

AD 2 AERODROMES**ESOW 2.1 AERODROME LOCATION INDICATOR AND NAME****ESOW – STOCKHOLM/VÄSTERÅS****ESOW 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

- | | |
|---|---|
| 1. ARP coordinates and site at AD | 593522N 0163801E RWY centre point |
| 2. Direction and distance from (city) | E 3.0 NM from Västerås |
| 3. Elevation/Reference temperature | 21 ft/+18.7°C |
| 4. Geoid undulation at AD ELEV PSN | 84 ft |
| 5. MAG VAR/Annual change | 5° E 2015/+0.1 increasing |
| 6. Administration, address, telephone, fax, AFS | Västerås Flygplats AB
SE-721 31 Västerås
TEL: +46 (0)21 80 56 00
FAX: +46 (0)21 80 11 20
E-mail: operations@vasteras.se
AFS: ESOWZTZX
Website: www.vst.nu |
| 7. Types of traffic permitted (IFR/VFR) | IFR/VFR. Max RWY ref code 4C |
| 8. Remarks | - |

ESOW 2.3 OPERATIONAL HOURS

- | | |
|--|---|
| 1. AD Administration
AD Operating hours | MON-FRI 0700-1500 (0600-1400)
H24 |
| 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 | As ATS |
| 9. Handling | O/R |
| 10. Security | O/R |
| 11. De-Icing | O/R |
| 12. Remarks | Increased charges outside TWR HR of OPS |

ESOW 2.4 HANDLING SERVICES AND FACILITIES

- | | | |
|----|--|--|
| 1. | Cargo-handling facilities | Available, all types |
| 2. | Fuel/oil types | Fuel Jet A1, 100LL
Oil - |
| 3. | Fuelling facilities/discharge capacity | Jet A1: Fuel truck 8000 l
100LL: Stationary 5000 l |
| 4. | De-icing facilities | Available, Type I and II |
| 5. | Hangar space for visiting ACFT | O/R |
| 6. | Repair facilities for visiting ACFT | O/R |
| 7. | Remarks | Avgas 100LL available at APN 4 self-service.
Shell carnet with PIN or VISA with PIN required
otherwise O/R TEL +46 (0)21 41 06 30. |

ESOW 2.5 PASSENGER FACILITIES

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

ESOW 2.6 RESCUE AND FIRE FIGHTING SERVICES

- | | | |
|----|---|---|
| 1. | AD category for fire fighting | CAT 7 for SKED TFC, others O/R TEL +46 (0)21 80 56 01 |
| 2. | Rescue equipment | - |
| 3. | Capability for removal of disabled aircraft | By arrangement |
| 4. | Remarks | - |

ESOW 2.7 SEASONAL AVAILABILITY – CLEARING

- | | | |
|----|-----------------------------|------------------|
| 1. | Types of clearing equipment | Blowers/sweepers |
| 2. | Clearance priorities | RWY, TWY, Apron |
| 3. | Remarks | - |

ESOW 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

- | | | |
|----|-------------------------------------|--|
| 1. | Apron surface and strength | Apron 1 ASPH PCN 55 F/C/X/T
Apron 2 ASPH PCN 30 F/C/X/T
Apron 3 ASPH PCN 30 F/C/X/T
Apron 4 ASPH PCN 30 F/C/X/T
Apron 5 ASPH PCN 30 F/C/X/T
Apron 6 ASPH PCN 30 F/C/X/T |
| 2. | Taxiway width, surface and strength | TWY A 11 m ASPH PCN 30 F/C/X/T
TWY B 11 m ASPH PCN 30 F/C/X/T
TWY C 11 m ASPH PCN 30 F/C/X/T
TWY D 11 m ASPH PCN 30 F/C/X/T
TWY E 11 m ASPH PCN 30 F/C/X/T
TWY F 24 m ASPH PCN 55 F/C/X/T
TWY G 11 m ASPH PCN 30 F/C/X/T |
| 3. | ACL, location and elevation | Apron 1 35 ft |
| 4. | VOR checkpoints | - |
| 5. | INS checkpoints | - |
| 6. | Remarks | - |

ESOW 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 | <p>RWY 01/19: Designator, THR, TDZ, CL, edges day marked.
RTHL, REDL, RENL</p> <p>TWY A: CL, ITHP day marked, Edge LGT
 B: CL, HLDG day marked, Edge LGT, RGL
 C: CL, HLDG day marked, Edge LGT, RGL
 D: CL day marked, blue reflective edge markers
 E: CL, HLDG day marked, blue reflective edge markers, RGL
 F: CL, HLDG day marked, Edge LGT, RGL
 G: CL day marked, Edge LGT</p> |
| 3. | Stop bars | - |
| 4. | Remarks | - |

ESOW 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					

ESOW 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 | STOCKHOLM/Arlanda
9 HR HO |
| 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 | STOCKHOLM/Västerås TWR |
| 10. | Additional information (limitation of service,
etc.) | Flight planning room |

