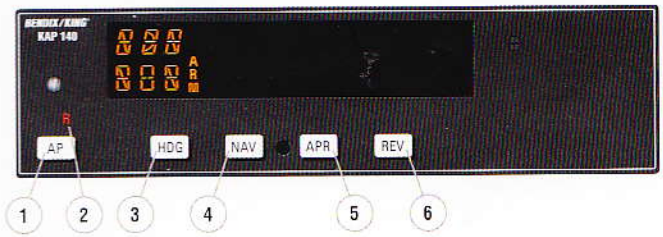
KAP 140 Single Axis Operation

The KAP 140 is a high-performance digital, panel-mounted autopilot system for light aircraft.

Single-axis Flight Control Computer



Full Single-axis KAP 140 Display

1. AUTOPILOT ENGAGE/DISENGAGE (**AP**) BUTTON - When pushed, engages autopilot if all logic conditions are met. The autopilot will engage in the basic roll (ROL) mode which functions as a wing leveler. When pressed again, will disengage the autopilot.

2. ROLL AXIS (**R**) ANNUNCIATION - When illuminated, indicates failure of the roll axis and will disengage the autopilot and not allow engagement.

3. HEADING (**HDG**) MODE SELECTOR BUTTON - When pushed, will select the Heading mode, which commands the airplane to turn to and maintain the heading selected by the heading bug on either the DG or HSI. A new heading may be selected at any time and will result in the airplane turning to the new heading. Button can also be used to toggle between HDG and ROL modes. This button will engage the autopilot.

4. NAVIGATION (**NAV**) MODE SELECTOR BUTTON - When pushed, will arm the navigation mode. The mode provides automatic beam capture and tracking of VOR, LOC or GPS as selected for presentation on the HSI or CDI. NAV mode is recommended for enroute navigation tracking.

5. APPROACH (**APR**) MODE SELECTOR BUTTON - When pushed, will arm the Approach mode. This mode provides automatic beam capture and tracking of VOR, GPS and LOC, as selected for presentation on the HSI or CDI. APR mode is recommended for instrument approaches.

6. BACK COURSE APPROACH (**REV**) MODE SELECTOR BUTTON - When pushed, will arm the Back Course approach mode. This mode functions similarly to the approach mode except that the autopilot response to LOC signals is reversed.

7. ROLL MODE DISPLAY - Displays the active and armed roll modes (ROL, HDG, NAV ARM, NAV, APR ARM, APR, REV ARM, REV). Also displayed will be flashing AP annunciation (5 seconds) at each autopilot disconnect accompanied by an aural tone (for 2 seconds).

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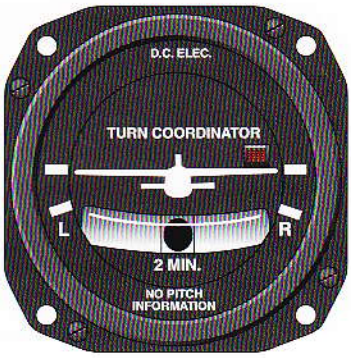
System Operating Modes

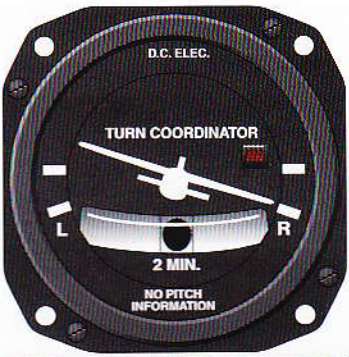


Wing Leveler (ROL) Mode

In the roll mode, the autopilot maintains wings level flight.

1. Engage autopilot - Press **AP**

NOTE: The KAP 140 engages into ***ROL*** *mode as a default.*



Heading Select (HDG) Mode

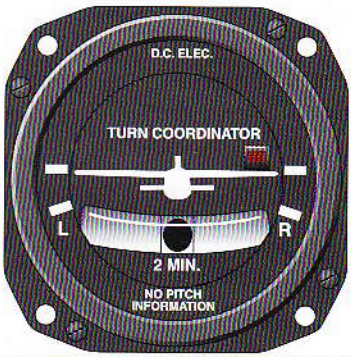
In the heading mode, the autopilot will fly a selected heading. The following steps should be taken to operate in the heading mode:

1. Move the heading "bug" to the desired heading on the DG or HSI using the Heading Select knob.

2. Depress the **HDG** button on the KAP 140 to engage the heading select mode. The autopilot will turn the aircraft in the shortest direction to intercept and fly the heading.

3. If you move the heading "bug" again while the heading select mode is engaged, the autopilot will immediately turn the aircraft in the direction of the newly selected heading.

4. Press **HDG** button again and the autopilot will return to the ROL mode.



Navigation (NAV) Mode Using a DG from HDG Mode (45° Intercept)

In the navigation (**NAV**) mode, the autopilot intercepts and tracks VOR/RNAV and GPS courses.

To arm **NAV** mode (with the KAP 140 currently in the **HDG** mode):

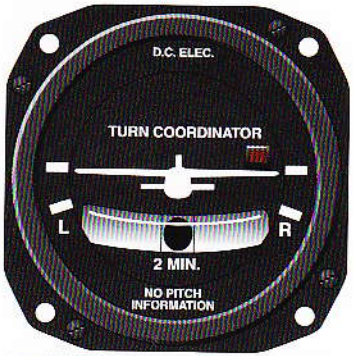
1. Select the desired frequency for VOR or RNAV. For GPS, verify the desired waypoint or destination.
2. OBS Knob - SELECT desired course.
3. **NAV** Mode Selector Button - PRESS. Note **NAV ARM** annunciated.

*NOTE: When **NAV** is selected, the autopilot will flash **HDG** for 5 seconds to remind the pilot to reset the HDG bug to the OBS course. Check the heading displayed on the DG against the magnetic compass and reset if necessary.*

4. Heading Selector Knob - ROTATE BUG to agree with OBS course.

Note Instruments: CDI needle to left. Intercept heading 45° to the left of selected (heading bug) course.

5. If the Course Deviation Bar is greater than 2 to 3 dots: the autopilot will annunciate **NAV ARM**; when the computed capture point is reached the **ARM** annunciator will go out and the selected course will be automatically captured and tracked. If the D-Bar is less than 2 to 3 dots: the **HDG** mode will disengage upon selecting NAV mode; the **NAV** annunciator will illuminate and the capture/track sequence will automatically begin.



Navigation (NAV) Mode Using a DG from ROL Mode (All Angle Intercept)

In the navigation (**NAV**) mode, the autopilot intercepts and tracks VOR/RNAV and GPS courses.

