x 45	PCN 50 F/B/X/T ASPH	623112.31N 0172700.73E BGN RWY: 623107.92N 0172704.14E GUND 84.7 ft	THR 13.3 ft TDZ 13.3 ft

Slope of RWY-SWY	SWY dimensions (m)	CWY dimensions (m)	Strip dimensions (m)	OFZ	Remarks
7	8	9	10	11	12
16 See ESNN AOC	-	-	2099 x 300	-	-
34 See ESNN AOC	-	-	2099 x 300	-	-

ESNN 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
16	1954	1954	1954	1804	BGN RWY 16 150 m in front of THR
34	1949	1949	1949	1804	BGN RWY 34 144 m in front of THR

ESNN 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT Type, LEN INTST	THR LGT Colour WBAR	VASIS (MEHT)	TDZ LGT LEN	RWY Centre Line LGT LEN, Spacing Colour INTST	RWY Edge LGT LEN, Spacing Colour INTST	RWY End LGT Colour WBAR	SWY LGT LEN, Colour
1	2	3	4	5	6	7	8	9
16	Barrette CL SALS 180 m LIL/LIH	Green	PAPI Left/3.25° (60.0 ft)	-	-	1954/60 m White Caution zone 600 m yellow LIL/LIH	Red	-
34	Calvert CAT I 900 m LIL/LIH	Green	PAPI Left/3.00° (57.4 ft)	-	-	1949/60 m White Caution zone 600 m yellow LIL/LIH	Red	-

10 Remarks:		
	RWY 16:	LED lights on APCH, RTHL, REDL, RENL and TRID. TRID FLG white. LIH.
	RWY 34:	LED lights on RTHL, REDL and RENL.

ESNN 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1.	ABN/IBN location, characteristics and hours of operation	-
2.	LDI location and LGT Anemometer location and LGT	See ESNN 2-1 See ESNN 2-1
3.	TWY edge and centre line lighting	Edge: TWY A, B, C, D CL: - LED lights on all TWY edge lights LED lights on all RGL
4.	Secondary power supply/switch-over time	Available/1 sec
5.	Remarks	-

ESNN 2.16 HELICOPTER LANDING AREA

RWY 16/34 to be used

ESNN 2.17 ATS AIRSPACE

1.	Designation and lateral limits	SUNDSVALL CTR	624157N 0172537E - 623327N 0173747E - 622009N 0174112E - 621802N 0172655E - 623032N 0171448E - 624007N 0171347E - 624157N 0172537E
2.	Vertical limits	SUNDSVALL CTR	2500 ft AMSL GND
3.	Airspace classification	C	
4.	ATS unit call sign Language(s)	SUNDSVALL TOWER Swedish/English	
5.	Transition altitude	5000 ft AMSL	
6.	Remarks	CTR established during hours of TWR.	

ESNN 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Channel/Frequency	Hours of operation	Remarks
1	2	3	4	5
TWR	SUNDSVALL TOWER	129.555	HO	Primary channel
		121.500	HO	-
		118.105	HX	By directive from TWR
ATIS	SUNDSVALL ATIS	127.405	HO	-

ESNN 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid CAT of ILS/MLS (for VOR/ILS/MLS give VAR)	ID	Frequency	Hours of operation	Site of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
LOC 16 ILS CAT I (7° E 2020)	NNN	108.70 MHz	HO	623100.8N 0172709.7E		380 m beyond THR 34 LOC Class I/E/2
GP		330.50 MHz	HO	623200.4N 0172632.1E		Angle 3.25° RDH 50.0 ft 266 m past THR 16 left side. Horizontal coverage E RWY CL limited to 4° GP Class I/C/2
LOC 34 ILS CAT I (7° E 2020)	SNN	110.30 MHz	HO	623237.4N 0172554.3E		995 m beyond THR 16 LOC Class I/E/2
GP		335.00 MHz	HO	623123.6N 0172700.8E		Angle 3.0° RDH 50.9 ft 328 m past THR 34 right side GP Class I/C/2
DVOR/DME (7° E 2020)	SUN	113.10 MHz	H24	623142.4N 0172655.4E	46 ft	DME channel 78X DVOR and DME on R-022 is approved to use from 22 NM and restricted due to low signal level between 30 NM and 22 NM.
DME	NNN	108.70 MHz	HO	623200.4N 0172632.5E	45 ft	Low signal in sector 10°-35° east of the extended CL below 5000 ft, 17 NM and beyond. 265 m past THR 16 left side. DME channel 24X
DME	SNN	110.30 MHz	HO	623123.6N 0172701.2E	39 ft	DME channel 40X

ESNN 2.20 LOKALA TRAFIKFÖRESKRIFTER

1. Tillstånd för motorstart skall alltid inhämtas från TWR.

2. När flygsäkerhet, trafiksituation och väderförhållanden så medger ska landningar som ankommer söderifrån ske på bana 34 och starter mot destinationer söderut ske på bana 16.

