

RNAV STARs at STOCKHOLM/ARLANDA

GENERAL

RNAV STARs at STOCKHOLM/Arlanda are divided into two parts depending on traffic density situation at ATC discretion.

High to medium traffic density

Simplified RNAV STARs ending up at an IAF. Operators will be radar vectored to final.

Pilots are requested to plan descent to perform a continuous descent operation (CDO) from at least FL100.

Low traffic density

RNAV STARs leading to final approach are primarily used at night and during periods of low traffic density at ATC discretion. RNAV STARs are noise preferential routes and should be adhered to.

Pilots are requested to plan their descent so as to perform a continuous descent operation (CDO) from at least FL100. Specified minimum level at waypoints must be adhered to unless specifically cancelled by ATC.

When descending on initial approach, noise reductions should be achieved by using Low Power, Low Drag operating procedures (LP/LD) by maintaining a "clean" aircraft configuration until the final stage of the approach, provided this is consistent with safe operation of the aircraft.

APPROVED USERS, EQUIPMENT AND OPERATIONS

RNAV 1 is required for these RNAV STARs. Operators receiving clearance via RNAV STAR and are unable flying RNAV 1, shall inform ATC by using phraseology "UNABLE RNAV STAR".

POSITION UPDATE

All RNAV STARs are based on DME/DME or GNSS for position update. Failure of one DME in Stockholm TMA will not affect RNAV STARs navigation based on DME/DME.

RNAV EQUIPMENT FAILURE

If the airborne RNAV equipment fails, ATC shall be informed as soon as practicable. ATC will then provide radar vectors.

RNAV STAR DESCRIPTION

For each RNAV STAR, there is a description as a list of waypoints in sequence. If there is an altitude restriction and/or a speed restriction, this will be notified on chart and in the STAR description. There is also a description of the database coding to be used by navdatabase suppliers only. The coding is according to ARINC 424 standard.

Note: In order to adapt STAR coding to certain FMS equipment, a minimum altitude restriction is added at some waypoints where speed restriction is prescribed. These altitudes are marked with an asterisk (*).

RNAV STAR CHART

Each RNAV STAR includes information about distance to threshold "DTG XX NM" (DTG = Distance To Go) at certain waypoints in order to facilitate a continuous descent operation (CDO).

If there is an altitude restriction, this is depicted in the chart as follows:

<u>FL80</u>	=	At or above FL80
<u>5000</u>	=	At or above 5000 ft

RNAV STAR HAMMAR 3J, XILAN 3J and ELTOK 3J

Notify that RNAV STAR HAMMAR 3J, XILAN 3J and ELTOK 3J, all to RWY 01L, are designed with a short straight distance before FAP. In order to facilitate the sharp turn onto final, two speed restrictions are added, IAS 200 kt and 180 kt. The design with a short distance before FAP has two reasons:

- Separation to aerodrome Stockholm/Bromma (ESSB)
- Avoiding populated areas due to noise.