To arm **NAV** mode (with the KAP 140 currently in the ROL mode):

1. Maneuver the aircraft to the desired intercept angle prior to selecting **ROL** mode.
2. Select the desired frequency for VOR or RNAV. For GPS, verify the desired waypoint or destination.
3. OBS Knob - SELECT desired course.
4. **NAV** Mode Selector Button - PRESS. Note **NAV ARM** annunciated.

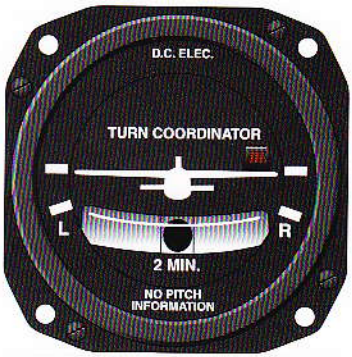
*NOTE: When **NAV** is selected, the autopilot will flash **HDG** for 5 seconds to remind the pilot to reset the HDG bug to the OBS course. Check the heading displayed on the DG against the magnetic compass and reset if necessary.*

5. Heading Selector Knob - ROTATE BUG to agree with OBS course.

Note Instruments: CDI needle to left. Intercept heading 30° to the left of selected (heading bug) course.

6. If the Course Deviation Bar is greater than 2 to 3 dots: the autopilot will annunciate **NAV ARM**; when the computed capture point is reached the **ARM** annunciator will go out and the selected course will be automatically captured and tracked. If the D-Bar is less than 2 to 3 dots: the **ROL** mode will disengage upon selecting **NAV** mode; the **NAV** annunciator will illuminate and the capture/track sequence will automatically begin.

Note: Intercept angles greater than 45° can result in course overshoot when close to the station. Therefore, intercept angles greater than 45° are not recommended.



Navigation (NAV) Mode Using an HSI

In the navigation (**NAV**) mode, the autopilot intercepts and tracks VOR/RNAV and GPS courses.

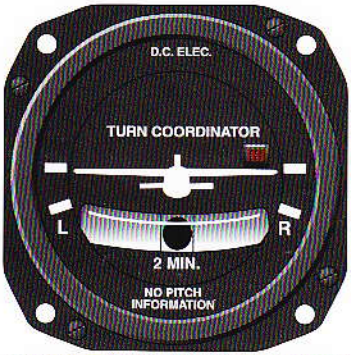
To arm **NAV** mode (with the KAP 140 currently in the **HDG** mode):

1. Select the desired frequency for VOR or RNAV. For GPS, verify the desired waypoint or destination.
2. Course Bearing Pointer - SET to desired course.
3. Heading Selector Knob - SET BUG to provide desired intercept angle and engage HDG mode. Note **NAV ARM** annunciated.

4. **NAV** Mode Selector Button - PRESS.

5. If the Course Deviation Bar is greater than 2 to 3 dots: the aircraft will continue in **HDG** mode (or **ROL** if **HDG** is not selected) with **NAV ARM** annunciated; when the computed capture point is reached **HDG** will disengage, the **ARM** annunciator will go out and the selected course will be automatically captured and tracked. If the D-Bar is less than 2 to 3 dots: the **HDG** mode (or **ROL** if **HDG** is not selected) will disengage upon selecting **NAV** mode; the **NAV** annunciator will illuminate and the capture/ track sequence will automatically begin.

Note: Intercept angles greater than 45° can result in course overshoot when close to the station. Therefore, intercept angles greater than 45° are not recommended.



Approach (APR) Mode Using a DG from HDG Mode (45° Intercept)

The Approach (**APR**) mode allows the autopilot to intercept and track LOC, VOR/RNAV and GPS courses.

To arm **APR** mode (with the KAP 140 currently in the HDG mode):

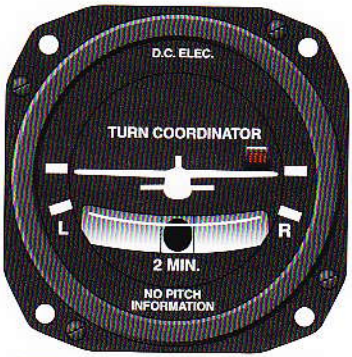
1. Select the desired frequency for LOC, VOR or RNAV. For GPS, verify the desired approach.
2. OBS Knob - SELECT desired approach course. (For a localizer, set it to serve as a memory aid.)
3. **APR** Mode Selector Button - PRESS. Note **APR ARM** annunciated.

*NOTE: When **APR** is selected, the autopilot will flash **HDG** for 5 seconds to remind the pilot to reset the HDG bug to the desired approach course. Check the heading displayed on the DG against the magnetic compass and reset if necessary.*

4. Heading Selector Knob - ROTATE BUG to agree with desired approach course.

Note Instruments: CDI needle to left. Intercept heading 45° to the left of selected (heading bug) course.

5. If the Course Deviation Bar is greater than 2 to 3 dots: the autopilot will annunciate **APR ARM**; when the computed capture point is reached the **ARM** annunciator will go out and the selected course will be automatically captured and tracked. If the D-Bar is less than 2 to 3 dots: the **HDG** mode will disengage upon selecting **APR** mode; the **APR** annunciator will illuminate and the capture/track sequence will automatically begin.



Approach (APR) Mode Using a DG from ROL Mode (All Angle Intercept)

The Approach (**APR**) mode allows the autopilot to intercept and track LOC, VOR/RNAV and GPS courses.

To arm **APR** mode (with the KAP 140 currently in the ROL mode):

1. Maneuver the aircraft to the desired intercept angle prior to selecting **ROL** mode.
2. Select the desired frequency for LOC, VOR or RNAV. For GPS, verify the desired approach.
3. OBS Knob - SELECT desired approach course. (For a localizer, set it to serve as a memory aid.)
4. **APR** Mode Selector Button - PRESS. Note **APR ARM** annunciated.

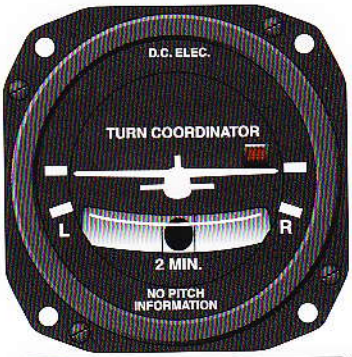
*NOTE: When **APR** is selected, the autopilot will flash **HDG** for 5 seconds to remind the pilot to reset the HDG bug to the desired approach course. Check the heading displayed on the DG against the magnetic compass and reset if necessary.*

5. Heading Selector Knob - ROTATE BUG to agree with desired approach course.

Note Instruments: CDI needle to left. Intercept heading 30° to the left of selected (heading bug) course.

