Condor Aero Club
Zelienople, PA

Aircraft Checkout

Piper Dakota N4335M

PA-28-236

(July 1, 2025)

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Topics

- Condor Operating Requirements
- PA-28-236 Dakota Overview
- Dakota N4335M Avionics

For Information Only !

Please consult the Pilot's Operating Handbook
– including all Flight Manual Supplements –
for complete information.

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PA-28-236 Dakota Overview

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Dakota N4335M

Member Operating Requirements

- Private Pilot or Better with (100) Hours as PIC
- Previous Condor Checkout in Piper Archer, or Equivalent
- Condor Club-Approved CFI Checkout Appropriate to Flight Conditions Desired (VFR/IFR):
  - If > 10 Hours in High-Performance and/or Complex Aircraft:
    - (1) Hour Ground Review of Aircraft and Systems
    - (1) Hour Flight Instruction
  - If < 10 Hours in High-Performance and/or Complex Aircraft:
    - (1) Hour Ground Review of Aircraft and Systems
    - Minimum (5) Hours Dual Instruction
    - (15) Takeoffs & Landings
- For Additional Information: www.condoraero.com

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Dakota Airframe, Engine, and Propeller

- Airframe:
  - Wingspan: (35) Feet, (6) Inches
  - Length: (24) Feet, (9) Inches
  - Height: (7) Feet, (5) Inches
- Engine:
  - Lycoming, O-540-J3A5D, (6) Cylinders
  - 235 Horsepower
  - Max. RPM: 2400
  - TBO: 2000 Hours
  - Fuel Burn: ~(12) Gallons / Hour at Normal Cruise (75% Power)
- Propeller:
  - Hartzell, Two-Blade, Constant Speed
  - 80” Diameter
- Fuel Capacity:
  - One Tank in Each Wing
  - Selectable: OFF / LEFT / RIGHT
    - Topped Off:
      - Total: (77) Gallons, (38.5) Gallons per Side
      - Usable: (72) Gallons, (36.0) Gallons per Side
      - Weight: (432) Lbs.
    - To Tabs (Preferred other than for Trips):
      - Total: (57) Gallons, (28.5) Gallons per Side
      - Usable: (52) Gallons, (26.0) Gallons per Side
      - Weight: (312) Lbs.

Ensure “stop tab” prevents accidentally selecting “OFF” when switching from Right to Left Tank!

- Oil Capacity:
  - (12) Quarts, (8-9) Quarts Normal
  - Add a Quart when Below (8) Quarts

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Weight & Balance Examples

(N4335M - June 23, 2025)

- Max. Ramp Weight: 3011.0 Lbs.
- Max. Takeoff Weight: 3000.0 Lbs.
- Useful Load: 1178.0 Lbs.

Full Fuel

- Full Fuel (72 Gals.): 432.0 Lbs.
- Payload w/Full Fuel: 746.0 Lbs.
- Available Baggage: 66.0 Lbs.

(with Full Fuel & (4) 170 lb. People)

	Weight (Pounds)	Arm (Inches)	Moment (Inch-Pounds)
Basic Empty Weight	1,833.0	84.53	154,954.8
Pilot and Front Passenger:	340.0	80.50	27,370.0
Passengers (Rear Seats):	340.0	118.10	40,154.0
Fuel (72 Gallons):	432.0	95.00	41,040.0
Baggage (200 Lbs. Max.):	66.0	142.80	9,424.8
Ramp Weight (3011 Lbs. Max.):	3,011.0	90.65	272,943.6
Fuel Allowance: (Engine Start, Taxi, Run-Up)	-11.0	95.00	-1,045.0
Takeoff Weight (3000 Lbs. Max.):	**3,000.0**	**90.63**	**271,898.6**

Fuel to Tabs

- Fuel to Tabs (52 Gals.): 312.0 Lbs.
- Payload w/Fuel to Tabs: 866.0 Lbs.
- Available Baggage: 186.0 Lbs.

