

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	PPR. See para 2.20.

ESOW 2.3 OPERATIONAL HOURS

1.	AD Administration AD Operating hours	MON-FRI 0700-1600 (0600-1500) H24
2.	Customs and immigration	O/R
3.	Health and sanitation	O/R
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	Fuel truck Jet A1: Available 30 min after ATS opening until 30 min before ATS closing. Self Service: Jet A1, 100LL and UL91, see para 2.4.7.
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, UL91 Oil -
3.	Fuelling facilities/discharge capacity	Jet A1: 2 trucks x 20,000 l. Fuel tank 100,000 l for fuel trucks on APN 1. Stationary 10,000 l on APN 4. 100LL: 2 stationary x 20,000 l. UL91: Stationary 20,000 l.
4.	De-icing facilities	Available, Type I and II
5.	Hangar space for visiting ACFT	O/R operations@vasterasairport.se
6.	Repair facilities for visiting ACFT	O/R operations@vasterasairport.se
7.	Remarks	Jet A1 AirBP: self service APN 4 (AirBP carnet) 100LL AirBP: self service APN 4 (AirBP carnet) 100LL Shell: self service APN 4 (Shell carnet/VISA) UL91 AirBP: self service APN 4 (AirBP carnet) For inquiry about self service payment options other than listed above, contact TEL +46 (0)21 41 06 30 MON-FRI 0800-1600 (0700-1500) prior to flight.

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. CAT 5 for TFC up to 10 000 kg MTOM during TWR HR of OPS. Others O/R TEL +46 (0)21 80 56 01 or email operations@vasterasairport.se
2.	Rescue equipment	-
3.	Capability for removal of disabled aircraft	TEL +46 (0)70 465 80 31
4.	Remarks	-

ESOW 2.7 SEASONAL AVAILABILITY – CLEARING

1.	Types of clearing equipment	Blowers/sweepers
2.	Clearance priorities	RWY, TWY, Apron
3.	Remarks	RWY de-iced/anti-iced with NAFO/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	Apron 1, 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 in feet	Markings/ Type, colour	Remarks
a	b	c	d	e	f
ESOW1	Vegetation	593617.9N 0163815.9E	59 / -	-	-
ESOW2	Vegetation	593618.0N 0163815.6E	61 / -	-	-
ESOW3	Vegetation	593701.3N 0163822.7E	142 / -	-	-
ESOW4	Vegetation	593735.1N 0163833.3E	198 / -	-	-
ESOW5	Vegetation	593736.3N 0163835.5E	212 / -	-	-
ESOW6	Vegetation	593737.0N 0163836.9E	214 / -	-	-
ESOW7	Vegetation	593433.8N 0163734.4E	27 / -	-	-
ESOW8	Vegetation	593432.3N 0163749.1E	27 / -	-	-
ESOW9	Vegetation	593411.2N 0163718.3E	84 / -	-	-
ESOW10	Vegetation	593410.6N 0163722.6E	88 / -	-	-
ESOW11	Vegetation	593355.6N 0163720.1E	109 / -	-	-
ESOW12	Vegetation	593355.0N 0163719.0E	113 / -	-	-
ESOW13	Vegetation	593348.6N 0163723.8E	121 / -	-	-
ESOW14	Vegetation	593340.5N 0163722.6E	141 / -	-	-
ESOW15	Vegetation	593331.7N 0163737.0E	152 / -	-	-

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	-

DECLARED DISTANCES TAKE-OFF INTERSECTIONS						
RWY	INTERSECTION	TORA (m)	TODA (m)	ASDA (m)	Remarks	
1		2	3	4	5	6
01	TWY B	2013	2013	2013	-	-
01	TWY C	1154	1154	1154	-	-
19	TWY C	1438	1438	1438	-	-
19	TWY E	1995	1995	1995	-	-

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 7 sec carrier wave
RWY 19: PCL LIL RWY and TWY on channel 130.605 7 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 RWY 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	-
APP	VÄSTERÅS APPROACH	125.955	HO	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

LOCAL TRAFFIC REGULATIONS

1. Tillgänglighet

1. Availability

PPR för all trafik i ESOW CTR samt TMA Sektor Västerås under ATS öppethållningstid.
Telefon +46 (0)21 80 00 20. SKED TFC, SAR, HOSP och polisflygningar undantaget.

Start och landning på flygplatsen är förbjudet utanför ATS öppethållning. SAR, HOSP, polisflygningar och brukare med lokala skriftliga överenskommelser är undantagna.
För information kontakta e-mail:
flightrequest@vasterasairport.se

2. Föreskrifter för skol- och övningsflygning

Upprepade start- och landningsövningar (TGL) tillåts endast:
15 MAY–14 JUN MON–FRI 0600–1900 (0500–1800),
SAT 0900–1300 (0800–1200).
15 JUN–15 AUG MON–FRI 0800–1700 (0700–1600).
16 AUG–14 MAY MON–FRI 0600–1900 (0500–1800),
SAT 0800–1600 (0700–1500).

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

3. Trafikföreskrifter

Utanför ATS öppethållningstider:
VFR in- och utpasseringspunkter bör användas.
Ankommande VFR-trafik bör passera plats på 1500 ft AMSL innan angöring av trafikvarv.
Reducering av höjd sker därefter enligt eget avgörande.
Trafikvarv till RWY skall förläggas E RWY.
Gräsbana stängd.

Under ATS öppethållning:
Rätt VFR in- och utpasseringspunkt bör 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. Parkering allmänflyg

Parkering för allmänflyget på platta 4 om inget annat meddelats.

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.

PPR for all TFC in ESOW CTR and in TMA Sector Västerås during ATS HR of OPS.
Phone +46(0)21 80 00 20. SKED TFC, SAR, HOSP and police flights exempted.

Take-off and landing at the aerodrome is prohibited outside ATS HR of OPS. SAR, HOSP, Police flights and operators with local written agreement exempted.
For information contact e-mail:
flightrequest@vasterasairport.se

2. Provisions to school and training flights

Repeated touch-and-go landings (TGL) only permitted:
15 MAY–14 JUN MON–FRI 0600–1900 (0500–1800),
SAT 0900–1300 (0800–1200).
15 JUN–15 AUG MON–FRI 0800–1700 (0700–1600).
16 AUG–14 MAY MON–FRI 0600–1900 (0500–1800),
SAT 0800–1600 (0700–1500).

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

3. Traffic regulations

Outside ATS HR of OPS:
VFR entry and exit points should be used.
Arriving VFR traffic should pass overhead at 1500 ft AMSL before joining traffic circuit and descending at own discretion.
Traffic circuit to RWY shall be flown E RWY.
Grass RWY closed.

During ATS HR of OPS:
VFR entry and exit point should be used in accordance with current 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.
Deviations may occur according to ATC clearance.

4. Parking General Aviation

General Aviation parking at apron 4 unless otherwise instructed by ATS.

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

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

Upprepade start- och landningsövningar för luftfartyg i turbulenskategori L ska ske på lägst 1000 ft (300 m) AMSL, utom i samband med start och landning.

Upprepade start- och landningsövningar för luftfartyg i turbulenskategori M och H ska ske på lägst 2 000 ft (600 m) AMSL, utom i samband med start och landning.

Upprepade start- och landningsövningar för luftfartyg i turbulenskategori L (med undantag för övning med helikopter) ska genomföras i det östra trafikvarvet vid varje tillfälle flygsäkerheten så tillåter.

FLIGHT PROCEDURES

1. Omnidirectional departure procedures

2. VFR flight within CTR

Repeated take-off and landing exercises for aircraft in wake turbulence category L shall be conducted at minimum 1000 ft (300 m) AMSL, except in connection with take-off and landing.

Repeated take-off and landing exercises for aircraft in wake turbulence category M and H shall be conducted at minimum 2000 ft (600 m) AMSL, except in connection with take-off and landing.

Repeated take-off and landing exercises for aircraft in wake turbulence category L (with the exception of exercises with helicopters) must be carried out in the eastern traffic circuit whenever flight safety allows.

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 instrumentinflygningar (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, se punkt 2.20.

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

3. Modellflygsektor Arosängen

Aktivitet med obemannade luftfartyg kan förekomma. Position 594028N 0163416E med 400 m radie och max 120 m över marken.

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 sector Västerås, see para 2.20.

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

3. Model flying sector Arosängen

Unmanned aircraft activity may occur. Position 594028N 0163416E with 400 m radius and max 120 m above ground.

ESOW 2.24 TILLHÖRANDE KARTOR

AD chart
AOC
Area Chart
List of waypoints and significant points
ATC Surveillance Minimum ALT Chart
IAC
IAC
IAC
IAC
IAC
IAC
VAC

RELATED CHARTS

ESOW 2-1
ESOW-3-1
See **ESSA 4-1**
ESOW 4-3
ESOW 4-91
NDB+DME+ILS 19 ESOW 5-1
NDB 19 ESOW 5-2
NDB 01 ESOW 5-3
RNP RWY 01 ESOW 5-7
RNP RWY 19 ESOW 5-11
ESOW 6-1