6. If the Course Deviation Bar is greater than 2 to 3 dots: the autopilot will annunciate **APR ARM**; when the computed capture point is reached the **ARM** annunciator will go out and the selected course will be automatically captured and tracked. If the D-Bar is less than 2 to 3 dots: the **ROL** mode will disengage upon selecting **APR** mode; the **APR** annunciator will illuminate and the capture/track sequence will automatically begin.

Note: Intercept angles greater than 45° can result in course overshoot when close to the station. Therefore, intercept angles greater than 45° are not recommended.



Approach (APR) Mode Using an HSI

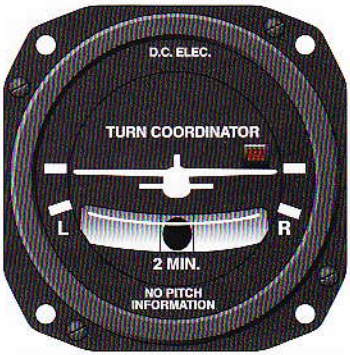
The Approach (**APR**) mode allows the autopilot to intercept and track LOC, VOR/RNAV and GPS courses.

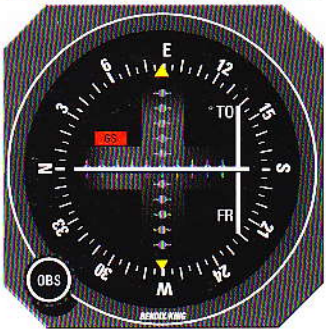
To arm **APR** mode (with the KAP 140 currently in the HDG mode):

1. Select the desired frequency for LOC, VOR or RNAV. For GPS, verify the desired approach.
2. Course Bearing Pointer - SET to desired course.
3. Heading Selector Knob - SET BUG to provide desired intercept angle.
4. APR Mode Selector Button - PRESS. Note **APR ARM** annunciated.

5. If the Course Deviation Bar is greater than 2 to 3 dots: the aircraft will continue in **HDG** mode (or **ROL** if **HDG** is not selected) with the **APR ARM** annunciated; when the computed capture point is reached **HDG** mode will disengage, the **ARM** annunciator will go out and the selected course will be automatically captured and tracked. If the D-Bar is less than 2 to 3 dots: the **HDG** mode (or **ROL** if **HDG** is not selected) will disengage upon selecting **APR** mode; the **APR** annunciator will illuminate and the capture/track sequence will automatically begin.

Note: Intercept angles greater than 45° can result in course overshoot when close to the station. Therefore, intercept angles greater than 45° are not recommended.





Back Course (REV) Mode Using a DG from HDG Mode (45° Intercept)

The Back Course (**REV**) mode allows the autopilot to intercept and track a localizer back course.

To arm **REV** mode (with the KAP 140 currently in the HDG mode):

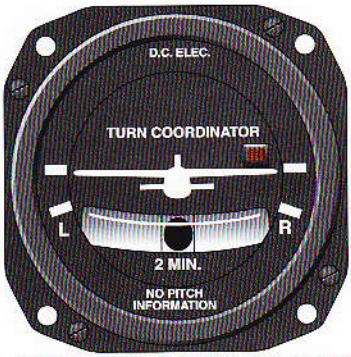
1. Select the desired frequency for LOC.
2. OBS Knob - SELECT front course inbound heading.
3. **REV** Mode Selector Button - PRESS. Note **REV ARM** annunciated.

*NOTE: When **REV** is selected, the autopilot will flash **HDG** for 5 seconds to remind the pilot to reset the HDG bug to the front course inbound heading. Check the heading displayed on the DG against the magnetic compass and reset if necessary.*

4. Heading Selector Knob - ROTATE BUG to agree with the FRONT COURSE inbound heading.

Note Instruments: CDI needle to the right. Intercept heading 45° to the left of the back course.

5. If the Course Deviation Bar is greater than 2 to 3 dots: the autopilot will annunciate **REV ARM**; when the computed capture point is reached the **ARM** annunciator will go out and the selected course will be automatically captured and tracked. If the D-Bar is less than 2 to 3 dots: the **HDG** mode will disengage upon selecting **REV** mode; the **REV** annunciator will illuminate and the capture/track sequence will automatically begin.



Back Course (REV) Mode Using a DG from ROL Mode (All Angle Intercept)

The Back Course (**REV**) mode allows the autopilot to intercept and track a localizer back course.

To arm **REV** mode (with the KAP 140 currently in the ROL mode):

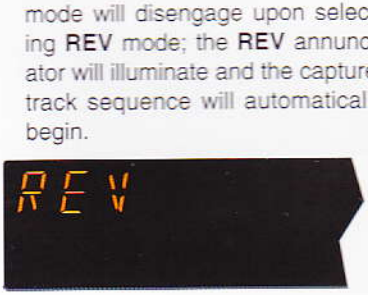
1. Maneuver the aircraft to the desired intercept angle prior to selecting **ROL** mode.
2. Select the desired frequency for LOC.
3. OBS Knob - SELECT front course inbound heading.
4. **REV** Mode Selector Button - PRESS. Note **REV ARM** annunciated.

*NOTE: When **REV** is selected, the autopilot will flash **HDG** for 5 seconds to remind the pilot to reset the HDG bug to the front course inbound heading. Check the heading displayed on the DG against the magnetic compass and reset if necessary.*

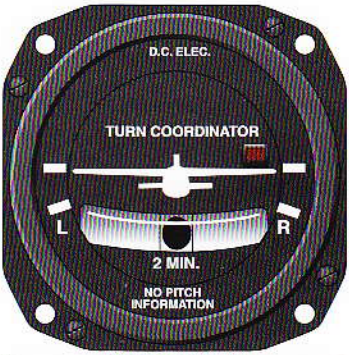
5. Heading Selector Knob - ROTATE BUG to agree with the FRONT COURSE inbound heading.

Note Instruments: CDI needle to the right. Intercept heading 30° to the left of the back course.

6. If the Course Deviation Bar is greater than 2 to 3 dots: the autopilot will annunciate **REV ARM**; when the computed capture point is reached the **ARM** annunciator will go out and the selected course will be automatically captured and tracked. If the D-Bar is less than 2 to 3 dots: the **HDG** mode will disengage upon selecting **REV** mode; the **REV** annunciator will illuminate and the capture/track sequence will automatically begin.



Note: Intercept angles greater than 45° can result in course overshoot when close to the station. Therefore, intercept angles greater than 45° are not recommended.



