

AD 2 AERODROMES**ESPA 2.1 AERODROME LOCATION INDICATOR AND NAME****ESPA – LULEÅ/KALLAX****ESPA 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

- | | | |
|----|--|---|
| 1. | ARP coordinates and site at AD | 653236N 0220725E RWY centre point |
| 2. | Direction and distance from (city) | S 2.5 NM from Luleå |
| 3. | Elevation/Reference temperature | 65 ft/+17.5°C |
| 4. | Geoid undulation at AD ELEV PSN | 71 ft |
| 5. | MAG VAR/Annual change | 9° E 2015/+0.1 increasing |
| 6. | Administration, address, telephone, fax, AFS | <p>MIL AD: FM/Swedish Armed Forces
 Norrbottn Wing
 SE-971 73 Luleå
 TEL: +46 (0)920 23 40 00
 FAX: +46 (0)920 23 43 09
 E-mail: f21-baseops@mil.se
 Website: www.forsvarsmakten.se
 CIV OPR: Swedavia AB
 Luleå Airport
 SE-972 54 Luleå
 TEL: +46 (0)10 109 48 00
 FAX: +46 (0)10 949 06
 E-mail: luleairport@swedavia.se
 AFS: ESPAZTX
 Website: www.swedavia.se/sv/lulea</p> |
| 7. | Types of traffic permitted (IFR/VFR) | IFR/VFR. Max RWY ref code 4E |
| 8. | Remarks | <p>PPR outside TWR HR of OPS.
 72 HR PPR for all foreign military transport aircrafts and foreign military helicopters.
 All military PPR requests shall be made during hours of AD Administration.
 FAX +46(0)920 23 44 39 or e-mail f21-baseops@mil.se</p> <p>All cargo and ad hoc passenger PPR requests shall be made during hours of AD Administration.
 * 72 HR PPR for all civil cargo transport aircrafts.
 E-mail lla.handlingrequest@swedavia.se, Phone +46(0)70 594 49 21.
 * 24 HR PPR for all civil ad hoc passenger transport aircrafts.
 E-mail lla.handlingrequest@swedavia.se, Phone +46(0)72 558 47 53.</p> |

ESPA 2.3 OPERATIONAL HOURS

1.	AD Administration AD Operating hours	MON-FRI 0800-1630 (0700-1530) MON-FRI 0545-2400 (0445-2300), SAT 0700-2000 (0600-1900), SUN 0800-2400 (0700-2300)
2.	Customs and immigration	O/R
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	MON-FRI 0500-2400 (0400-2300), SAT 0600-2000 (0500-1900), SUN 0700-2400 (0600-2300)
9.	Handling	MON-FRI 0500-2400 (0400-2300), SAT 0600-2000 (0500-1900), SUN 0700-2400 (0600-2300)
10.	Security	MON-FRI 0500-2400 (0400-2300), SAT 0600-2000 (0500-1900), SUN 0700-2400 (0600-2300)
11.	De-icing	MON-FRI 0500-2400 (0400-2300), SAT 0600-2000 (0500-1900), SUN 0700-2400 (0600-2300)
12.	Remarks	Increased charges outside TWR HR of OPS

ESPA 2.4 HANDLING SERVICES AND FACILITIES

1.	Cargo-handling facilities	O/R
2.	Fuel/oil types	Fuel Jet A1, 100LL Oil -
3.	Fuelling facilities/discharge capacity	Jet A1: No limitations, fuel truck 100LL: Stationary Apron 10
4.	De-icing facilities	Type I and II on permanent ramp for ACFT code A-C, D-E on ramp 8 and 9. Contact de-icing on channel 121.950
5.	Hangar space for visiting ACFT	O/R
6.	Repair facilities for visiting ACFT	O/R
7.	Remarks	Fuel supplier: Shell, 100LL by Shell Self service, Apron 10. Handling on the military side O/R. See Administrative data for contact. Handling on civil side can be reached on channel 131.700.

ESPA 2.5 PASSENGER FACILITIES

1.	Hotels	In Luleå
2.	Restaurants	At AD
3.	Transportation	Buses, taxis, rental cars
4.	Medical facilities	In Luleå
5.	Bank and Post Office	In Luleå, limited bank service at AD
6.	Tourist Office	In Luleå
7.	Remarks	-

ESPA 2.6 RESCUE AND FIRE FIGHTING SERVICES

- | | | |
|----|---|---------------------------------|
| 1. | AD category for fire fighting | CAT 7 (CAT 8 and 9 O/R) |
| 2. | Rescue equipment | Tracked vehicles, MIL equipment |
| 3. | Capability for removal of disabled aircraft | Available, MIL equipment |
| 4. | Remarks | - |

ESPA 2.7 SEASONAL AVAILABILITY – CLEARING

- | | | |
|----|-----------------------------|-------------------------------------|
| 1. | Types of clearing equipment | Snowploughs, sweepers, blowers, etc |
| 2. | Clearance priorities | RWY, TWY, Apron |
| 3. | Remarks | RWY 14/32 anti-iced with UREA |

ESPA 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

- | | | |
|----|-------------------------------------|--|
| 1. | Apron surface and strength | Apron 9 ASPH PCN 55 F/B/X/T
Apron 10 ASPH PCN 18 F/B/X/T
Apron 11 ASPH PCN 34 F/B/X/T
Apron 12 ASPH PCN 55 F/B/X/T |
| 2. | Taxiway width, surface and strength | TWY A 23 m ASPH PCN 55 F/B/X/T
TWY A1 23 m ASPH PCN 55 F/B/X/T
TWY A2 23 m ASPH PCN 55 F/B/X/T
TWY A3 23 m ASPH PCN 55 F/B/X/T
TWY A5 23 m ASPH PCN 55 F/B/X/T
TWY A6 23 m ASPH PCN 55 F/B/X/T
TWY A7 23 m ASPH PCN 55 F/B/X/T |
| 3. | ACL, location and elevation | Apron 9, 41 ft
Apron 10, 37 ft |
| 4. | VOR checkpoints | - |
| 5. | INS checkpoints | See ESPA 2-3 |
| 6. | Remarks | APRON 12 Maximum wingspan for aircrafts on Apron 12 is 36 m. |

ESPA 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 14/32: Designator, THR, TDZ, CL, edges day marked.
RTHL, REDL, RENL.

TWY A: CL, HLDG day marked. Edge lights and lighted stop signs.
A1: CL, HLDG day marked. Edge lights and lighted stop signs, RGL.
A2: CL, HLDG day marked. Edge lights and lighted stop signs, RGL.
A3: CL, HLDG day marked. Edge lights and lighted stop signs, RGL.
A5: CL, HLDG day marked. Edge lights and lighted stop signs, RGL.
A6: CL, HLDG day marked. Edge lights and lighted stop signs, RGL.
A7: CL, HLDG day marked. Edge lights and lighted stop signs, RGL. |
| 3. | Stop bars | - |
| 4. | Remarks | RWY 14/32: REDL located 4 m from RWY edge |

ESPA 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
Not available					

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

ESPA 2.11 METEOROLOGICAL INFORMATION PROVIDED

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

ESPA 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
14	137.28° GEO 128° MAG	3350 x 45	PCN 60 F/B/X/T ASPH	653317.27N 0220550.66E GUND 71 ft	THR 65.3 ft
32	317.33° GEO 308° MAG	3350 x 45	PCN 60 F/B/X/T ASPH	653157.78N 0220847.59E GUND 71 ft	THR 21.0 ft TDZ 29 ft

Slope of RWY-SWY	SWY dimensions (m)	CWY dimensions (m)	Strip dimensions (m)	OFZ	Remarks
7	8	9	10	11	12
14 See ESPA AOC	60 x 45	900 x 150	3470 x 300	-	MIL marker boards 600 m from RWY end.
32 See ESPA AOC	60 x 45	900 x 150	3470 x 300	-	MIL marker boards 600 m from RWY end.

