

**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	10° E (2020)/+0.2 increasing
6. Name of aerodrome operator, address, telephone, telefax numbers, AFS, e-mail, website	MIL AD: FM/Swedish Armed Forces Norrbotten Wing SE-971 73 Luleå TEL: +46 920 23 40 00 FAX: +46 920 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 10 109 48 00 FAX: +46 10 949 06 E-mail: luleaairport@swedavia.se AFS: ESPAZTX Website: www.swedavia.se/sv/lulea
7. Types of traffic permitted (IFR/VFR)	IFR/VFR. Max RWY ref code 4E
8. Remarks	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 operator. FAX +46 920 23 44 39 or e-mail f21-baseops@mil.se PPR for CIV and CARGO ACFT 5 days prior to planned arrival or departure. ACFT with status HOSP, STATE, SAR, SKED TFC and operators with sanction agreement are exempt. Requests shall be sent to: lla.handlingrequest@swedavia.se.

**ESPA 2.3 OPERATIONAL HOURS**

1. AD operator	MON-FRI 0700-1530 (0600-1430)
AD Operating hours	MON-FRI 0500-2300 (0400-2200), SAT 0600-1900 (0500-1800), SUN 0700-2300 (0600-2200)
2. Customs and immigration	O/R
3. Health and sanitation	-
4. AIS Briefing Office	FPC, H24, +46 8 797 63 40, www.lfv.se/fpc
5. ATS Reporting Office (ARO)	As ATS
6. MET Briefing Office	FPC, H24, +46 8 797 63 40, www.lfv.se/fpc
7. ATS	Ref AIP SUP/NOTAM
8. Fuelling	MON-FRI 0400-2300 (0300-2200), SAT 0500-1900 (0400-1800), SUN 0600-2300 (0500-2200)

- |                     |                                                                                                                                                                                                                             |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>9. Handling</b>  | MON-FRI 0400-2300 (0300-2200), SAT 0500-1900 (0400-1800), SUN 0600-2300 (0500-2200)                                                                                                                                         |
| <b>10. Security</b> | MON-FRI 0400-2300 (0300-2200), SAT 0500-1900 (0400-1800), SUN 0600-2300 (0500-2200)                                                                                                                                         |
| <b>11. De-icing</b> | MON-FRI 0400-2300 (0300-2200), SAT 0500-1900 (0400-1800), SUN 0600-2300 (0500-2200)                                                                                                                                         |
| <b>12. Remarks</b>  | Security available to meet requirements for scheduled traffic. Schedule can be obtained from Swedavia +46 (0)10 109 49 50 or <a href="http://www.swedavia.se">www.swedavia.se</a> . Increased charges outside AD HR of OPS. |

## ESPA 2.4 HANDLING SERVICES AND FACILITIES

- |                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Cargo-handling facilities</b>           | O/R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>2. Fuel and oil types</b>                  | Fuel: Jet A1, UL91<br>Oil: -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>3. Fuelling facilities and capacity</b>    | Jet A1: No limitations, fuel truck<br>UL91: Stationary Apron 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>4. De-icing facilities</b>                 | Available, Type I and II, mobile units.<br>Contact de-icing on channel 121.950, phone +46 10 109 49 36.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>5. Hangar space for visiting ACFT</b>      | O/R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>6. Repair facilities for visiting ACFT</b> | O/R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>7. Remarks</b>                             | Handling on the military side O/R. See Administrative data for contact.<br>Handling on civil side can be reached on channel 131.700.<br>De-icing on Apron 12A: Available for ACFT with max wingspan 36 m.<br>De-icing on Apron 12B and 9: Available for all ACFT. Shall be used by ACFT with wingspan more than 36 m.<br>Fuel supplier: Jet A1, Shell Aviation AB, e-mail: <a href="mailto:lla@sasab.se">lla@sasab.se</a> , phone: +46 10 109 49 54. UL91 available at aero club apron 10. Request of fuelling, e-mail: <a href="mailto:info@lbfk.com">info@lbfk.com</a> . Phone: +46 76 788 18 64 |

## ESPA 2.5 PASSENGER FACILITIES

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

## ESPA 2.6 RESCUE AND FIRE FIGHTING SERVICES

- |                                                       |                                       |
|-------------------------------------------------------|---------------------------------------|
| <b>1. AD category for fire fighting</b>               | CAT 7 (CAT 8 1 HR PN, CAT 9 24 HR PN) |
| <b>2. Rescue equipment</b>                            | Tracked vehicles, MIL equipment       |
| <b>3. Capability for removal of disabled aircraft</b> | Available, MIL equipment              |
| <b>4. Remarks</b>                                     | -                                     |