Back Course (REV) Mode Using an HSI

The Back Course (**REV**) mode allows the autopilot to intercept and track a localizer back course.

To arm **REV** mode (with the KAP 140 currently in the HDG mode):

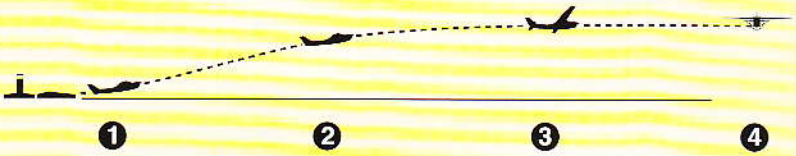
1. Select the desired frequency for LOC.
2. Course Bearing Pointer - SET to the FRONT COURSE inbound heading.
3. Heading Selector Knob - SET BUG to provide desired intercept angle.
4. **REV** Mode Selector Button - PRESS. Note **REV ARM** annunciated.

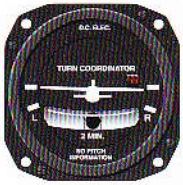
5. If the Course Deviation Bar is greater than 2 to 3 dots: the aircraft will continue in **HDG** mode (or **ROL** if **HDG** is not selected) with the **REV ARM** annunciated; when the computed capture point is reached **HDG** mode will disengage, the **ARM** annunciator will go out and the selected course will be automatically captured and tracked. If the D-Bar is less than 2 to 3 dots: the **HDG** mode (or **ROL** if **HDG** is not selected) will disengage upon selecting **REV** mode; the **REV** annunciator will illuminate and the capture/track sequence will automatically begin.

Note: Intercept angles greater than 45° can result in course overshoot when close to the station. Therefore, intercept angles greater than 45° are not recommended.

OPERATIONS WITH THE KAP 140

Takeoff And Climb To Assigned Altitude





OR

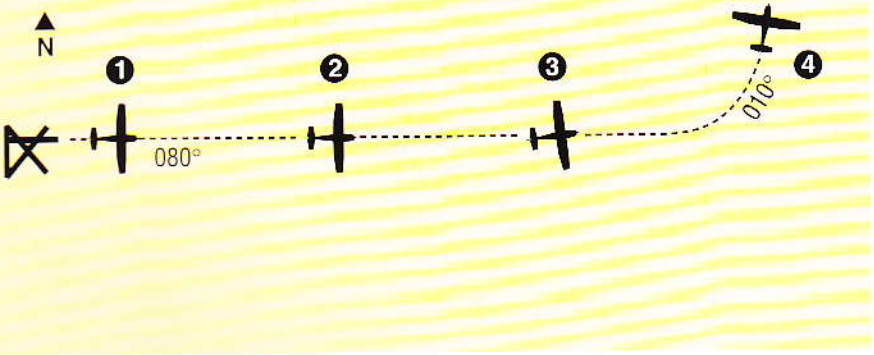
1. The aircraft is well off the ground and established at a desired climb rate.

   The heading bug on the DG or HSI is turned to the desired heading of 080° (runway heading).

   By depressing the **HDG** button on the KAP 140, the autopilot engages into the heading mode and maintains the selected heading of 080°.

OR

2. The heading bug on the DG or HSI is turned to the new desired heading of 010° and the aircraft begins to respond with an immediate left turn.



3. The autopilot is responding to the heading select mode with a left bank.

4. The autopilot has completed the turn and is now established on a 010° heading.

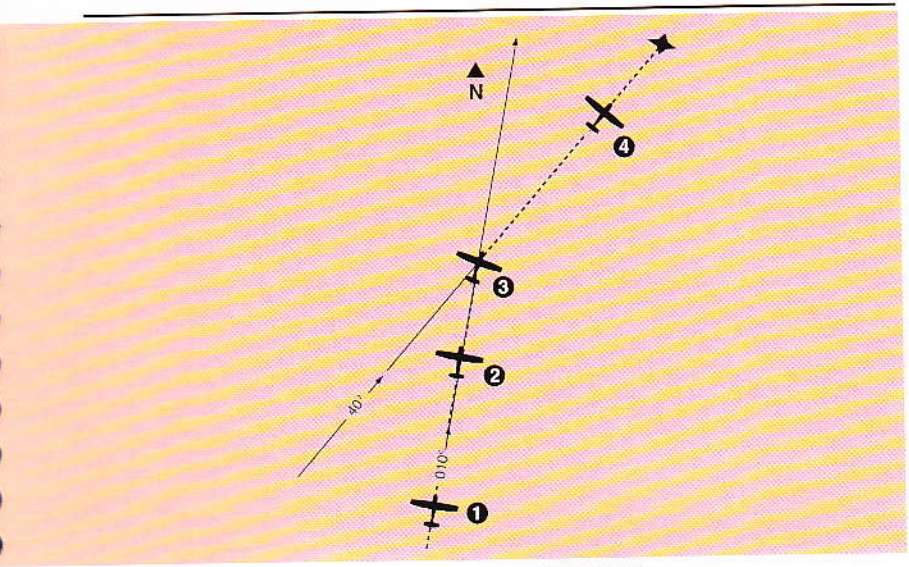
Note: The autopilot controls only the roll axis. The PILOT must maintain control of the pitch and yaw axis.

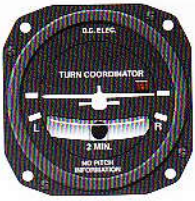
GPS Capture Using DG

** Description of GPS operation based on Bendix/King GPS receiver. Others may require different operation.*

1. Continuing on heading 010°, a GPS waypoint is established. A 30° intercept is desired.

2. The **HDG** button is depressed to select **ROL** mode which will allow an "all angle intercept". GPS data is selected for the CDI and the OBS is set to 040°. The **NAV** button is depressed and **NAV ARM** is annunciated. **ROL** will change to **HDG** and flash for five seconds. **ROL** will then be redisplayed. While the **HDG** annunciation is flashing, move the heading bug to the desired course of 040°. The aircraft will remain wings level until the capture point.



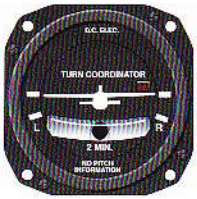


3. When the computed capture point is reached, the **ROL** annunciation changes to **NAV** and a right turn is initiated by the autopilot.

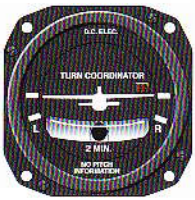
4. The turn is complete and the autopilot is tracking the GPS course.