ESOW 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
01	011.64° GEO 007° MAG	2581 x 46	PCN 55 F/B/X/T ASPH	593442.54N 0163745.30E GUND 84 ft	THR 5 ft
19	191.65° GEO 187° MAG	2581 x 46	PCN 55 F/B/X/T ASPH	593604.23N (*) 0163818.51E GUND 84 ft	THR 21.3 ft TDZ 18 ft

Slope of RWY-SWY	SWY dimensions (m)	CWY dimensions (m)	Strip dimensions (m)	OFZ	Remarks
7	8	9	10	11	12
01 Info not avbl.	-	-	2701 x 300	-	-
19 Info not avbl.	-	-	2701 x 300	-	-

ESOW 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
01	2581	2581	2581	2581	-
19	2581	2581	2581	2581	-

ESOW 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
01	Barrette CL SALS 330 m LIH	Green	PAPI Left/3.25° (59.0 ft)	-	-	2581/60 m White Caution zone 600 m yellow LIH	Red	-
19	Barrette CL CAT I 900 m LIH	Green	PAPI Left/3.00° (50.0 ft)	-	-	2581/60 m White Caution zone 600 m yellow LIH	Red	-
10 Remarks: RWY 01: PCL LIL RWY and TWY on FREQ 130.600 MHz 15 sec carrier wave RWY 19: PCL LIL RWY and TWY on FREQ 130.600 MHz 15 sec carrier wave								

ESOW 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

- | | | |
|----|--|--|
| 1. | ABN/IBN location, characteristics and hours of operation | ABN at TWR FLG W/G 24/min HO |
| 2. | LDI location and LGT
Anemometer location and LGT | Lighted windsock E TWY C and at RWY ends
300 m past THR 01 right side, lighted
410 m past THR 19 right side, lighted |
| 3. | TWY edge and centre line lighting | Edge: TWY A, B, C, F, G

CL: - |
| 4. | Secondary power supply/switch-over time | Available/No interruption |
| 5. | Remarks | - |

ESOW 2.16 HELICOPTER LANDING AREA

RWY 01/19 or grass strip 01/19 to be used

ESOW 2.17 ATS AIRSPACE

- | | | | |
|----|-----------------------------------|---|---|
| 1. | Designation and lateral limits | VÄSTERÅS CTR | 594704N 0163615E - 594556N 0164805E -
593406N 0164749E - 592348N 0163944E -
592454N 0162810E - 593633N 0162752E -
594704N 0163615E |
| 2. | Vertical limits | VÄSTERÅS CTR | 1500 ft AMSL
<hr/> GND |
| 3. | Airspace classification | C | |
| 4. | ATS unit call sign
Language(s) | VÄSTERÅS TOWER
Swedish/English | |
| 5. | Transition altitude | 5000 ft AMSL | |
| 6. | Remarks | CTR established during hours of TWR.
Johannisberg ATZ with airspace class G penetrates CTR. The lower limit of Västerås CTR in this part is 1000 ft AMSL. For details see ENR 2.2 and AD 2 ESOW 6-1. | |

ESOW 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
TWR	VÄSTERÅS TOWER	130.600 MHz	HO	Primary FREQ VDF.
		121.500 MHz	HO	-
TMC	VÄSTERÅS CONTROL	125.950 MHz	HX	VDF
		121.500 MHz	HO	-
ATIS	VÄSTERÅS ATIS	127.550 MHz	HO	-

ESOW 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
L 01	RD	419 kHz	H24	593103.1N 0163616.3E		Range 15 NM
LOC 19 ILS CAT I (5° E 2015)	SCD	108.30 MHz	H24	593433.3N (*) 0163741.5E		292 m beyond THR 01 ILS Class I/E/2
GP		334.10 MHz	H24	593555.0N (*) 0163807.0E		Angle 3.0° RDH 50 ft 315 m past THR 19 right side
L 19	LE	333 kHz	H24	593946.8N 0163948.8E		Range 15 NM
DVOR/DME (5° E 2015)	ARS	112.80 MHz	H24	593510.3N 0163901.4E	50 ft	1000 m ESE ARP DME channel 75X
DME	SCD	108.30 MHz	H24	593555.0N (*) 0163807.0E	38 ft	DME channel 20X

ESOW 2.20 LOKALA TRAFIKFÖRESKRIFTER

1. Föreskrifter för skol- och övningsflygning

För skol- och övningsflygning gäller PPR.

Upprepade start- och landningsövningar TGL tillåts endast:
15 JUN–15 AUG MON–FRI 0800–1700 (0700–1600),
16 AUG–14 JUN MON–FRI 0600–2000 (0500–1900),
SAT, SUN och HOL 0800–1600 (0700–1500).