## ESPA 2.7 RUNWAY SURFACE CONDITION ASSESSMENT AND REPORTING, AND SNOW PLAN

- |                                                               |                                     |
|---------------------------------------------------------------|-------------------------------------|
| <b>1. Types of clearing equipment</b>                         | Snowploughs, sweepers, blowers, etc |
| <b>2. Clearance priorities</b>                                | RWY, TWY, Apron                     |
| <b>3. Use of material for movement area surface treatment</b> | RWY 14/32 anti-iced with UREA       |
| <b>4. Specially prepared winter runways</b>                   | -                                   |

## 5. Remarks

-

**ESPA 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS 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 12A CONC/ASPH PCN 55/R/B/X/T  
 Apron 12B CONC PCN 55/R/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 Parking and Docking Chart

## 6. Remarks

Apron 12A Maximum wingspan 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.  
 TWY A1: CL, HLDG day marked. Edge lights and lighted stop signs, RGL.  
 TWY A2: CL, HLDG day marked. Edge lights and lighted stop signs, RGL.  
 TWY A3: CL, HLDG day marked. Edge lights and lighted stop signs, RGL.  
 TWY A5: CL, HLDG day marked. Edge lights and lighted stop signs, RGL.  
 TWY A6: CL, HLDG day marked. Edge lights and lighted stop signs, RGL.  
 TWY 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.  
 MIL short track markings mid RWY.

**ESPA 2.10 AERODROME OBSTACLES**

In Area 2				
OBST ID/Designation	OBST type	OBST position	ELEV/HGT	Markings/ Type, colour
a	b	c	d	e
ESPA1	TREE	653153.2N 0220903.6E	32 ft / -	-
ESPA2	NAVAID	653321.8N 0220540.5E	77 ft / -	-
ESPA3	NAVAID	653324.1N 0220535.3E	80 ft / -	-
ESPA4	ANTENNA	653323.3N 0220532.3E	88 ft / -	-
ESPA5	TREE	653340.4N 0220451.1E	128 ft / -	-
ESPA6	TREE	653340.2N 0220448.3E	132 ft / -	-
ESPA7	TREE	653342.5N 0220444.7E	137 ft / -	-
ESPA8	TREE	653342.5N 0220443.6E	139 ft / -	-
<b>f Remarks:</b>	-			

In Area 3				
OBST ID/Designation	OBST type	OBST position	ELEV/HGT	Markings/ Type, colour
a	b	c	d	e
f Remarks: 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, <a href="https://tafplanner.smhi.se/app.php/production-program">https://tafplanner.smhi.se/app.php/production-program</a> |
| 4. Trend forecast                                                      | Not issued                                                                                                                      |
| Interval of issuance                                                   |                                                                                                                                 |
| 5. Briefing/consultation provided                                      | FPC H24, +46 8 797 63 40, <a href="http://www.lfv.se/fpc">www.lfv.se/fpc</a>                                                    |
| 6. Flight documentation                                                | TAF, METAR, SIGMET, Upper air winds                                                                                             |
| Language(s) used                                                       | 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                                 | LULEÅ/KALLAX TWR<br>KALLAX APP                                                                                                  |
| 10. Additional information (limitation of service, etc.)               | Flight planning room available                                                                                                  |

### ESPA 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	True 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°	3350 x 45	PCN 60/F/B/X/T ASPH	653317.27N 0220550.66E GUND 70.9 ft	THR 65.3 ft
32	317.33°	3350 x 45	PCN 60/F/B/X/T ASPH	653157.78N 0220847.59E GUND 70.9 ft	THR 21.0 ft TDZ: 28.9 ft
Designations RWY NR	Slope of RWY-SWY	SWY dimensions (m)	CWY dimensions (m)	Strip dimensions (m)	RESA dimensions (m)
1	7	8	9	10	11
14	See ESPA AOC	60 x 45	900 x 150	3470 x 300	-
32	See ESPA AOC	60 x 45	900 x 150	3470 x 300	-
Designations RWY NR	Location/ description of arresting system		OFZ (Yes/No)	Remarks	
1	12		13	14	
14	-		-	MIL marker boards 600 m from RWY end.	
32	-		-	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	-
32		3350	4250	3410	3350	-
RWY Designator	INTERSECTION	TORA (m)	TODA (m)	ASDA (m)	-	Remarks
1		2	3	4	5	6
14	TWY A1	3350	4250	3410	-	-
14	TWY A2	2650	3550	2710	-	-
14	TWY A3	2260	3160	2320	-	-
32	TWY A5	2335	3235	2395	-	-
32	TWY A6	2885	3785	2945	-	-
32	TWY A7	3350	4250	3410	-	-