GPS Capture Using HSI

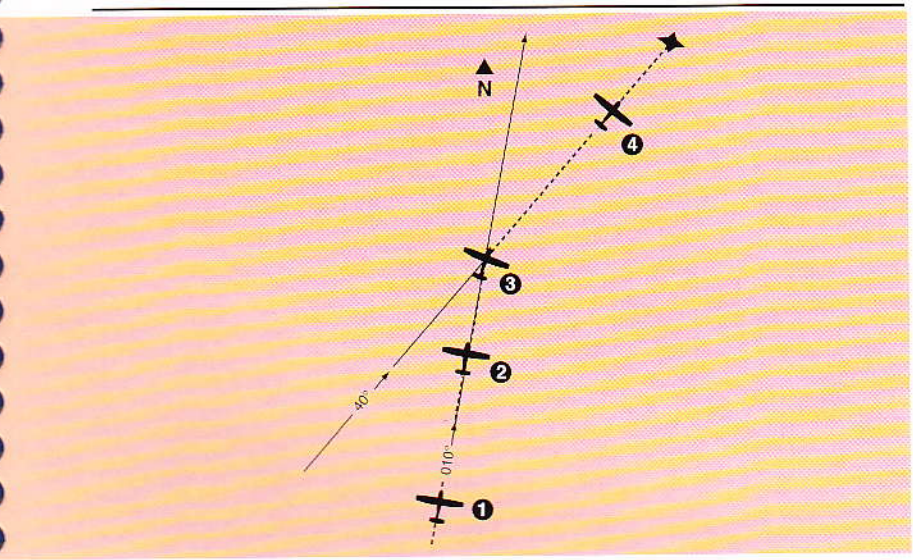
** Description of GPS operation based on Bendix/King GPS receiver. Others may require different operation.*



1. Continuing on heading 010°, a GPS waypoint is established. A 30° intercept is desired.



2. GPS data is selected for the HSI. The course pointer is set to 040°. The **NAV** button is depressed and **NAV ARM** is annunciated.



3. When the computed capture point is reached, the **HDG** annunciation changes to **NAV** and a right turn is initiated by the autopilot.

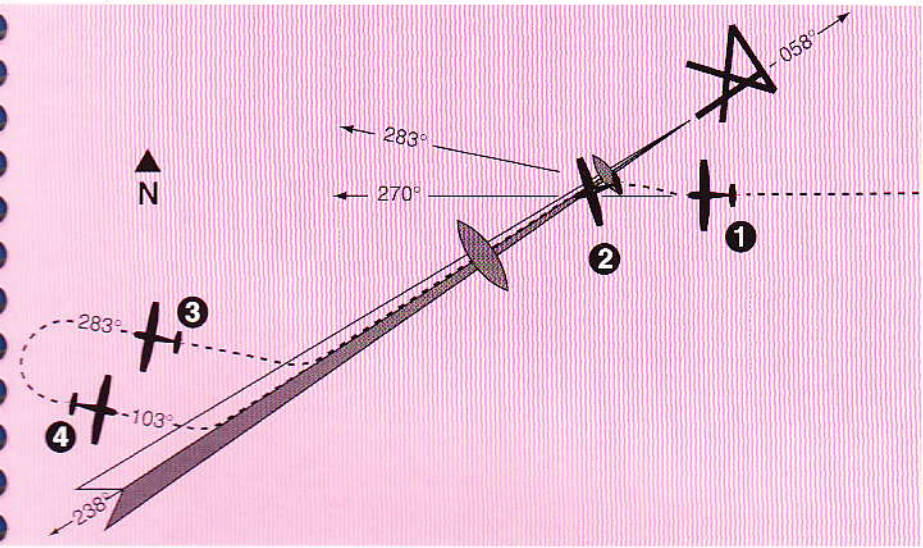
4. The turn is complete and the autopilot is tracking the GPS course.

Outbound On Front Course For Procedure Turn To LOC Approach Using DG

1. The aircraft is heading 270° with heading engaged. To intercept and fly the LOC front course outbound, set the front course on the OBS and depress the back course (**REV**) button. While the **HDG** annunciation is flashing move the heading bug to the front course 058°. Since **HDG** was active upon selection of **REV**, the autopilot will initiate a 45° intercept to the localizer. In this case, the aircraft will turn to 283°.

2. When the computed capture point is reached, auto-intercept mode is cancelled, the reverse localizer mode is automatically activated and a left turn outbound on the localizer is initiated by the autopilot.

Note: The left-right deviations of the CDI course deviation needle are reversed (you must turn right to center a deviation of the index to the left). This needle reversing takes place because you are flying outbound on a front course.

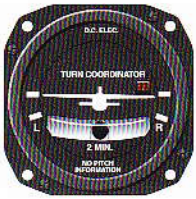


3. At the desired point, **HDG** mode is used to initiate the procedure turn. Select **HDG** and set the heading bug to 283°. During the procedure turn outbound, the CDI course index goes off scale to the right. The aircraft is flying away from the localizer centerline at a 45° angle on a selected heading of 283°.

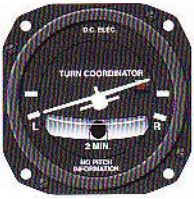
* Check the heading displayed on the DG against the magnetic compass and reset if necessary.

4. Now you have reset the heading bug to 103° and made a 180° turn to this heading. This 103° heading will intercept the front course of 058°. You must now select the approach mode by depressing the **APR** button on the KAP 140. While the **HDG** annunciation is flashing move the heading bug to the front course 058°. Since the 45° intercept is 103°, the aircraft will not turn until the front course is captured.

Outbound On Front Course For Procedure Turn To LOC Approach Using HSI

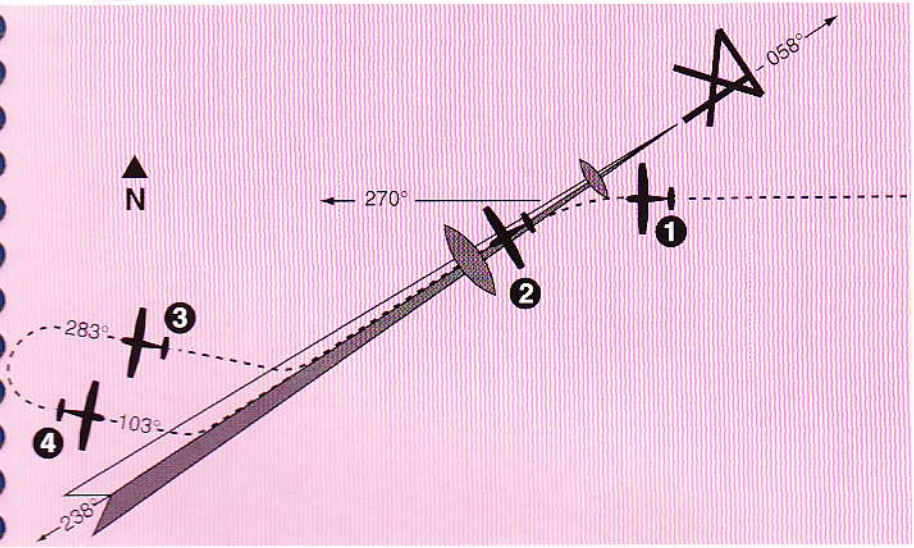


1. The aircraft is heading 270° with heading engaged. To intercept and fly the LOC front course outbound, set the front course on the HSI and depress the back course (**REV**) button. The back course (**REV**) mode is selected to go outbound on the front course. The capture point is now being computed based on closure rate.