(with Fuel to Tabs & (4) 170 lb. People)

	Weight (Pounds)	Arm (Inches)	Moment (Inch-Pounds)
Basic Empty Weight	1,833.0	84.53	154,954.8
Pilot and Front Passenger:	340.0	80.50	27,370.0
Passengers (Rear Seats):	340.0	118.10	40,154.0
Fuel (52 Gallons):	312.0	95.00	29,640.0
Baggage (200 Lbs. Max.):	186.0	142.80	26,560.8
Ramp Weight (3011 Lbs. Max.):	3,011.0	92.55	278,679.6
Fuel Allowance: (Engine Start, Taxi, Run-Up)	-11.0	95.00	-1,045.0
Takeoff Weight (3000 Lbs. Max.):	**3,000.0**	**92.54**	**277,634.6**

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Dakota “V” Speeds (KIAS)

- V_{SO}: 56
- V_{S1}: 65
- V_X : 73
- V_Y : 85
- V_{FE}: 102
- V_A: 124 @ 3000 Lbs.
  (96 @ 1761 Lbs.)
- V_{NO}: 137
- V_{NE}: 173

- Demo. Crosswind: 17
- Best Glide: 76
- Final Approach: 72

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Abbreviated Normal Procedures

- **Before Takeoff (Engine Running):**
  - Avionics Master: ON (Main Switch Panel)
  - Digital Tach: Verify Operation
  - GI 275s: Verify NO Battery Icons
    Test “Reversionary” Mode
  - Autopilot: Press “Test” Button & Release
    (Full A/P Check Later in Deck)

- **Takeoff (Rotate):**
  - Normal (Flaps 0°): 60-65 KIAS
  - Short/Soft (Flaps 25°): 50-60 KIAS

- **Climb:**
  - Best Angle: 65 KIAS
  - Best Rate: 85 KIAS
  - Cruise Climb: 100 KIAS

- **Cruise:**
  - Fuel Pump Off: At Desired Altitude
  - Power Settings: Pilot’s Sun Visor
  - “Normal Cruise”: 75%
  - Lean Mixture: 25°-50° “Rich of Peak” EGT

- **Descent:**
  - Carb. Heat: ON for (5) Secs, then OFF
    (Check for Carb Ice)
  - Throttle: 15” MP (or as Required)
  - Airspeed: 137 KTS
  - Mixture: Rich

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Normal Traffic Pattern

- Downwind
  - Gas: Fuel Pump ON, Fullest Tank
  - Undercarriage: Down (Fixed)
  - Mixture: Full Rich
  - Power: 15” Manifold Pressure
  - Flaps: 10°
  - Airspeed: 85 KIAS
- “Key Position”
  - Carb. Heat: Check ON for (5) Secs, then OFF
  - Power: 11” MP (for 500 FPM Descent)
  - Prop: SLOWLY Advance
- Base
  - Flaps: 25°
  - Airspeed: 80 KIAS
  - “Clear Right” Visually Verify no Straight-In Approaches
- Final
  - Prop: Verify FULL FORWARD for possible Go Around
  - Flaps: 40°
  - Airspeed: 75 KIAS
- “Over the Fence”
  - Airspeed: 70 KIAS

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Additional Information

- Operating at Gross Weight:
  - Longer takeoff runs
  - Shallower climbs
  - Longer landing rollouts
- Hight Density Altitude:
  (90°F, 1000 MSL Airport)
  - 50% Increase in Takeoff Distance
  - 30% Decrease in Climb Performance
- Use of Flaps:
  - Decreases Obstacle Clearance distance by 200 ft.
    (1600 Feet assuming standard conditions)
- Carburetor Icing:
  - PA-28s Not Known for Carburetor Icing
    - Use Carb Heat as Directed in POH
  - Always expect Carburetor Icing when:
    - Relative Humidity is High
    - Temperatures are between 20°F and 70°F
- Airframe Icing:
  - PA-28s are NOT approved for FIKI Operations
    (Flight Into Known Icing)
- Cabin Door:
  - Double Latching – DON'T SLAM !!
    - Pull Handle Up, Fully Close the Door,
      Latch Bottom Handle, Latch Top Handle
  - If Door Opens in Flight:
    - FLY THE AIRPLANE !
    - Slow to 87 KIAS
    - Open the Storm Window
    - Secure Door
- Flight Planning:
  - Aircraft Type: P28B
  - FAA Equipment: /G (GPS)
  - ICAO Equipment: B, G, S, Y
  - ICAO Surveillance: B2, E

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Domestic & ICAO Flight Plans

Equipment Codes (GTN 650Xi & GTX 345)

