

Pilot briefing ENTC Tromsø, Langnes airport

General

Tromsø - Langnes airport is situated on an island surrounded by high mountains in the arctic region of northern Norway. The climate is harsh and unpredictable, especially during winter. Arctic depressions can create sudden and persistent snow showers with visibility and ceilings below minima as well as rapidly changing wind directions and speeds. The airport is close to the sea, so temperatures often hovers around 0°C, with wet contaminants on the runway as a result. Polar night prevails NOV – FEB, during which there is little more than four hours of twilight between the periods of darkness.

The terrain surrounding the airport necessitates steep approach angles, and the ILS glideslope and PAPI to both runways have an approach angle of 4 degrees. The steep approach angles dictate an early aircraft configuration to control the speed during approach and to be stabilized in due time for a safe landing. The missed approach procedures are largely below the mountain summits, published speed limits must be adhered to in order to maintain a safe distance to the terrain. Safe operations require thorough preparations and proficient execution!

Please see the attached pictures for area familiarization.

Planning

A detailed study of approach procedures and airport information in AIP and/or OM-C is required. Thorough planning with regard to expected weather and runway conditions is necessary for a successful outcome.

The braking action / friction values stated in SNOWTAM, ATIS and R/T communication are based on measured friction, weather conditions and the observer's experience. Friction measuring is not an exact science and precise figures are sometimes hard to obtain. When the temperature hovers around 0°C the friction is particularly unreliable. Pilots must therefore use their own judgement when considering the figures. This is especially important during periods of heavy snow when friction values may change significantly between the runway closures. Time of treatment is critical, and good communication with ATC is paramount for a correct calculation of landing and takeoff performance.

The airport services will remove contamination regularly during precipitation and do their utmost to obtain acceptable friction values. Normal time for snow clearance in moderate snow conditions is 30 min. However, during heavy snow this is not always possible. Extra fuel for holding should be carried if such conditions are forecasted, and an alternate with stable conditions should be selected, especially when there are snow showers at ENTC. Selecting an alternate on the other side of the mountain range (e.g. in Sweden or Finland) may be a good solution. Remember to check opening hours at the alternate airport, taking holding time and flying time into consideration.

Descend and approach

A stabilized approach is necessary for a safe landing. To be stabilized in due time, assertive speed control during descend, and especially approach, is required. Most jet-aircraft are designed for an approach angle of approximately 3 degrees, so the steep approaches into Tromsø - Langnes airport require special attention and a detailed flight crew briefing. Normally, intermediate approach configuration and the corresponding speed should be achieved before starting the final descend, and landing configuration and final approach speed should be achieved minimum 6 NM before the runway threshold. If tailwind is experienced or expected during the approach, landing configuration and final approach speed should be achieved before starting the final descend.

Constant attention to prevailing weather conditions, and especially changes in wind and precipitation at the airport, should be kept during the entire descend and approach. Margins and threshold values must be discussed during the flight crew briefing. If conditions are not satisfactory, the approach should be delayed or a missed approach executed.

Landing

The runway aiming points are equipped with three white lights, embedded on each side of the runway centerline. This is to aid pilots in achieving a precise touchdown and thereby ensure the stopping distance is according to the calculations. A firm touchdown, maximum braking and reverse thrust is recommended if conditions are marginal or uncertain.

Simple Touch Down Zone lights, consisting of two yellow lights on each side of the runway, indicate the end of the touch down zone. However, landing should be as close to the aiming point as possible and well before these lights.

The RESA (Runway End Safety Area) for runway 18 is only 90 meters wide. The RESA edges are marked by a red light on both sides. The first part is on a bridge with steep drops on both sides.

Restrictions on tailwind landings for jet-aircraft on contaminated runway 18.

These restrictions apply only for landing. In this context, contamination is considered to be frost, ice, slush, snow etc., not damp or wet.

As a safety precaution CAA Norway has set a maximum allowed tailwind component of 8 knots for jet-aircraft landing on runway 18 when the runway is contaminated. The wind component is based on the average reading the last two minutes from the northern anemometer.

Factors to be considered when selecting runway for landing:

- Wind readings from Kjølén anemometer, 4 NM NW of ENTC at 2600 FT
- The fact that LDA RWY 36 is longer than LDA RWY 18
- Pilot reports from preceding approaches and landings
- Requests and assessments by Pilot in command