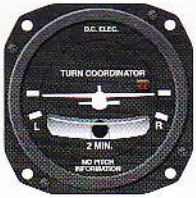


2. When the computed capture point is reached, **HDG** mode is cancelled and reverse localizer mode is automatically activated and a left turn outbound on the localizer is initiated by the autopilot.

Note: The left-right deviations of the HSI course needle operate just as though you were flying a front course approach.



3. At the desired point, **HDG** mode is used to initiate the procedure turn. Select **HDG** and set the heading bug to 283°. During the procedure turn outbound, the deviation bar shows that the aircraft is flying away from the localizer centerline at a 45° angle on a selected heading of 283°.

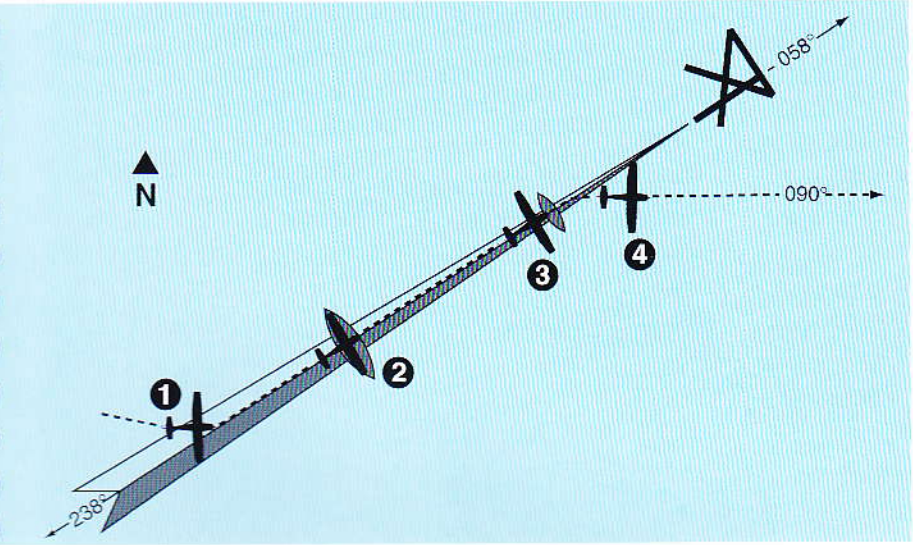


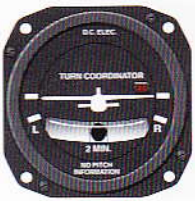
4. Now you have reset the heading bug to 103° and made a 180° turn to this heading. The 103° heading will intercept the front course of 058°. You must now select the approach mode by depressing the **APR** button on the KAP 140. Automatic capture of the localizer will occur.

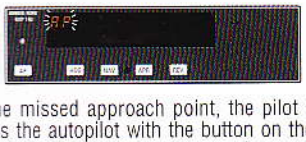
Front Course LOC Approach Using DG

1. Continuing the maneuver on page 38, APR coupling occurs (**HDG** annunciation changes to **APR**). The autopilot will capture the localizer and the CDI course index will center.

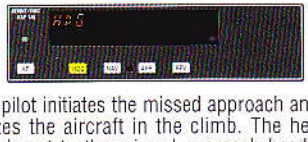
2. The autopilot is following the localizer. The autopilot will make the bank changes as necessary to maintain localizer .





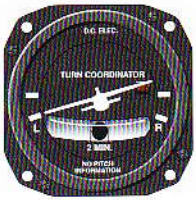


3. At the missed approach point, the pilot disengages the autopilot with the button on the control wheel. This cancels all operating modes. A flashing **AP** annunciation is displayed and a disconnect tone will sound.

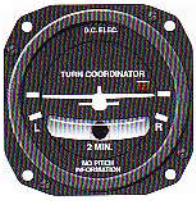


4. The pilot initiates the missed approach and stabilizes the aircraft in the climb. The heading bug is set to the missed approach heading of 090°. By depressing the **HDG** button on the KAP 140, the autopilot engages into the heading mode, commencing a right turn to a heading of 090°.

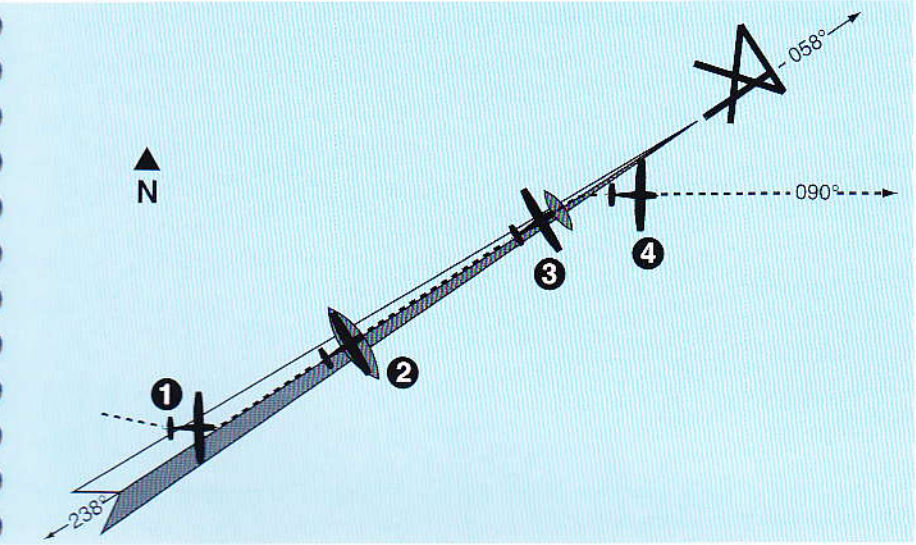
Front Course LOC Approach Using HSI

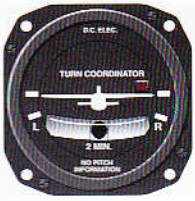


1. Continuing the maneuver on page 40, APR coupling occurs (**HDG** annunciation changes to **APR**). The autopilot will capture the localizer and the CDI course index will center.