FILING

FAA Equipment

- ○ /A - DME w/ Mode C
- ○ /B - DME no Mode C
- ○ /C - RNAV no Mode C
- ○ /D - DME no Transponder
- ◉ /G - GPS/GNSS w/ enrte/term/appr
- ○ /H - RVSM w/ no Mode C
- ○ /I - RNAV w/ Mode C
- ○ /L - GPS w/ enrte/term/appr/RVSM
- ○ /M - TACAN no Transponder
- ○ /N - TACAN no Mode C
- ○ /P - TACAN w/ Mode C
- ○ /S - GNSS w/ Mode A
- ○ /T - no DME no Mode C
- ○ /U - no DME w/ Mode C
- ○ /V - GNSS w/ no Transponder
- ○ /W - RVSM w/ Mode C
- ○ /X - no DME no Transponder
- ○ /Y - RNAV w/ no Transponder
- ○ /Z - RVSM w/ RNAV/Mode C, no GNSS

ICAO Equipment

- ☐ A - GBAS Landing Sys
- ☑ B - LPV (APV with SBAS)
- ☐ C - LORAN C
- ☐ D - DME
- ☐ E1 - FMC WPR ACARS
- ☐ E2 - D-FIS ACARS
- ☐ E3 - PDC ACARS
- ☐ F - ADF
- ☑ G - GNSS
- ☐ H - HF RTF
- ☐ I - Inertial Nav
- ☐ J1 - CPDLC ATN VDL Mode 2
- ☐ J2 - CPDLC FANS 1/A HFDL
- ☐ J3 - CPDLC FANS 1/A VDL Mode A
- ☐ J4 - CPDLC FANS 1/A VDL Mode 2
- ☐ J5 - CPDLC FANS 1/A (INMARSAT)
- ☐ J6 - CPDLC FANS 1/A (MTSAT)
- ☐ J7 - CPDLC FANS 1/A (Iridium)
- ☐ K - MLS
- ☐ L - ILS
- ☐ M1 - ATC RTF (INMARSAT)
- ☐ M2 - ATC RTF (MTSAT)
- ☐ M3 - ATC RTF (Iridium)
- ☐ N - NIL
- ☐ O - VOR
- ☐ P1 - CPDLC RCP 400
- ☐ P2 - CPDLC RCP 240
- ☐ P3 - SATVOICE RCP 400
- ☐ R - PBN Approved
- ☑ S - (VOR, VHF RTF, ILS)
- ☐ T - TACAN
- ☐ U - UHF RTF
- ☐ V - VHF RTF
- ☐ W - RVSM
- ☐ X - MNPS
- ☑ Y - VHF 8.33 kHz spacing
- ☐ Z - Other (Automatically set)

ICAO Surveillance Codes

- ☐ A - Mode A
- ☐ B1 - ADS-B, Dedicated 1090 Out
- ☑ B2 - ADS-B, Dedicated 1090 Out+In
- ☐ C - Modes A and C
- ☐ D1 - ADS-C, FANS
- ☑ E - Mode S, ID, Alt, Squitter
- ☐ G1 - ADS-C, ATN
- ☐ H - Mode S, ID, Alt, Enhanced Surv
- ☐ I - Mode S, ID no Alt
- ☐ L - Mode S, ID, Alt, Squitter+Enh Surv
- ☐ N - NIL
- ☐ P - Mode S, Alt no ID
- ☐ S - Mode S, ID and Alt
- ☐ U1 - ADS-B, UAT Out
- ☐ U2 - ADS-B, UAT Out+In
- ☐ V1 - ADS-B, VDL Mode 4 Out
- ☐ V2 - ADS-B, VDL Mode 4 Out+In
- ☐ X - Mode S, no ID no Alt