**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 side/2.86° 57 ft	-	-	3350/60 m White Caution zone 600 m yellow LIL/LIH	Red	-
32	CALVERT CAT I 720 M LIL/LIH	Green	PAPI Left side/2.86° 57 ft	-	-	3350/60 m White Caution zone 600 m yellow LIL/LIH	Red	-
<b>10 Remarks:</b> RWY 14: APCH LGT includes military type EFAS.								
RWY 32: APCH LGT includes military type EFAS.								

**ESPA 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY**

- ABN/IBN location, characteristics and hours of operation** -
- LDI location and LGT** Lighted windsock 240 m S ARP
- Anemometer location and LGT** E THR 14 and E ARP, lighted
- TWY edge and centre line lighting** Edge: A, A1, A2, A3, A5, A6, A7  
CL: -
- Secondary power supply/switch-over time** Available / 13 sec, when operating OTS CAT II without interruption.
- 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 -<br>652556N 0223211E - 652146N 0222113E -<br>652808N 0215744E - 653908N 0214214E to point<br>of origin. |
| 2. Vertical limits                   | KALLAX CTR                           | 1600 ft AMSL<br><hr/> GND                                                                                                                    |
| 3. Airspace classification           | C                                    |                                                                                                                                              |
| 4. ATS unit call sign<br>Language(s) | KALLAX TOWER<br>Swedish/English      |                                                                                                                                              |
| 5. Transition altitude               | 5000 ft AMSL                         |                                                                                                                                              |
| 6. Hours of applicability            | CTR established during hours of TWR. |                                                                                                                                              |
| 7. Remarks                           | -                                    |                                                                                                                                              |

### ESPA 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Channels	Hours of operation	Remarks
1	2	3	4	5
TWR	KALLAX TOWER	128.205	HO	PRIMARY
		121.500	HO	VDF
APP	KALLAX APPROACH	125.455	HO	VDF
		130.805	HO	VDF
PAR	KALLAX PRECISION	119.005	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	Service volume radius from GBAS reference point	Remarks
1	2	3	4	5	6	7	8
LOC 14 ILS CAT I (10° E 2020)	PA	110.30 MHz	HO	653150.9N 0220902.8E	-	-	290 m beyond THR 32 ILS Class I/C/2
GP 14	-	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 14	-	-	-	653608.1N 0215919.7E	-	-	
MM 14	-	-	-	653342.2N 0220455.1E	-	-	

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	Service volume radius from GBAS reference point	Remarks
1	2	3	4	5	6	7	8
LOC 32 ILS CAT II (10° E 2020)	SPA	109.90 MHz	HO	653324.2N 0220535.3E	-	-	290 m beyond THR 14 ILS Class II/D/3
GP 32	-	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.
L 14	OL	377 kHz	H24	653608.3N 0215919.3E	-	-	Range 25 NM
VOR/DME (10° E 2020)	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	-	DME Channel 36X

**ESPA 2.20 LOKALA FLYGPLATSFÖRESKRIFTER****1. Klarering före uttaxning**

Klarering lämnas före/vid begäran om start-up. Klareringen utfärdas för gällande bana och tillämplig SID.

2. Då förhållandena så medger bör reversering utöver IDLE REVERSE eller motsvarande ej utföras. Start med reducerad dragkraft bör övervägas för att minska negativ miljöpåverkan.

3. Undvik back-track på banan mellan 15 april och 30 oktober på grund av risk för vridskador på asfalt.

4. Avgångsmeddelanden (A-DPI och C-DPI) skickas till Network Manager Operation Center (NMOC).

4.1. ADS-B-data krävs.

4.1.1. ADS-B-data används av flygplatsoperatören och Eurocontrol, piloter på flygplan utrustade med Mode S- och ADS-B-funktionalitet måste (när de opererar på marken):

a. Välja automatiskt läge och tilldelat läge A, eller

b. Om automatiskt läge inte är tillgängligt, välj PÅ och tilldelat läge A:

- Från tidpunkt vid begäran om pushback.
- Efter landning, tills flygplanet har stannat på sin uppställningsplats.
- När flygplanet är helt parkerat ska piloten välja STBY.