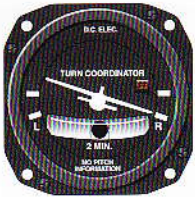


2. The autopilot is following the localizer. The autopilot will make bank changes as necessary to maintain localizer.





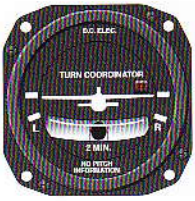
3. At the missed approach point, the pilot disengages the autopilot with the button on the control wheel. This cancels all operating modes.



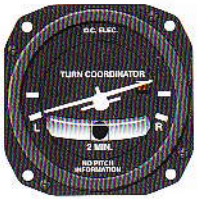
4. The pilot initiates the missed approach and stabilizes the aircraft in the climb. The heading bug is set to the missed approach heading of 090°. By depressing the **HDG** button on the KAP 140, the autopilot engages into the heading mode, commencing a right turn to a heading of 090°.

Outbound on GPS Approach Using DG

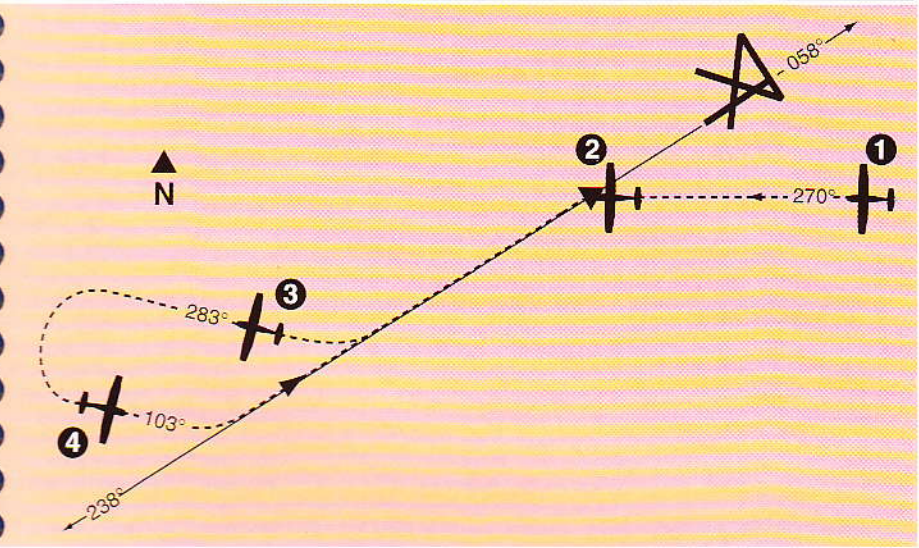
** Description of GPS operation based on Bendix/King GPS receiver. Others may require different operation.*



1. The aircraft is in **APR** mode approaching the IAF. Approach arm is indicated on the GPS annunciator.*



2. Upon waypoint alerting at the IAF, the heading bug is set to 238°, the GPS's Leg/OBS mode switching is set to OBS mode and the OBS is set to 238°. The autopilot initiates a left turn to track the 238° GPS course.



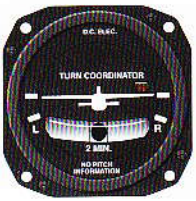
3. At the desired point, heading mode is used to initiate the procedure turn. During the procedure turn outbound, the deviation bar shows that the aircraft is flying away from the GPS course at a 45° angle on a selected heading of 283°.

* Check the heading displayed on the DG against the magnetic compass and reset if necessary.

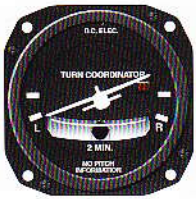
4. The heading bug has been set to 103° and the aircraft has made a left turn to this heading. The GPS's Leg/OBS mode switching is set to Leg mode and the OBS is set to 058°. Select approach mode by depressing the **APR** button. *The **HDG** annunciation will flash for five seconds then extinguish. While the **HDG** annunciation is flashing, move the heading bug to 058°. Since the 45° intercept is 103°, the aircraft will not turn until the course is captured.

Outbound on GPS Approach Using HSI

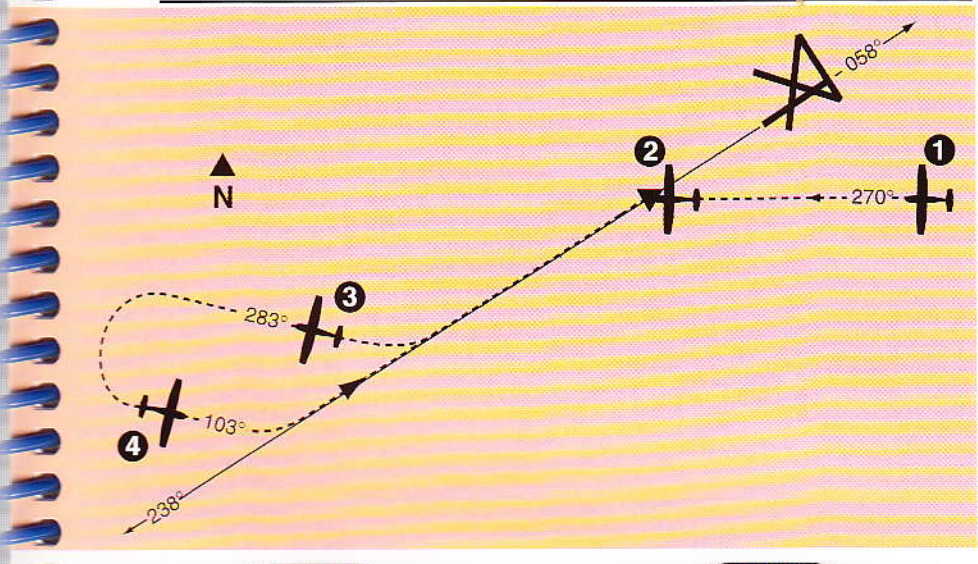
** Description of GPS operation based on Bendix/King GPS receiver. Others may require different operation.*

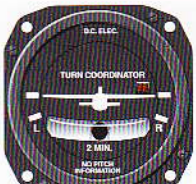


1. The aircraft is in **APR** mode approaching the IAF. Approach arm is indicated on the GPS annunciator.*

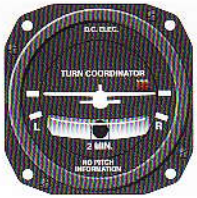


2. Upon waypoint alerting at the IAF, the course pointer is set to 238°, the GPS's Leg/OBS mode switching is set to OBS mode. The autopilot initiates a left turn to track the 238° GPS course.