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Special Equipment

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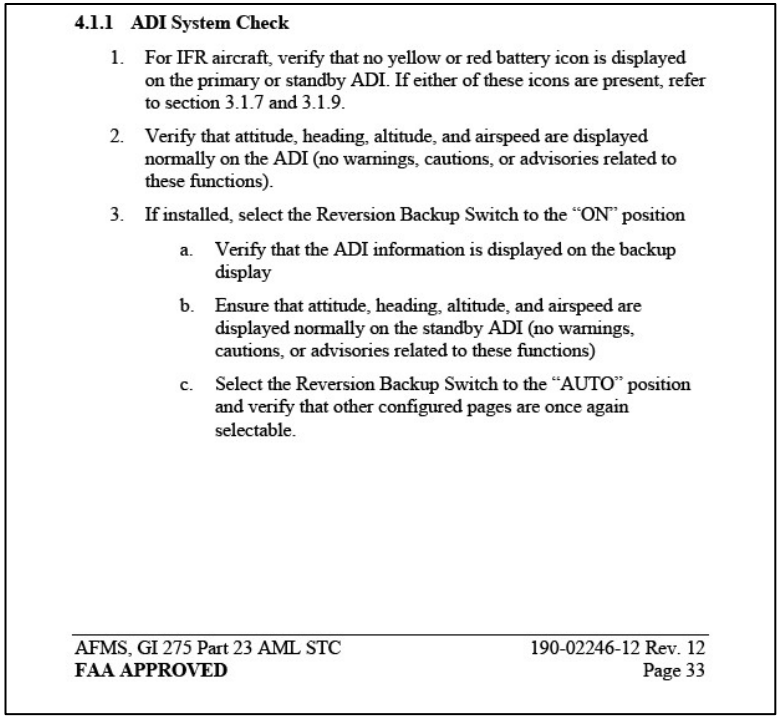
Aircraft Flight Manual Supplements (AFMSs)

- Flight Manual Supplement
  - Ensures the pilot has access to all the necessary and updated information to safely operate a particular aircraft, as configured, with any modifications or installed equipment.

- POH – Supplements Section (Section 9)
  - Contains AFMSs detailing information needed to operate optional equipment installed on the aircraft.
  - Typically contains additional checklist items
    - Normal Operations
    - Emergency Operations

- Garmin GI 275 AFMS Excerpt:



4.1.1 ADI System Check

1. For IFR aircraft, verify that no yellow or red battery icon is displayed on the primary or standby ADI. If either of these icons are present, refer to section 3.1.7 and 3.1.9.
2. Verify that attitude, heading, altitude, and airspeed are displayed normally on the ADI (no warnings, cautions, or advisories related to these functions).
3. If installed, select the Reversion Backup Switch to the "ON" position
   a. Verify that the ADI information is displayed on the backup display
   b. Ensure that attitude, heading, altitude, and airspeed are displayed normally on the standby ADI (no warnings, cautions, or advisories related to these functions)
   c. Select the Reversion Backup Switch to the "AUTO" position and verify that other configured pages are once again selectable.

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N4335M Panel

(July 2025)

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N4335M Panel

(Important Differences)

- Vacuum System Removed
  (Static Air “Steam” Gauges Remain)
- Battery Backup
- Reversionary Mode
- Graphic Engine Analyzer
- Fully-Coupled Autopilot
- ADS-B Out/In Capable
  - Bluetooth ID= “N4335M GTN650Xi”
- TAA Compliant
  (Technically Advanced Aircraft)

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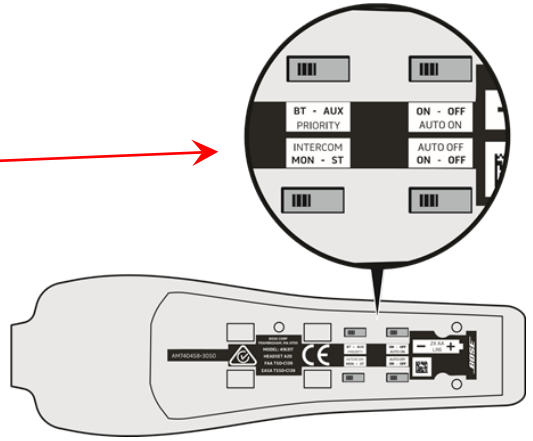
GMA 350c Audio Panel

- Stereo Audio Panel / Intercom
  - Pilot, Co-Pilot, Passengers
  - Co-Pilot position can be configured as “Crew” or “Passenger”

- “3D Audio”
  - Enables hearing different audio sources from different directions
    - COM1 (ATC) = Left
    - COM2 (ATIS) = Right
  - Easier to isolate ATIS/AWOS broadcast from comms “chatter”
  - Requires stereo headsets



Bose A20

- (3) Entertainment Inputs
  - MP3 Players, Smart Phones, etc.
  - Front Panel / Bluetooth, Co-Pilot, and Rear Seat Jacks
  - Music / Telephone can be easily distributed to the Pilot, Co-Pilot, and/or Passengers
- Flight Recorder