4.1.2. När flygplanet kan kommunicera sin identitet (dvs callsign) måste denna anges (via FMS eller transponderns kontrollpanel) vid tidpunkten för begäran om pushback.

**ESPA 2.20 LOCAL AERODROME REGULATIONS****1. 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.

2. 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.

3. Avoid back-track on RWY between April 15 and October 30 due to risk of surface damage.

4. Departure planning information messages (A-DPI and C-DPI) provided to Network Manager Operation Center (NMOC).

4.1. ADS-B data required.

4.1.1. For ADS-B data used by the AD operator and Eurocontrol, pilots of aircraft equipped with Mode S and ADS-B functionality must, when operating on the ground:

a. Select automatic mode and the assigned Mode A, or

b. If automatic mode is not available, select ON and the assigned Mode A:

- From the request of push-back.
- After landing, until the aircraft has stopped on its stand.
- When the aircraft is fully parked, the pilot shall select STBY.

4.1.2. When the aircraft is capable of communicating its identification (i.e callsign), this must be entered (via the FMS or transponder control panel) at the time of the push-back request.

4.1.3. Besättningen måste använda det format som definierats av ICAO för att ange sin identitet.

4.1.3. The crew must use the format defined by ICAO to enter the aircraft identification.

4.1.4. För att inte äventyra prestandan hos system baserade på SSR-frekvenser (inklusive luftburna TCAS och SSR-radar) bör TCAS inte väljas innan klarering för uppställning ges, och bör avmarkeras efter att banan lämnats.

4.1.4. In order not to compromise the performance of systems based on SSR frequencies (including airborne TCAS and SSR radars), TCAS should not be selected before receiving clearance to line up, and should be deselected after vacating the runway.

## **ESPA 2.21 BULLERREDUCERANDE FÖRFARANDE**

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.

## **ESPA 2.21 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**

## **ESPA 2.22 FLIGHT PROCEDURES**

### **1 Ankommande IFR-trafik inom Luleå TMA och Kallax CTR**

Flygvägar

Flygvägar för ankommande trafik är upprättade enligt ESPA STARs.

### **1 Inbound IFR traffic within Luleå MA and Kallax CTR**

Routes

Arrival routes are established in accordance with ESPA STARs.

Väntlägen (Ref ENR 1.3)

Väntlägen är upprättade enligt ESPA Area Chart.

Holdings (Ref ENR 1.3)

Holdings are established in accordance with ESPA Area Chart.

### **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.

### **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 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.

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.

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

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

Lågsiktsprocedurer (LVP) skall vara i kraft.

Low visibility procedures (LVP) shall be in force.

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

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

### **3 Avgående IFR-trafik inom Luleå TMA och Kallax CTR**

Flygvägar

Flygvägar för avgående trafik är upprättade enligt ESPA SIDs.

### **3 Outbound IFR traffic within Luleå TMA and Kallax CTR**

Routes

Departure routes are established in accordance with ESPA SIDs.

### **4 Startprocedurer, omnidirectional**

### **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.	Tree (CIO)	133	315°/4336

## 5 Avbrott i radioförbindelse

Allmänt

Luffartyg ska följa de föreskrifter som anges i AIP ENR 1.3 mom 10. Under IMC gäller dessutom följande.

### 5.1 Ankommande klarering mottagen och kvitterad.

Normalt är gällande bana gräns för den av ACC meddelade ankommande klareringen. Härvid skall luffartyget, med bibehållande av senast tilldelad och kvitterad flyghöjd, följa angiven flygväg till LULEÅ VOR (SLU).

Om gränsen för den av ACC meddelade klareringen är annan än gällande bana, skall luffartyget, med bibehållande av senast tilldelad och kvitterad flyghöjd, följa angiven flygväg till denna gräns och därifrån flyga direkt till LULEÅ VOR. Har beräknad tidpunkt för inflygning mottagits och kvitterats, skall plané påbörjas först vid denna tidpunkt.

Luffartyg som utför radarinflygning skall, med bibehållande av senast tilldelad och kvitterad flyghöjd, flyga direkt LULEÅ VOR (SLU).

Efter ankomst över LULEÅ VOR skall erforderlig plané utföras i publicerat väntläge, varefter normal instrumentinflygning skall utföras.

### 5.2 Ankommande klarering inte mottagen och/eller kvitterad.

Luffartyget skall, med bibehållande av senast tilldelad och kvitterad flyghöjd, flyga via aktuell inpasseringspunkt i TMA direkt till Luleå VOR (SLU). Efter ankomst över LULEÅ VOR skall erforderlig plané utföras i publicerat väntläge, varefter normal instrumentinflygning skall utföras.

