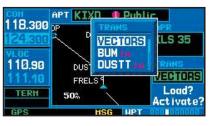
APPROACHES

Selecting Approaches

- 1. Press the PROC key to display the procedures page.
- 2. Rotate the large right knob () to highlight "Select Approach?" and press ENT.
- 3. A window will appear listing the available procedures. Rotate the large right knob () to highlight the desired procedure and press
- 4. A second window will appear listing the available transitions. Rotate the large right knob () to highlight the desired transition waypoint and press (The approach "Vectors" option assumes you will receive vectors to the final course segment of the approach and will provide navigation guidance relative to the final approach course.)







5. Rotate the large right knob (ⓐ) to highlight "Load?" or "Activate?" and press ("Load?" will add the procedure to the flight plan without immediately using it for navigation guidance. This allows you to continue navigating the original flight plan, but keeps the procedure available on the active flight plan page for quick activation when needed.)

 For precision approaches and some non-precision approaches, a reminder window will appear indicating that GPS guidance on such approaches is strictly for monitoring only—use the VLOC receiver and external CDI (or HSI) for primary



navigation. To confirm this reminder, highlight "Yes?" and press

Not all approaches in the database are approved for GPS use. As you select an approach, a "GPS" designation to the right of the procedure name indicates the procedure can be flown using the GPS receiver. Some procedures will not have this designation, meaning the GPS receiver may be used for supplemental navigation guidance only. ILS approaches, for example, must be flown by tuning the VLOC receiver to the proper frequency and switching the external CDI (or HSI) connection to "VLOC".

A selected approach may be *activated* or *loaded*. Activating the approach overrides the "enroute" portion of the active flight plan, proceeding directly to the "approach" portion (for a full approach, directly to the approach transition). Activating the approach also initiates automatic CDI scaling transitions as the approach progresses.

In many cases, it may be easiest to "Load" the full approach while still some distance away, enroute to the destination airport. Later, if vectored to final, use the following steps to select "Activate Vector-To-Final"—which makes the inbound course to the FAF waypoint active. Otherwise, activate the full approach using the "Activate Approach?" option.

APPROACHES

Activating an Approach

- 1. With an approach loaded in the active flight plan, press PROC to display the procedures page.
- 2. Rotate the large right knob (to highlight "Activate Approach?".
- 3. Press ENT.



The "Activate Vector-To-Final?" option allows you to activate the final course segment of the approach. This option assumes you will receive vectors to the final approach fix (FAF) and guides you to intercept the final course, before reaching the FAF.

Activating an Approach with Vectors-To-Final

- 1. With an approach loaded in the active flight plan, press PROC to display the procedures page.
- 2. Rotate the large right knob (to highlight "Activate Vector-To-Final?".
- 3. Press ENT



Flying an Approach

Due to the variety of available approach procedures, the specific steps required will vary according to the approach selected. Keep the following general guidelines in mind while flying the approach:

- You will typically select the destination airport as the last waypoint in the active flight plan or using the key. Doing so ensures that the desired waypoint will automatically appear when choosing the "Select Approach?" option from the *procedures page*. (Otherwise, you must first choose the airport, then the approach procedure.)
- When a localizer-based approach (such as an ILS) is loaded, the desired frequency is automatically placed in standby on the VLOC window. To activate the frequency, press the key.
- If the VLOC receiver will be used for the approach, be sure to switch the external CDI (or HSI) to "VLOC" by pressing the collaboration ("VLOC" will appear directly above the collaboration key; see page 10).
- An "Auto ILS CDI" setting provides automatic switching to "VLOC" once established inbound on the final course segment of an approach.
- As you progress to each approach waypoint, a waypoint alert message ("NEXT DTK ###°") will appear in the lower right corner of the display. (See page 10.)
- When you should begin a course change (via a standard rate turn), turn advisories ("TURN TO ###°") will appear in the lower right corner of the display. (See page 10.)

APPROACHES / MISSED APPROACH

- For GPS-based approaches, receiver autonomous integrity monitoring (RAIM) will monitor satellite conditions and alert you—using an "INTEG" or "WARN" annunciation at the bottom left corner of the display (see page 10)—if protection limits cannot be maintained. If this occurs, the GPS receiver should not be used for primary navigation guidance. Revert to an alternate navigation source, or select an alternate destination airport.
- Within 30 nautical miles of the destination airport, CDI scaling will transition from 5.0 nautical miles (enroute mode; or "ENR") to 1.0 nautical mile (terminal mode; or "TERM")—or when leaving the departure airport, from 1.0 nm to 5.0 nm. Within 2.0 nautical miles of the final approach fix, GPS-based approaches will see a second transition from 1.0 nautical mile to 0.3 nautical mile (approach mode; or "APR")
- A "START PROC TRN" prompt will appear in the lower right corner of the display to advise you when you are at a safe distance to initiate a procedure turn. The procedure turn is displayed on the map page, but guidance through the turn itself is not provided.
- Alerts for proper holding pattern entry (e.g. "HOLD DIRECT") are displayed in the lower right corner of the display. Waypoint sequencing is automatically suspended (indicated by "SUSP" directly above the best key) at the holding waypoint. Press the best key again to return to automatic waypoint sequencing. For course reversals, waypoint sequencing is suspended for one trip around the holding pattern only (after which it will return to automatic waypoint sequencing).

• The CDI will guide you through a DME arc. Just keep the needle centered as you fly along the arc. When using an autopilot, the course select on the CDI (or HSI) must be periodically updated with the desired track (DTK).

• As you cross the missed approach point, "SUSP" will appear above the obs key, indicating that automatic sequencing of waypoints is suspended at the missed approach appear on the CDI (or HSI)



→ SWARM

054°

00.07

Ø53°

suspended at the missed approach point, and a "from" indication will appear on the CDI (or HSI).

127.650

0.30

146

109.00

Flying the Missed Approach

- 1. Press the OBS key. The next waypoint in the approach is automatically offered as the destination waypoint.
- 2. Follow the missed approach procedures, as published on your approach plate, for proper climb and heading instructions.
- 3. An alert message in the lower right hand corner of the screen will recommend entry procedures for the holding pattern (e.g., "HOLD TEARDROP"). As you fly the holding pattern, a timer appears on the default NAV page. The timer automatically resets on the outbound side of the hold when you are abeam the hold waypoint. The timer again resets as you turn inbound (within approximately 30° of the inbound course).
- 4. When leaving the holding pattern to re-fly the approach (or another approach) press the PROC key to "Select Approach?" or "Activate Approach?" as previously described. (Or, use the PROC key to select another destination.)