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Garmin GTN 650Xi

Touchscreen Navigator

- WAAS GPS / Comm / Nav Multi-Function Display (MFD)
  - 4.9” Touch-Screen Display
  - Moving Map w/Nav Data
  - Obstacles / Terrain
  - ADS-B Weather & Traffic
  - Airport Diagrams

- “SafeTaxi”
  - When on the ground, geo-referenced airport diagrams automatically display
  - Shows your aircraft’s position on the runway/taxiway to enhance situational awareness

(You should still be looking out the window!)

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Garmin GTX 345

ADS-B In/Out Transponder

- ABS-B In (Streamed via Bluetooth)
  - FIS-B: Weather & Flight Information
  - TIS-B: Traffic Display & Aural Alerting
    - An aural message issues when an alert becomes active. For example, “Traffic! Two O’clock, Low, Two Miles.”
    - Aural Alerts Suppressed Below 500ft AGL

    (You should still be looking out the window!)
- Surface Situational Awareness Mode:
  - Active within 5NM from and at/below 1500ft of the nearest airport
  - Airport Map Data and Ground Targets may be Displayed (via SafeTaxi on GTN 650Xi)
- Bluetooth Interface
  - Managed via GTN 650Xi
    - MENU → System → Connext Setup
  - If Unable to Connect (Pair)
    - Select “Manage Paired Devices”
    - Confirm <10 Devices are “Remembered”
    - You may need to delete saved devices

Always operate the Transponder in ALT Mode unless otherwise advised by ATC

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Garmin GI 275 ADI

Primary Flight Display

- Fully-Integrated ADAHRS
  (Air Data, Attitude, and Heading Reference System)
  - Attitude Indicator, Heading Indicator, Airspeed Indicator, Altimeter, Turn Coordinator, Vertical Speed Indicator
  - Lateral & Vertical Course Guidance
    - Lateral: CDI (**VOR/LOC/GPS**)
    - Vertical: **Glide Slope (ILS)** / **Glide Path (GPS)**
- TIS-B Traffic
- Backup Battery
  - Provides up to (60) Minutes of Operation following the Loss of Aircraft Power
  - During Normal Power-Down, allow the "Shutting Down in XX" countdown to time out.
  - Do NOT press the "Stay On" button.
- Backup VFR GPS

Magenta = GPS Calculated Data

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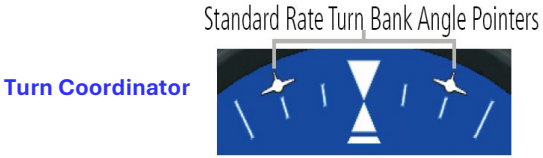
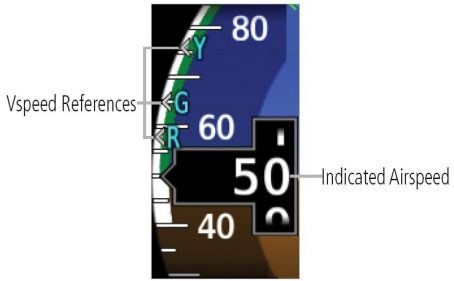
Garmin GI 275 ADI