## 6 Lågsiktsprocedurer (LVP) etablerade.

När LVP tillämpas tillåts endast ett luffartyg alternativt fordon på manöverområdet. Se även ESPA Aerodrome chart Special regulations.

## 7 VFR- flygning inom Kallax CTR

Normala in- och utpasserings-punkter

- a) MULON
- b) VALLEN

Se även ESPA VAC.

Normala flygvägar  
Se ESPA VAC.

## 5 Communication failure

General

Aircraft shall follow the procedures laid down in AIP ENR 1.3 para 10. In addition, in IMC the relevant procedures below shall be applied.

### 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 LULEÅ VOR (SLU).

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 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 LULEÅ VOR (SLU).

After arrival over LULEÅ VOR descent, if required, shall be made in the published holding pattern. 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 LULEÅ VOR (SLU). After arrival over LULEÅ VOR descent, shall be made in the published holding pattern. 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 ESPA Aerodrome chart Special regulations.

## 7 VFR flight within Kallax CTR

Normal entry and exit points

- a) MULON
- b) VALLEN

See also ESPA VAC.

Normal routes  
See ESPA VAC.

Anm. Då ESR46 är upprättat får flygning ej ske öster om linjen Sandöns västra spets – Lulnäsets strand, såvida ATS ej gett särskilt tillstånd härtill.

Note. When ESR46 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.

Väntlägen

a) NORD

b) SYD

Se även ESPA VAC.

Holding points

a) NORTH

b) SOUTH

See also ESPA VAC.

Avbrott i radioförbindelse

Se ESPA VAC.

Communication failure

See ESPA VAC.

### ESPA 2.23 TILLÄGGSSINFORMATION

Reducerad banseparation 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.

### ESPA 2.23 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 FLYGKARTOR AVSEENDE EN FLYGPLATS

### ESPA 2.24 AERONAUTICAL CHARTS RELATED TO AN AERODROME

<i>Charts</i>	<i>Pages</i>
Aerodrome Chart - ICAO	AD 2 ESPA 2 - 1
Taxiing Guidance Chart	AD 2 ESPA 2 - 2
Parking and docking Chart - ICAO	AD 2 ESPA 2 - 3
AOC - ICAO Type A RWY 14/32	AD 2 ESPA 3 - 1
PATC - ICAO RWY 32	AD 2 ESPA 3 - 3
Area Chart - ICAO LULEÅ TMA	AD 2 ESPA 5 - 1
SID - ICAO RNAV (GNSS) SID RWY 14	AD 2 ESPA 6 - 1
SID - ICAO RNAV (GNSS) SID RWY 32	AD 2 ESPA 6 - 3
STAR - ICAO RNAV (GNSS) STAR RWY 14	AD 2 ESPA 6 - 5
STAR - ICAO RNAV (GNSS) STAR RWY 32	AD 2 ESPA 6 - 7
SID/STAR - ICAO RWY 14	AD 2 ESPA 6 - 9
SID/STAR - ICAO RWY 32	AD 2 ESPA 6 - 11
ATC Surveillance Minimum Altitude Chart - ICAO	AD 2 ESPA 7 - 1
IAC - ICAO ILS z or LOC z RWY 14	AD 2 ESPA 8 - 1
IAC - ICAO ILS y or LOC y RWY 14	AD 2 ESPA 8 - 2
IAC - ICAO VOR RWY 14	AD 2 ESPA 8 - 3
IAC - ICAO NDB RWY 14	AD 2 ESPA 8 - 4
IAC - ICAO ILS or LOC RWY 32	AD 2 ESPA 8 - 5
IAC - ICAO ILS OTS Cat II RWY 32	AD 2 ESPA 8 - 6
IAC - ICAO VOR RWY 32	AD 2 ESPA 8 - 7
IAC - ICAO RNP RWY 14 (LNAV, LNAV/VNAV only)	AD 2 ESPA 8 - 9
IAC - ICAO RNP RWY 32 (LNAV, LNAV/VNAV only)	AD 2 ESPA 8 - 11
VAC - ICAO	AD 2 ESPA 9 - 1

### LIST OF WAYPOINTS AND SIGNIFICANT POINTS

See ESPA LULEÅ-KALLAX 4

### ESPA 2.25 GENOMTRÄNGANDE AV YTAN FÖR VISUELLA SEGMENTET (VSS)

### ESPA 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION