SVALBARD (LYR/ENSB)

Elevation 94ft

CATEGORY B

No AV brief available.

GENERAL

- The airport is located 1.6nm north-west of the town of Longyearbyen, on the south side of a large bay, Adventfjorden
- LYR is the northernmost airport in the world with scheduled public flights
- LYR Air Traffic Services consists of a Flight Information Service only. There is no ATC service, and no Radar.

Threat Based Briefing Topics

CFIT

- The airfield is surrounded by high ground on all sides, and in particular to the S and E.
- Terrain rises sharply to the S of the airfield, with the 1,000ft asl contour lying less than 1nm S and spot heights up to 3,458ft asl just 4nm S
- To the NE there are peaks of 3,114ft asl ~4nm NE, 3,150ft asl ~8nm NE and 3,540ft ~9nm NE
- A ridge rises up to 3,750ft asl directly under the final approach to Rwy 28 at ~13nm
- Rwy 28 ILS and RNAV approaches considerably offset to fly down a steep, narrow valley
- LOC and RNAV Rwy 28 have 3.6° vertical profiles and reversal procedures take place over very high ground
- Note Rwy 10 missed approach speed restrictions to ensure terrain clearance

Runway Excursion

- Short landing Rwy 28 due to disparity between PAPIs (3.4°) and RNAV/LOC vertical profile (3.6°)
- Long landing Rwy 28 due to excessive mitigation/flare following steep approach profile

Mid Air Collision

- No Radar available
- Longyear provides a Flight Information Service only. The FISO's instructions are mandatory on the ground, but in the air may be considered advisory only. No ATC separation can be guaranteed and a good lookout is essential
- SID initial climb clearance is to an altitude, but above the TA of 5,000ft. Careful attention to altimeter setting procedures is required

Loss of Control

- Risk of 'black hole illusion' during night approaches
- Risk of turbulence and WINDSHEAR on short final to both runways, as well as severe turbulence below FL100 with wind 160° to 270° above 20kt

ARRIVAL

Approach

- No Radar. Expect a procedural approach.

- Severe turbulence can be expected below FL100 with S/SW'ly winds above 20kt
- If landing 28, the LOC approach provides the lowest minima. However, if the weather allows it may be preferable to fly the RNAV approach which will provide a vertical path
- Both LOC and RNAV Rwy 28 approaches have 3.6° vertical profiles due to terrain. It is recommended that the aircraft is fully configured before reaching the final descent point to prevent an excessive airspeed increase and possible rushed approach.
- Rwy 28: Do not deviate from the final approach track until visual contact has been established and can be maintained
- The Rwy 28 PAPIs are set at 3.4° and therefore will indicate HIGH when the aircraft is on the correct 3.6° LOC/RNAV profile. This will be exacerbated in the B744 due to the high eye-wheel height. **Do not be tempted to dive for the PAPIs once visual.**
- Rwy 10 has a significant (for the LDA) inset threshold
- Both runways suffer from severe turbulence and WINDSHEAR on short final with strong S/SW'ly winds

Missed Approach

- Rwy 10: note speed restrictions on the missed approach in order to maintain terrain clearance

GROUND

- Twy A unsuitable for B744 aircraft
- Very limited parking and ground services available

DEPARTURE

- IRS High Latitude Alignment procedure required. FCOM SP.11.8 refers. Note that the alignment will take a minimum of 17 minutes, so it is recommended that the alignment process is started at the earliest opportunity after the aircraft is shut down to avoid delaying the next departure.
- ATC clearance will be relayed by the Longyear FISO
- TA is 5,000 ft but initial climb on SIDs is to either 5,100 or 5,500ft altitude. Pay careful attention to altimeter settings and climb clearances
- Vessels in the bay crossing the departure area may penetrate the 3.3% SID climb gradient

WEATHER

- Temperatures are generally extremely mild for the latitude as a result of the influence of the warm North Atlantic Current

- However, the archipelago is the meeting place for cold polar air from the north and mild, wet sea air from the south. This can lead to low pressure and rapidly changeable conditions with high wind speeds, especially in winter
- Fog common during summer
- Precipitation frequent but generally falls in small quantities
- Average max/min temperatures -20°C/-9°C (Jan) and 3°C/7°C (Jul)

OPERATIONAL INFORMATION

Handling Agent	Simfest Ground Services
Handling Agent VHF	
Potable Water	Uplift permitted

IF ONLY Electrical Power is required	Use APU (no GPU available)
If BOTH electrical power and air conditioning is required:	Use APU for air conditioning (ACU equipment not available)