Breaking it Down

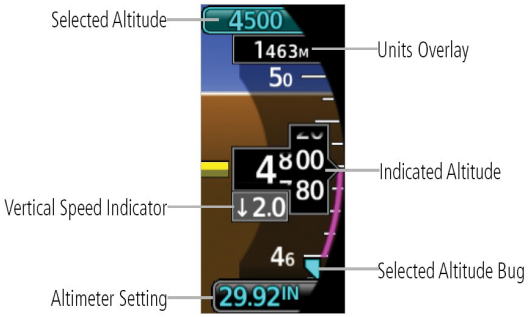


Turn Coordinator



Airspeed Indicator

Attitude Indicator



Altimeter

Heading Indicator

Vertical Speed Indicator and Altitude Trend Vector

Aircraft Symbol and Horizon Line are Calibrated for Level Pitch – Non-Adjustable

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Garmin GI 275 HSI

HSI / Standby ADI Display

Green = Raw Data (VOR / ILS / LOC)
Magenta = GPS Calculated Data

- Two Selectable HSI Pages:
  - "HSI" (Standard HSI)
    - Default / Power-Up Page
    - Selectable Navigation Source
    - Lateral & Vertical Course Guidance
      - Lateral: (**VOR/LOC/GPS**)
      - Vertical: **Glide Slope (ILS)** / **Glide Path (GPS)**
    - GPS Data Fields:
      - **DIS**: Distance to Waypoint
      - **ETE**: Estimated Time Enroute
  - "HSI Map" (Enhanced HSI)
    - Adds Situational Awareness to Traditional HSI
    - Moving Map, Waypoints, Flightplan Course
    - Airspace, Airports, Navaids
    - FIS-B Weather, TIS-B Traffic

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Garmin GI 275 HSI

"HSI" Page (Standard HSI)

Heading Bug

Current Heading

Navigation Source (VOR/LOC/GPS)

Course Deviation Markers

Active Waypoint

Distance to Waypoint

Selected Heading

Message on External Navigator

CDI Source Selection

Current Track (GPS)

To/From Indicator

External Navigator Phase of Flight

Vertical Deviation Indicator

Est. Time to Waypoint

Course Deviation Indicator

Active Course

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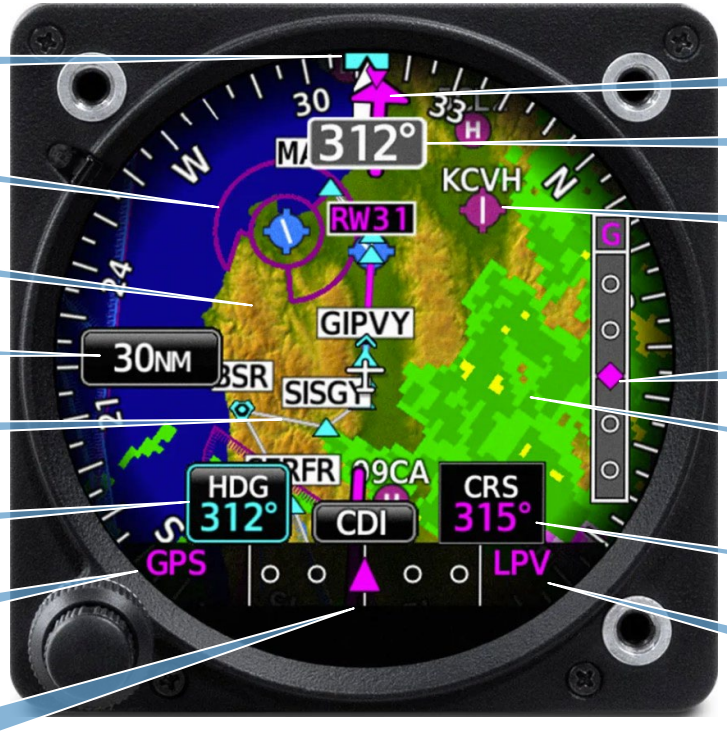
Garmin GI 275 HSI

"HSI Map" Page (Enhanced HSI)



Heading Bug

Class C Airspace

Terrain / Obstacles

Map Zoom Level

Waypoints

Selected Heading

Navigation Source (VOR/LOC/GPS)

Course Deviation Indicator

Active Course Pointer

Current Heading

Airports

Vertical Deviation Indicator

TIS-B Weather

Active Course

External Navigator Phase of Flight

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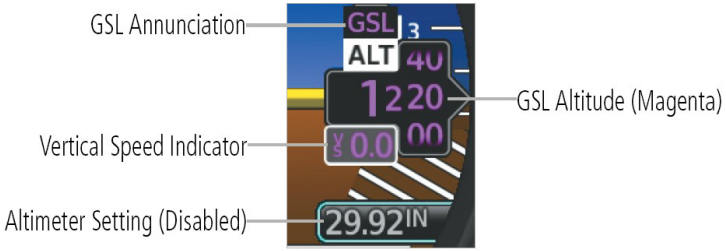
GI 275 System Redundancy

- **Backup Battery**
  - Provides up to (60) minutes of Backup Power if Aircraft Power is Lost
    - If Airborne:
      - "External Power Lost" Message Appears
    - If on the Ground:
      - "Shutting Down in XX Secs" Message Appears
      - Allow Countdown to time out – DO NOT Press Any Button
      - Pressing the "Stay On" Button will require a Manual Shutdown or the GI 275 will remain on until Battery Power is exhausted

Battery status annunciations appear on the upper left portion of the GI 275.