ESPA 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
14	3350	4250	3410	3350	Intermediate distances, see ESPA-3-1
32	3350	4250	3410	3350	Intermediate distances, see ESPA-3-1

ESPA 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
14	Calvert CAT I 900 m LIL/LIH	Green	PAPI Left/2.86° (57.4 ft)	-	-	3350/60 m White Caution zone 600 m yellow LIL/LIH	Red	-
32	Calvert CAT I 720 m LIL/LIH	Green	PAPI Left/2.86° (57.4 ft)	-	-	3350/60 m White Caution zone 600 m yellow LIL/LIH	Red	-

10 Remarks:	RWY 14: RWY 32:	APCH LGT RWY 14 includes military type EFAS APCH LGT RWY 32 includes military type EFAS.
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ESPA 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 | Lighted windsock 240 m S ARP
E THR 14 and E ARP, lighted |
| 3. | TWY edge and centre line lighting | Edge: TWY A, A1, A2, A3, A5, A6, A7

CL: - |
| 4. | Secondary power supply/switch-over time | Available / 13 sec, when LVP without interruption. |
| 5. | Remarks | - |

ESPA 2.16 HELICOPTER LANDING AREA

RWY 14/32 to be used.

ESPA 2.17 ATS AIRSPACE

- | | | | |
|----|-----------------------------------|--------------------------------------|---|
| 1. | Designation and lateral limits | KALLAX CTR | 654321N 0215314E - 653544N 0221854E -
652708N 0222650E - 652444N 0221744E -
652808N 0215744E - 653908N 0214214E -
654321N 0215314E |
| 2. | Vertical limits | KALLAX CTR | <u>1200 ft AMSL</u>
GND |
| 3. | Airspace classification | C | |
| 4. | ATS unit call sign
Language(s) | KALLAX TOWER
Swedish/English | |
| 5. | Transition altitude | 5000 ft AMSL | |
| 6. | Remarks | CTR established during hours of TWR. | |

ESPA 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Channel/Frequency	Hours of operation	Remarks
1	2	3	4	5
TWR	KALLAX TOWER	128.200	HO	Primary channel VDF
		121.500	HO	VDF
TMC/APP	KALLAX CONTROL	125.450	HO	VDF
		130.800	HO	VDF
		121.500	HO	VDF
PAR	KALLAX PRECISION	119.000	HO	Not for civil use

ESPA 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 14 ILS CAT I (9° E 2015)	PA	110.30 MHz	HO	653150.9N 0220902.8E		290 m beyond THR 32 ILS Class I/D/2
GP		335.00 MHz	HO	653311.7N 0220616.3E		Angle 2.86° RDH 50.9 ft 346 m past THR 14 left side During winter angle may vary BTN 2.86° and 3.14° due to snow.
OM				653608.1N 0215919.7E		-
MM				653342.2N 0220455.1E		-
L 14	OL	377 kHz	H24	653608.3N 0215919.3E		Range 25 NM
LOC 32 ILS CAT II (9° E 2015)	SPA	109.90 MHz	HO	653324.2N 0220535.3E		290 m beyond THR 14 ILS Class II/D/3
GP		333.80 MHz	HO	653206.9N 0220840.6E		Angle 2.86° RDH 50.9 ft 268 m past THR 32 right side. During winter angle may vary BTN 2.86° and 3.14° due to snow.
VOR/DME (9° E 2015)	SLU	115.10 MHz	H24	653224.8N 0220803.3E	58 ft	DME channel 98X
DME	SPA	109.90 MHz	H24	653207.0N 0220840.8E	41 ft	Zero (0) range indication at THR 32. DME channel 36X

ESPA 2.20 LOKALA TRAFIKFÖRESKRIFTER

- Klarering före uttaxning
Klarering lämnas före/vid begäran om start-up. Klareringen utfärdas för gällande bana och tillämplig SID. Uppgift om transponderkod lämnas under uttaxning.
- Då förhållandena så medger bör reversering utöver IDLE REVERSE eller motsvarande ej utföras.
Start med reducerad dragkraft bör övervägas för att minska negativ miljöpåverkan.

LOCAL TRAFFIC REGULATIONS

- Clearance at gate
ATC clearance will be delivered prior to/at start-up. Such clearance will be issued for RWY in use and appropriate SID. Transponder code will be communicated during taxi.
- When conditions permit reverse in excess of IDLE REVERSE or equivalent should not be used.
To minimize emission reduced take-off power should be considered.

ESPA 2.21 MINSKNING AV BULLERSTÖRNING

Över de centrala delarna av Luleå bör luftfartyg inte framföras på lägre höjd än 2000 ft AMSL, utom när så är nödvändigt i samband med start eller landning.

NOISE ABATEMENT PROCEDURES

Over the central parts of Luleå aircraft should not be operated below 2000 ft AMSL, except when necessary for take-off or landing.

ESPA 2.22 FLYGPROCEDURER

1. Ankommande IFR-trafik inom Luleå TMA och Kallax CTR

Flygvägar

Flygvägar för ankommande trafik är upprättade enligt ESPA 4–11/12 och ESPA 4–13/14.

Väntlägen (Ref ENR 1.3)

Väntlägen är upprättade enligt ESPA 4–1.

2. Speciell inflygningsprocedur Annan än standard CAT II RWY 32

Godkännande för användning av Annan än standard CAT II krävs av Transportstyrelsen och för utländska operatörer deras nationella flygsäkerhetsmyndighet.

Minimum RVR enligt EU-OPS kapitel E, Tillägg 1 (nytt) till OPS 1.430, tabell 7b "Minimi-RVR för annan standard kategori II i förhållande till inflygningsljussystem". Eftersom centrumljus saknas för RWY 32 är minsta siktvärde 450 meter för samtliga flygplanskategorier.

ILS-anläggningen skall uppfylla samtliga krav för CAT II med klassificering minst II/D/2.

Lågsiktsprocedurer (LVP) skall vara i kraft.

Endast operatörer med flygplan utrustade med godkänd HUDLS och/eller Automatisk landning får tillämpa denna procedur.

3. Avgående IFR-trafik inom Luleå TMA och Kallax CTR

Flygvägar

Flygvägar för avgående trafik är upprättade enligt ESPA 4–11/12 och ESPA 4–13/14.

4. Startprocedurer, omnidirectional

FLIGHT PROCEDURES

1. Inbound IFR traffic within Luleå MA and Kallax CTR

Routes

Arrival routes are established in accordance with ESPA 4–11/12 and ESPA 4–13/14.

Holdings (Ref ENR 1.3)

Holdings are established in accordance with ESPA 4–1.

2. Special approach procedure Other than Standard (OTS) CAT II RWY 32.

Authorization for Other than Standard (OTS) Category II operations by the operator's National Aviation Authority is required.

Minimum RVR according to EU-OPS Subpart E, Appendix 1 (New) to OPS 1.430, Table 7b "Other than Standard Category II Minimum RVR vs Approach Light System". Because RWY 32 has no Centre Line Lights, minimum RVR is 450 metres for all aircraft categories.

The ILS equipment shall fulfil all ILS CAT II requirements including a classification of at least II/D/2.

Low visibility procedures (LVP) shall be in force.

Only operators with aircraft equipped with Approved HUDLS and/or Autoland are allowed to use this procedure.

3. Outbound IFR traffic within Luleå TMA and Kallax CTR

Routes

Departure routes are established in accordance with ESPA 4–11/12 and ESPA 4–13/14.

4. Omnidirectional departure procedures

RWY	Procedure	Significant obstacle		
		Obstacle	Elevation (ft)	Direction (GEO)/Dist (m) from THR
14	Climb straight ahead to MNM turning ALT 500 ft. Continue climb to appropriate MSA.	-		
32	Climb straight ahead to MNM turning ALT 500 ft. Continue climb to appropriate MSA.	-		

5. Avbrott i radioförbindelse

- 5.1 Ankommande klarering mottagen och kvitterad.

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 OL L (bana 14) eller LULEÅ VOR (bana 32).

5. Communication failure

- 5.1 Inbound clearance received and acknowledged.

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 OL L (runway 14) or LULEÅ VOR (runway 32).

Om gränsen för det 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 OL L eller LULEÅ VOR. Har beräknad tidpunkt för inflygning mottagits och kvitterats, skall plané påbörjas först vid denna tidpunkt.

Luftfartyg som utför radarinflygning skall, med bibehållande av senast tilldelad och kvitterad flyghöjd, flyga direkt till OL L (bana 14) eller LULEÅ VOR (bana 32).

Efter ankomst över OL L eller LULEÅ VOR skall erforderlig plané utföras i respektive väntläge, varefter normal instrumentinflygning skall utföras.

5.2 Ankommande klarering inte mottagen och/eller kvitterad.

Luftfartyget skall, med bibehållande av senast tilldelad och kvitterad flyghöjd, flyga via aktuell inpasseringspunkt i TMA direkt till OL L (bana 14) eller Luleå VOR (bana 32). Efter ankomst över OL L eller LULEÅ VOR skall erforderlig plané utföras i respektive väntläge, varefter normal instrumentinflygning skall utföras.

6. Lågsiktsprocedurer (LVP) etablerade.

När LVP tillämpas tillåts endast ett luftfartyg alternativt fordon på manövreringsområdet. Se även AD 2 ESPA 2-1 Special regulations.

7. VFR- flygning inom Kallax CTR

Normala in- och utpasserings-punkter

- a) MULON
- b) VALLEN

Se även ESPA 6-1.

Normala flygvägar
NIL

Anm. Då R46 är upprättat får flygning ej ske öster om linjen Sandöns västra spets – Lulnäsets strand, såvida ATS ej gett särskilt tillstånd härtill.

Väntlägen

- a) NORD
- b) SYD

Se även ESPA 6-1.

Avbrott i radioförbindelse
Se ESPA 6-1.

ESPA 2.23 ÖVRIG INFORMATION

Reducerad bauseparation tillämpas enligt AD 1 mom 1.1.10, mellan luftfartyg i kategori 1 inbördes samt mellan kategori 1 och 2 om kategori 1 är bakomvarande.

If the clearance limit for the inbound clearance issued by ACC is another 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 OL L or LULEÅ VOR. If an expected approach time has been received and acknowledged, descent shall not be commenced until that time.

Aircraft executing a radar approach shall, maintaining the level last received and acknowledged, proceed direct to OL L (runway 14) or LULEÅ VOR (runway 32).

After arrival over OL L or LULEÅ VOR descent, if required, shall be made in the holding pattern in question. After that a normal instrument approach shall be carried out.

5.2 No inbound clearance received and/or acknowledged.

The aircraft shall, maintaining the level last received and acknowledged, proceed via the relevant TMA entry point direct to OL L (runway 14) or LULEÅ VOR (runway 32). After arrival over OL L or LULEÅ VOR descent, shall be made in the holding pattern in question. After that a normal instrument approach shall be carried out.

6. Low visibility procedures (LVP) established.

When LVP is applied only one aircraft or vehicles is allowed in the manoeuvring area. See also AD 2 ESPA 2-1 Special regulations.

7. VFR flight within Kallax CTR

Normal entry and exit points

- a) MULON
- b) VALLEN

See also ESPA 6-1.

Normal routes
NIL

Note. When R46 is established and if not permitted by ATS, flights must not be carried out east of the line limited by the western point of Sandön and the shore of Lulnäset.

Holding points

- a) NORTH
- b) SOUTH

See also ESPA 6-1.

Communication failure
See ESPA 6-1.

ADDITIONAL INFORMATION

Reduced runway separation is applied in accordance with AD 1 para 1.1.10 between aircraft of category 1 themselves, also between category 1 and 2 aircraft if category 1 is behind.

ESPA 2.24 TILLHÖRANDE KARTOR

RELATED CHARTS

AD chart		ESPA 2-1
Taxiing Guidance chart		ESPA-2-2
Parking/docking chart		ESPA 2-3
AOC	RWY 14/32	ESPA-3-1
PATC	RWY 32	ESPA-3-7
Area chart	TMA	ESPA 4-1
List of Waypoints and significant points		ESPA 4-3
FMS/RNAV Arrival General		ESPA 4-5
FMS/RNAV Arrivals	RWY 14/32	ESPA 4-7
SID/STAR	RWY 14	ESPA 4-11
SID/STAR	RWY 32	ESPA 4-13
ATC Surveillance Minimum ALT chart		ESPA 4-91
IAC	VOR/DME+ILS 14	ESPA 5-1
IAC	NDB+ILS 14	ESPA 5-2
IAC	VOR/DME 14	ESPA 5-3
IAC	NDB 14	ESPA 5-4
IAC	VOR/DME+ILS 32	ESPA 5-5
IAC	VOR/DME 32	ESPA 5-7
IAC	VOR/DME+ILS OTS CAT II 32	ESPA 5-9
VAC		ESPA 6-1