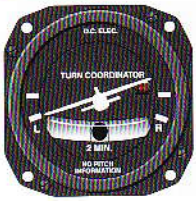
3. At the desired point, heading mode is used to initiate the procedure turn. During the procedure turn outbound, the deviation bar shows that the aircraft is flying away from the GPS course at a 45° angle on a selected heading of 283°.



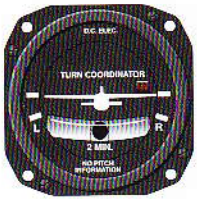
4. The heading bug has been set to 103° and the aircraft has made a left turn to this heading. The GPS's Leg/OBS mode switching is set to Leg mode and the course pointer is set to 058°. Select approach mode by depressing the **APR** button.

Inbound on GPS Approach Using DG

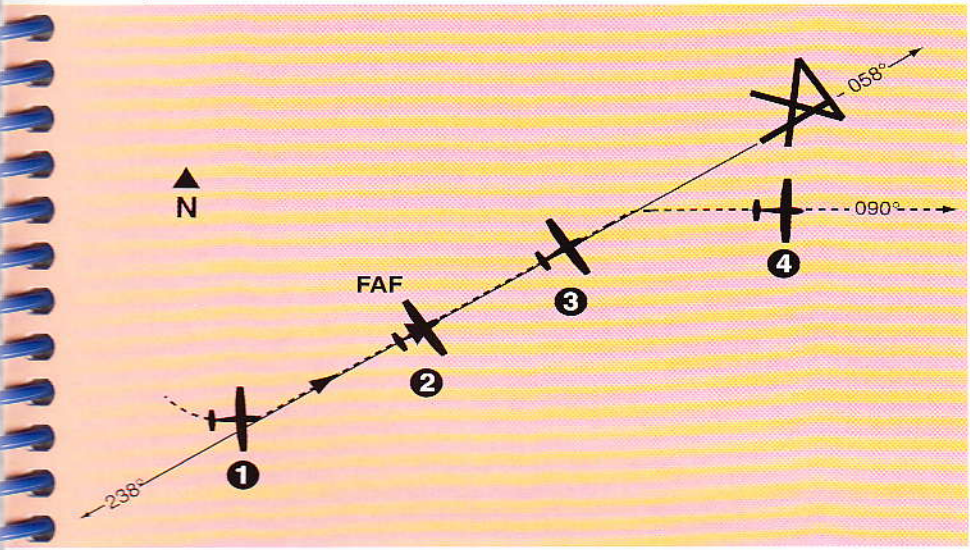
** Description of GPS operation based on Bendix/King GPS receiver. Others may require different operation.*



1. Continuing the maneuver on page 46, **APR** mode capture occurs. The autopilot initiates a left turn to track the 058° GPS course. Approach active is indicated on the GPS annunciator.*



2. The autopilot is following the GPS course. The autopilot will make the bank changes as necessary to maintain the GPS course.



3. At the missed approach point, the pilot disengages the autopilot with the button on the control wheel. This cancels all operating modes. A flashing **AP** annunciation is displayed and a disconnect tone will sound.

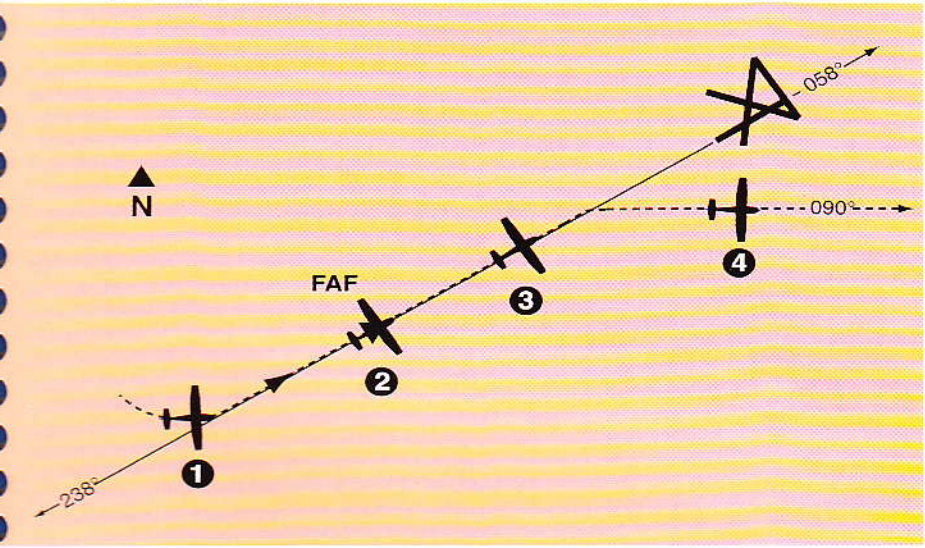
4. The pilot initiates the missed approach and stabilizes the aircraft in the climb. The heading bug is set to the missed approach heading of 090°. By depressing the HDG button on the KAP 140, the autopilot engages into the heading mode, commencing a right turn to a heading of 090°.

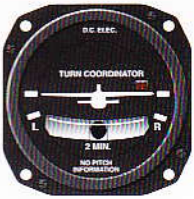
Inbound on GPS Approach Using HSI

** Description of GPS operation based on Bendix/King GPS receiver. Others may require different operation.*

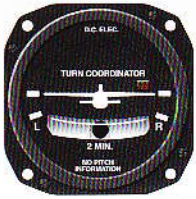
1. Continuing the maneuver on page 48, **APR** mode capture occurs. The autopilot initiates a left turn to track the 058° GPS course.* Approach active is indicated on the GPS annunciator.*

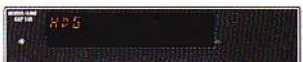
2. The autopilot is following the GPS course. The autopilot will make the bank changes as necessary to maintain the GPS course.





3. At the missed approach point, the pilot disengages the autopilot with the button on the control wheel. This cancels all operating modes. A flashing **AP** annunciation is displayed and a disconnect tone will sound.





4. The pilot initiates the missed approach and stabilizes the aircraft in the climb. The heading bug is set to the missed approach heading of 090°. By depressing the HDG button on the KAP 140, the autopilot engages into the heading mode, commencing a right turn to a heading of 090°.