3. Flygplan på uppställningsplats 2-6 eller 11-16 får inte utföra backning med egna motorer som ett standardförfarande. Detta är endast tillåtet om flygplatsen inte kan utföra push-back med bogserstång eller TBL-traktor.

LOCAL TRAFFIC REGULATIONS

1. Start-up clearance shall be obtained from TWR at all times

2. When flight safety, traffic situation and weather conditions permit, landings arriving from the south must be performed on RWY 34 and take-offs for destinations to the south must be performed on RWY 16.

3. Aircraft parked on stands 2-6 or 11-16 shall not perform power push-back as a standard procedure. This is only permitted if the aerodrome is unable to perform push-back by towing or TBL tractor.

ESNN 2.21 MINSKNING AV BULLERSTÖRNING

1. Över tätbebyggt område

Över de centrala delarna av Sundsvall bör luftfartyg inte framföras på lägre höjd än 2 000 ft AMSL, utom då så är nödvändigt i samband med start eller landning.

2. I moment AD 2.22 angivna flygvägar för ankommande och avgående trafik har upprättats även för att minska bullerstörningar. Luftfartyg skall noggrant följa i klareringen angiven flygväg samt i övrigt framföras så att onödiga bullerstörningar inte förorsakas.

NOISE ABATEMENT PROCEDURES

1. Over built up areas

Over the central parts of Sundsvall aircraft should not be operated below 2 000 ft AMSL except when necessary for take-off or landing.

2. The routes for inbound and outbound traffic mentioned in paragraph AD 2.22 below have been established also for noise abatement purposes. Aircraft shall strictly adhere to assigned route and be operated in such a manner that unnecessary noise disturbance is not caused.

ESNN 2.22 FLYGPROCEDURER

1. Ankommande IFR-trafik inom Sundsvall TMA/CTR

Flygvägar
Flygvägar för ankommande trafik är upprättade enligt ESNN 4-5/6 och ESNN 4-7/8.

Väntlägen (Ref ENR 1.3)
Väntlägen är upprättade enligt ESNN 4–1.

2. Avgående IFR-trafik inom Sundsvall TMA/CTR

Flygvägar
Flygvägar för avgående trafik är upprättade enligt ESNN 4-5/6 and ESNN 4-7/8.

Luftfartyg som av prestandaskäl inte kan använda anvisad flygväg skall meddela detta till ATC.

FLIGHT PROCEDURES

1. Inbound IFR traffic within Sundsvall TMA/CTR

Routes
Arrival routes are established in accordance with ESNN 4-5/6 and ESNN 4-7/8.

Holdings (Ref ENR 1.3)
Holdings are established in accordance with ESNN 4–1.

2. Outbound IFR traffic within Sundsvall TMA/CTR

Routes
Departure routes are established in accordance with ESNN 4-5/6 and ESNN 4-7/8.

Aircraft which, for performance reasons, are unable to conform with the procedures stipulated for the route assigned shall inform ATC accordingly.

3. Startprocedurer, omnidirectional

3. Omnidirectional departure procedures

RWY	Procedure	Significant obstacle		
		Obstacle	Elevation (ft)	Direction (GEO)/Dist (m) from THR
16	Climb straight ahead to MNM turning ALT 600 ft. Continue climb to appropriate MSA.	Tree (CIO) Tree (CIO) Pylon	79 92 1480	155°/2590 164°/2980 198°/19710
34	Climb straight ahead with MNM 360 ft/NM (5.9%) to MNM turning ALT 1400 ft. Continue climb to appropriate MSA.	Antenna	625	355°/5540

4. Avbrott i radioförbindelse

Luftfartyg skall följa de föreskrifter som anges i ENR 1.3. Under IMC gäller dessutom följande.

4.1 Ankommande klarering mottagen och kvitterad

4.1.1 Normalt är gällande bana gräns för den av ACC meddelade ankommande klareringen. Härvid skall luftfartyget med bibehållande av senast tilldelad och kvitterad flyghöjd följa angiven flygväg till SUN VOR.

4. Communication failure

Aircraft shall follow the procedures laid down in ENR 1.3. In addition, in IMC the relevant procedures below shall be applied.

4.1 Inbound clearance received and acknowledged

4.1.1 Clearance limit for the inbound clearance issued by ACC is normally the runway-in-use. When this is the case the aircraft shall, maintaining the level last received and acknowledged, follow the specified route to SUN VOR.

4.1.2 Om gränsen för den av ACC meddelade klareringen är annan än gällande bana, skall luftfartyget med bibehållande av senast tilldelad och kvitterad flyghöjd följa angiven flygväg till denna gräns och därifrån flyga direkt till SUN VOR. Har beräknad tidpunkt för inflygning mottagits och kvitterats, skall den i mom 4.1.4 angivna nedgången påbörjas först vid denna tidpunkt.

4.1.3 Luftfartyg som utför radarinflygning skall med bibehållande av senast tilldelad och kvitterad flyghöjd flyga direkt till SUN VOR.