Annunciation(s)	Explanation
	System running on battery Greater than or equal to 60 minutes of battery life
	System running on battery / battery charging Between 15 - 59 minutes of battery life
	Battery fault or battery rundown test expired
	System running on battery / battery charging Less than 15 minutes of battery life

- **GPS Backup / Redundancy**
  - Altimeter (GSL Backup)
    - Should all Static Air Data Sources Fail, the ADI Page will display Geometric Sea Level (GSL) Altitude (based on GPS) as a Backup Altitude Source.
  - Internal VFR-Only GPS
    - If the GTN 650Xi fails, the GI 275s will use their Internal VFR-Only GPS
    - "VFR GPS is Being Used" Message Appears



Altimeter - GSL

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GI 275 System Redundancy

"Display Backup" (Reversionary Operation)

- System Annunciations:
  - If a major component of the GI 275 system fail, a Red or Yellow "**X**" will be displayed.
- Reversionary Operation:
  - Should the Primary ADI have a fault, the "Standby Display" (HSI) will "revert" to behaving as a Primary ADI until the fault is resolved.
- Manual Reversion
  - Using the panel-mounted "DISPLAY BACKUP" switch, the pilot can manually select and/or reversionary operation.

***NOTE:** This should be performed as a checklist item during pre-flight / run-up.*

Normal Operation

Backup Operation

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GI 275 System Redundancy

Pre-Flight Checklist Test (Flight Manual Supplement)

Primary and Standby ADI Check:

☑ Primary Display (GI 275 ADI)……... VERIFY
(All Data is Displayed NORMALLY)
(No Warnings, Cautions, or Advisories related to these Functions)

☑ Standby Display (GI 275 HSI)…….. VERIFY
(All Data is Displayed NORMALLY)
(No Yellow or Red Battery Icon is Displayed)

NOTE

If a Yellow or Red battery icon is displayed in the upper left of either GI 275 Display, **DO NOT TAKEOFF.**

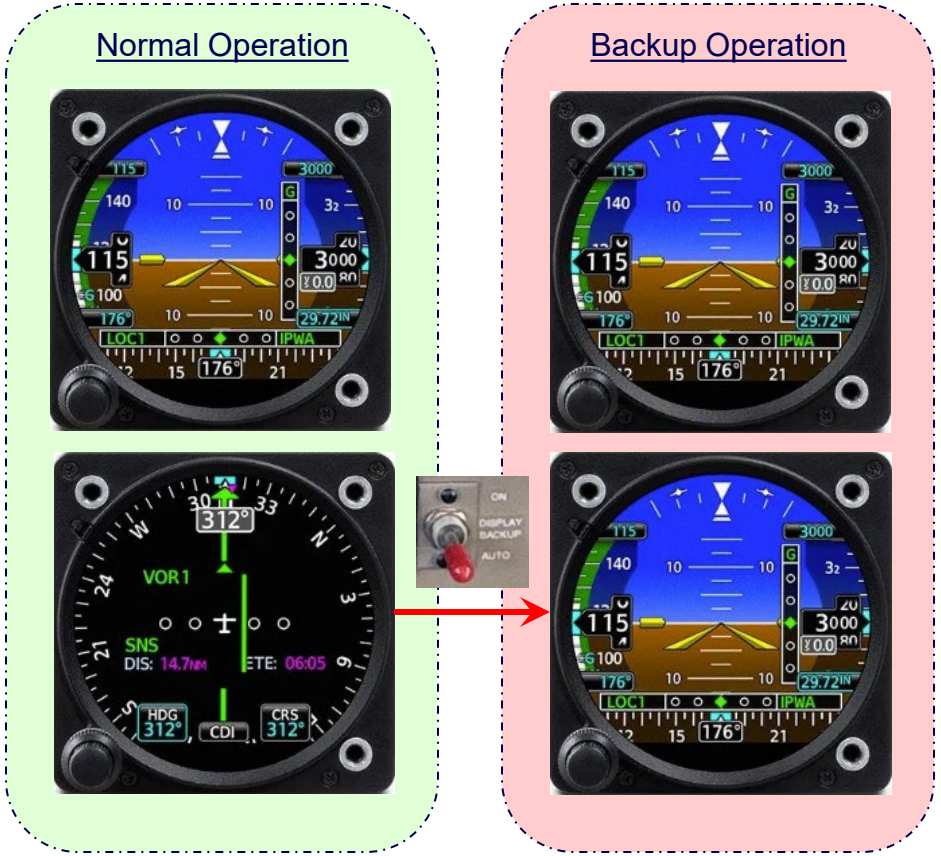
Standby Display Reversionary Test:

