

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	6° E 2020/+0.2 increasing
6.	Administration, address, telephone, fax, AFS	Nya Västerås Flygplats AB SE-721 31 Västerås TEL: +46 (0)21 80 56 00 FAX: +46 (0)21 80 11 20 E-mail: operations@vasterasairport.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 0800-1500 (0700-1400) 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	Jet A1: Available 30 min after ATS opening until 30 min before ATS closing.
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 trucks 40,000 l
100LL: Stationary 20,000 l |
| 4. De-icing facilities | Available, Type I and II |
| 5. Hangar space for visiting ACFT | O/R TEL +46 (0)21 33 32 25 |
| 6. Repair facilities for visiting ACFT | O/R TEL +46 (0)21 33 32 25 |
| 7. Remarks | Avgas 100LL only available at APN 4, self service,
otherwise O/R TEL +46 (0)21 41 06 30.
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 | RWY 01/19 de-iced/anti-iced with KAC/KFOR and /or SAND. |

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 12 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 25 m ASPH PCN 55 F/C/X/T TWY G 12 m ASPH PCN 30 F/C/X/T
3.	ACL, location and elevation	Stand 3 37 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	RWY 01/19: Designator, THR, TDZ, CL, edges day marked. RTHL, REDL, RENL 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
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, 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 | 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 006° MAG	2581 x 45	PCN 55 F/B/X/T ASPH	593442.54N 0163745.30E GUND 84 ft	THR 6 ft
19	191.65° GEO 186° MAG	2581 x 45	PCN 55 F/B/X/T ASPH	593604.23N 0163818.51E GUND 83.7 ft	THR 21.7 ft TDZ 21.7 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 channel 130.605 15 sec carrier wave RWY 19: PCL LIL RWY and TWY on channel 130.605 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, H24 |
| 2. LDI location and LGT
Anemometer location and LGT | Lighted windsock E TWY C. Windsocks at RWY ends and E Apron 3.
366 m NE THR 01, lighted
403 m SW THR 19, 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

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	Channel/Frequency	Hours of operation	Remarks
1	2	3	4	5
TWR	VÄSTERÅS TOWER	130.605	HO	Primary channel VDF.
		121.500	HO	-
TMC	VÄSTERÅS CONTROL	125.955	HX	VDF
		121.500	HO	-
ATIS	VÄSTERÅS ATIS	127.555	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	593103.2N 0163616.3E		Range 15 NM
LOC 19 ILS CAT I (6° E 2020)	SCD	108.30 MHz	H24	593433.2N 0163741.5E		294 m beyond THR 01 ILS Class I/E/2
GP		334.10 MHz	H24	593555.0N 0163807.0E		Angle 3.0° RDH 49.9 ft 315 m past THR 19 right side
L 19	LE	333 kHz	H24	593946.9N 0163948.7E		Range 15 NM
DVOR/DME (6° E 2020)	ARS	112.80 MHz	H24	593510.4N 0163901.2E	40 ft	1012 m ESE ARP DME channel 75X
DME	SCD	108.30 MHz	H24	593554.8N 0163807.2E	32 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 till RWY skall förläggas E RWY utanför TWR öppethållning. Trafikvarv till stråket ska förläggas W stråket utanför TWR öppethållning.

3. Ankommande VFR-trafik bör passera flygplatsen på 1500 ft innan angörning av trafikvarv utanför TWR öppethållning. Reducering av höjd sker på lämplig plats då trafikvarv kan förekomma samtidigt på båda sidor om fältet.

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 to RWY shall be flown E RWY outside TWR HR of OPS. Traffic circuit to the strip shall be flown W strip outside TWR HR of OPS.

3. Arriving VFR traffic should pass the aerodrome at 1500 ft before joining traffic circuit outside TWR HR of OPS. Descending at appropriate location as active traffic circuit may occur simultaneously on both sides of airfield.

4. VFR in- och utpasseringspunkter bör användas utanför TWR öppethållning. Under TWR öppethållning bör rätt VFR in och utpasseringspunkt nyttjas i förhållande till bana i användning. Bana 01 inpasseringspunkter är Vikhus och Golfbanan. Bana 01 utpasseringspunkter är Romfartuna och Björksta. Bana 19 inpasseringspunkter är Romfartuna och Björksta. Bana 19 utpasseringspunkter är Vikhus och Golfbanan. ATC klarering kan avvika.

4. VFR entry- and exit points should be used outside of TWR HR of OPS. During TWR HR of OPS should correct VFR entry and exit point be used according to RWY in use. RWY 01 entry points are Vikhus and Golfbanan. RWY 01 exit points are Romfartuna and Björksta. RWY 19 entry points are Romfartuna and Björksta. RWY 19 exit points are Vikhus and Golfbanan. ATC clearance may deviate.

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

1. Startprocedurer, omnidirectional

FLIGHT PROCEDURES

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

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

2. VFR flight within CTR

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

ESOW 2.23 ÖVRIG INFORMATION

1. Förhandstillstånd (PPR)/Förhandsmeddelande (PN) krävs för nedanstående flygverksamhet inom Stockholm TMA.

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

Innan färdplan lämnas in, skall förhandstillstånd (PPR) inhämtas eller förhandsmeddelande (PN) lämnas till skiftledaren vid Stockholm ACC TEL 08 585 547 02.

Undantag: Om flygningen kommer att beröra sektor Västerås gäller PPR för samtliga ovanstående flygverksamheter. 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

1. Prior Permission (PPR)/Prior notice (PN) required for operations mentioned below within Stockholm TMA.

- School and training flights comprising "airwork", holding/or repeated instrument approaches (PN).
- Aerial photographing (PPR).
- Geological survey flights and the like (PN).
- Parachute dropping (PN).
- Non-urgent nav aids and approach aids calibration flights (PN).

Before submitting the flight plan, the operator shall get prior permission or give prior notice of the flight to the Watch Supervisor at Stockholm ACC, phone +46 (0)8 585 547 02.

Exception: If the flight will be conducted within Västerås sector, PPR applies for all operations mentioned above. Permission shall be obtained from Västerås ATS, phone +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 phone +46 (0)21 80 00 20.

2. Reducerad banseparation tillämpas på flygplatsen enligt AD 1.1 mom 10.

2. Reduced RWY separation applies at the aerodrome according to AD 1.1 para 10.

ESOW 2.24 TILLHÖRANDE KARTOR

AD chart
AOC
Area Chart
List of waypoints and significant points
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
IAC RNP RWY 01
IAC RNP RWY 19
VAC

RELATED CHARTS

ESOW 2-1
ESOW-3-1
See **ESSA 4-1**
ESOW 4-3

ESOW 4-91

ESOW 5-1
ESOW 5-2
ESOW 5-3
ESOW 5-5
ESOW 5-6
ESOW 5-7
ESOW 5-11
ESOW 6-1