TGL får inte utföras under långfredagen, påskafton, Kristi
Himmelsfärdsdag, pingstafton, midsommarafton,
midsommardagen, Alla Helgons dag, julafton och juldagen.

2. Trafikvarv skall förläggas E RWY utanför TWR
öppethållning.

LOCAL TRAFFIC REGULATIONS

1. Provisions to school and training flights

School and training flights are subject to PPR.

Repeated touch-and-go landings TGL only permitted:
15 JUN–15 AUG MON–FRI 0800–1700 (0700–1600),
16 AUG–14 JUN MON–FRI 0600–2000 (0500–1900),*
SAT, SUN and HOL 0800–1600 (0700–1500).

TGL not permitted Good Friday, Easter Eve, Ascension Day,
Whitsun Eve, Midsummer Eve, Midsummer Day, All Saints
Day, Christmas Eve and Christmas day.

2. Traffic circuit shall be flown E RWY outside TWR HR
of OPS.

ESOW 2.21 MINSKNING AV BULLERSTÖRNING

Flygning över Västerås centrala delar, Irsta och Björnön bör
undvikas under 2000 ft utom i direkt samband med in- eller
utflygning.

NOISE ABATEMENT PROCEDURES

Flight should be avoided over the central part of Västerås,
Irsta and Björnön below 2000 ft, except in direct connection
to take-off or landing.

ESOW 2.22 FLYGPROCEDURER

FLIGHT PROCEDURES

1. Startprocedurer, omnidirectional

1. Omnidirectional departure procedures

RWY	Procedure	Significant obstacle		
		Obstacle	Elevation (ft)	Direction (GEO)/Dist (m) from THR
01	Climb straight ahead with MNM 380 ft/NM (6.2%) to MNM turning ALT 500 ft. Continue climb to appropriate MSA.	Pylon	151	018°/3200
		Pylon	1191	299°/14650
19	Climb straight ahead to MNM turning ALT 600 ft. Continue climb to appropriate MSA.	(CIO) Terrain	181	198°/3260
		Pylon	1191	291°/14100

2. VFR-flygning inom CTR

2. VFR flight within CTR

- a) Normal höjd i trafikvarv 1000 ft. Undantag E RWY perioden SEP–APR 700 ft.
b) Sväng efter start bör undvikas under 700 ft, båda banorna.

- a) Altitude in traffic circuit normally 1000 ft except E RWY period SEP–APR when 700 ft applies.
b) Initial turn after take-off should be avoided below 700 ft, both RWYs.

ESOW 2.23 ÖVRIG INFORMATION

Förhandsmeddelande (PN) krävs för nedanstående flygverksamhet inom Stockholm TMA.

- Skol- och övningsflygning som omfattar "airwork, flygning i väntläge och/eller upprepande instrumentinflygningar.
- Fotoflygning.
- Geologisk mätflygning och liknande.
- Lyft av fallskärmshoppare.
- Förplanerad kontrollflygning (mätflygning) av navigerings- och inflygningshjälpmedel.

Innan färdplan lämnas in, skall förhandsmeddelande lämnas till skiftledaren vid Stockholm ACC TEL 08/585 547 02.

Undantag: Om flygningen enbart kommer att beröra sektor Västerås, skall tillstånd inhämtas från Västerås ATS TEL 021 80 00 20.

Förhandsmeddelande (PN) krävs för all flygning utan ATS-färdplan i ESOW CTR samt Stockholm TMA sektor Västerås TEL 021 80 00 20.

ADDITIONAL INFORMATION

Prior notice (PN) is required for operations mentioned below within Stockholm TMA.

- School and training flights comprising "airwork", holding/ or repeated instrument approaches.
- Aerial photographing.
- Geological survey flights and the like.
- Lifting of parachutists.
- Non-urgent nav aids and approach aids calibration flights.

Before submitting the flight plan, the operator shall give prior notice of the flight to the Tactical Supervisor. Stockholm ACC TEL +46 (0)8 585 547 02.

Exception: If the flight will be conducted within Västerås sector only, permission shall be obtained from Västerås ATS, TEL +46 (0)21 80 00 20.

Prior notice (PN) is required for all operations without ATS flight plan in ESOW CTR and Stockholm TMA sector Västerås TEL +46 (0)21 80 00 20.

ESOW 2.24 TILLHÖRANDE KARTOR

RELATED CHARTS

AD chart

AOC

Area Chart

ATC Surveillance

Minimum ALT Chart

IAC

NDB+DME+ILS 19

IAC

NDB 19

IAC

VOR 19 Cat B/C/D

IAC

VOR 01 Cat B/C/D

IAC

NDB 01

VAC

ESOW 2-1

ESOW-3-1

See **ESSA 4-1**

ESOW 4-91

ESOW-5-1

ESOW-5-2

ESOW-5-3

ESOW-5-5

ESOW-5-6

ESOW 6-1