
KLN 90B PILOT'S GUIDE

006-08773-0000

for KLN 90Bs with

OPERATIONAL REVISION STATUS (ORS) 20

IMPORTANT: *Special installation procedures must be followed in order for the KLN 90B to be certified for IFR use. Consult the KLN 90B Flight Manual Supplement for the operating limitations of this unit.*

**For Important
Database Update
Information**

See Section 2.7

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Load approach into flight plan ✈️ (A)

CDI Scale Factor
±5.0 nm



Figure 6-1 KLN 90B Approach Diagram

General Procedure for Non-Precision Approaches

Non-precision approaches will all have the general flow of events as follows. Refer to figure 6-1.

1. **Select and load the approach into the flight plan.**

This can be done at almost any time but must be completed before reaching the Final Approach Fix and should be done as soon as possible. This corresponds to point A in figure 6-1. If the aircraft is greater than 30 NM from the airport, then the CDI scale factor will remain at the default ± 5 NM full scale deflection.

2. **Transition to the approach arm mode.** This will occur automatically when the aircraft is within 30 NM of the airport and there is an approach loaded into the flight plan (position B in figure 6-1). The CDI scale factor will change to ± 1.0 NM over the next 30 seconds and the external annunciator will indicate **ARM**.

3. **Get established on the final approach course.**

- NoPT arrival route
- Radar vectors (requires OBS mode)
- Procedure turn or holding pattern (requires OBS mode)
- DME arc


4. **Transition to the approach active mode.** This mode change is automatic and occurs at position C in figure 6-1 when:

- the aircraft is 2 NM from the FAF and the approach mode is armed
- the LEG mode is selected
- the aircraft is heading towards the FAF
- the FAF or a co-located IAF/FAF is the active waypoint
- the KLN 90B confirms that adequate integrity monitoring is available to complete the approach.
- RAIM is available at FAF & MAP

If any of these conditions are not met, the KLN 90B will not transition to the approach active mode and a missed approach will be required if the conditions do not change before reaching the FAF. If all of these conditions are met then the CDI scale factor will start to change to ± 0.3 NM and the external annunciator will indicate **ACTV**.

5. At the FAF (position D in figure 6-1) the CDI scale factor will be at ± 0.3 NM and will remain at this scale factor until you manually cancel the approach mode by either pressing the external GPS APR button to change to the **ARM** mode, by initiating a direct to operation or by changing to OBS mode.

WARNING: It is not approved to conduct the final portion of the approach unless the KLN 90B is in the approach active mode (ACTV on external annunciator).

6. **Fly to the Missed Approach Point.** (position E in figure 6-1). The KLN 90B will not automatically sequence to the next waypoint. You must manually change to the appropriate waypoint according to the situation. By default, the KLN 90B will nominate the first waypoint of the published missed approach procedure when  is pressed and the active waypoint is the MAP (rule number 4 in section 3.8).

7. **If necessary conduct the missed approach procedure.** Remember to always refer to the paper chart when conducting a missed approach. The OBS mode is usually needed at some point during a missed approach and is always required to fly the holding pattern (position F in figure 6-1).

The details of the above operations as well as several examples of how to conduct non-precision approaches using the KLN 90B are given in the following sections.