4.1.4 Efter ankomst över SUN VOR skall erforderlig nedgång utföras i väntläge SUNDSVALL, varefter normal instrumentinflygning skall utföras.

4.2 Ankommande klarering inte mottagen och/eller kvitterad

Luftfartyget skall med bibehållande av senast tilldelad och kvitterad flyghöjd flyga via aktuell inträdespunkt i TMA direkt till SUNDSVALL VOR. I väntläge SUNDSVALL skall nedgång utföras till 3000 ft AMSL, varefter normal instrumentinflygning till bana 16 eller 34 skall utföras.

5. Lågsiktsprocedurer (LVP)

LVP träder i kraft när bansynvidden (RVR) underskrider 550 m eller när molntäckeshöjden eller vertikalsikten är lägre än 200ft.
Meddelande om att LVP är i kraft lämnas via ATIS eller av ATS.

Lägsta RVR för avgående trafik är 400 m.

6. VFR- flygning inom Sundsvall CTR

Luftfartyg skall följa de föreskrifter som anges i ENR 1.2. Därutöver gäller följande:

Normala in- och utpasseringspunkter
Se ESNN 6–1.

Väntlägen
Se ESNN 6–1.

Avbrott i radioförbindelse
Se ESNN 6–1.

ESNN 2.23 ÖVRIG INFORMATION

1. Obemannade ballonger för rutinmässiga aerologiska mätningar skickas från SMHI autosondstation, V om bana 16, dagligen 2330 och 1130 (2230 och 1030) UTC.

2. ATS-tjänst bedrivs från RTC Sundsvall.

3. Signalstrålkastare placerad på R-TWR.

4. Undantag från krav i CS-ADR-DSN:
   - Hinder genomtränger de hinderbegränsande ytorna. Se hinderförteckning.

4.1.2 If the clearance limit for the inbound clearance issued by ACC is other than the runway-in-use, the aircraft shall, maintaining the level last received and acknowledged, follow the specified route to this limit and then proceed direct to SUN VOR. If an expected approach time has been received and acknowledged, the descent specified in para 4.1.4 shall not be commenced until that time.

4.1.3 Aircraft executing a radar approach shall, maintaining the level last received and acknowledged, proceed direct to SUN VOR.

4.1.4 After arrival overhead SUN VOR descent, if required, shall be made in SUNDSVALL holding pattern. Thereafter a normal instrument approach shall be carried out.

4.2 Inbound clearance not received and/or acknowledged

The aircraft shall, maintaining the level last received and acknowledged, proceed via the relevant TMA entry point direct to SUNDSVALL VOR. In the holding pattern SUNDSVALL descent to 3000 ft AMSL shall be made. Thereafter a normal instrument approach to RWY 16 or 34 shall be carried out.

5. Low visibility procedures (LVP)

LVP will be in force when RVR falls below 550 m or ceiling or vertical visibility is below 200 ft.

The application of LVP will be announced via ATIS or by ATS.

Minimum RVR for departing traffic is 400 m.

6. VFR flight within Sundsvall CTR

Aircraft shall adhere to the procedures stipulated in ENR 1.2. In addition, the following shall be applied:

Normal entry and exit points
See ESNN 6–1.

Holdings
See ESNN 6–1.

Communication failure
See ESNN 6–1.

ADDITIONAL INFORMATION

1. Unmanned balloons for routine aerological measurements are sent from SMHI automatic probe station, W of runway 16, daily 2330 and 1130 (2230 and 1030) UTC.

2. ATS provided from RTC Sundsvall.

3. Signalling lamp positioned at R-TWR.

4. Exemptions from requirements in CS-ADR-DSN:
   - Obstacles penetrating the aerodrome´s obstacle limitation surfaces. See list of obstacles.

ESNN 2.24 TILLHÖRANDE KARTOR / RELATED CHARTS

AD chart		ESNN 2-1
AOC	RWY 16	ESNN-3-1
AOC	RWY 34	ESNN-3-3
Area chart	(TMA)	ESNN 4-1
List of waypoints and significant points		ESNN 4-3
SID/STAR	RWY 16	ESNN 4-5
SID/STAR	RWY 34	ESNN 4-7
RNAV (GNSS) SID	RWY 16	ESNN 4-9
RNAV (GNSS) SID	RWY 34	ESNN 4-11
RNAV (GNSS) STAR	RWY 16	ESNN 4-13
RNAV (GNSS) STAR	RWY 34	ESNN 4-15
ATC Surveillance Minimum ALT chart		ESNN 4-91
IAC	ILS or LOC RWY 34	ESNN 5-1
IAC	VOR RWY 34	ESNN 5-2
IAC	ILS or LOC RWY 16	ESNN 5-3
IAC	VOR RWY 16	ESNN 5-4
IAC	RNP RWY 16 (LNAV, LNAV/VNAV only)	ESNN 5-5
IAC	RNP RWY 34 (LNAV, LNAV/VNAV only)	ESNN 5-7
VAC		ESNN 6-1