☑ DISPLAY BACKUP Switch……..ON

☑ Standby Display displays ADI Page……. VERIFY
(Attitude, Heading, Altitude, and Airspeed are displayed NORMALLY)
(No Warnings, Cautions, or Advisories related to these functions)

☑ DISPLAY BACKUP Switch…… AUTO

☑ Standby Display can select HSI and HSI Map……..VERIFY



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Bendix/King KAP-150 Autopilot

Pre-Flight Checklist Test (Flight Manual Supplement)

Autopilot Test:

TEST Button……...Momentarily PUSH

- ☑ ALL ANNUNCIATOR LIGHTS……...Verify ILLUMINATED
- ☑ TRIM Annunciator……...…FLASHES (4) Times
- ☑ ALL Annunciator Lights……..……Verify OFF
- ☑ AURAL ALERT……...…Verify BEEPS (~6) Times
- ☑ AP Annunciator Light……...……Verify FLASHES (~12) Times (Then OFF)

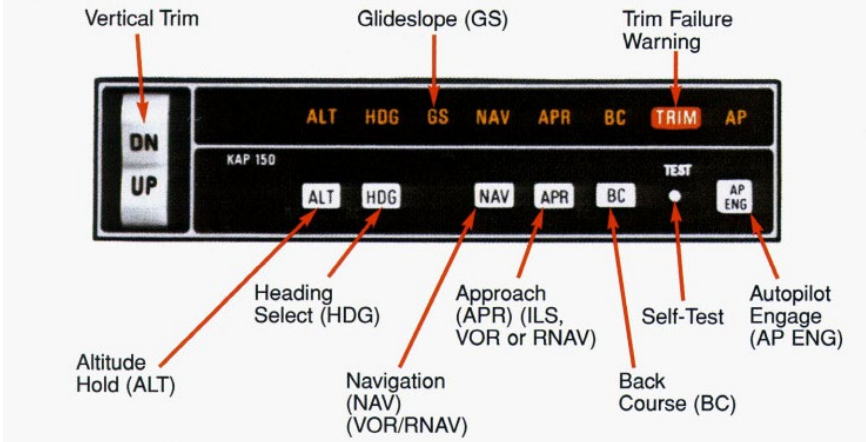
CAUTION

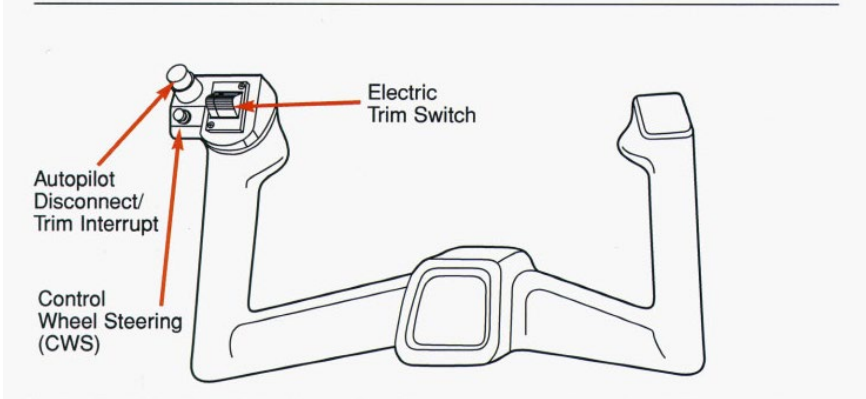
If the AP light fails to flash, you will be unable to engage the Autopilot.

- ☑ ALL ANNUNCIATOR LIGHTS……..…Verify OFF/BLANK

CAUTION

If the TRIM Annunciator Light flashes or remains on at the end of the Test, there is a failure in the Trim System, and you will be unable to engage the Autopilot.





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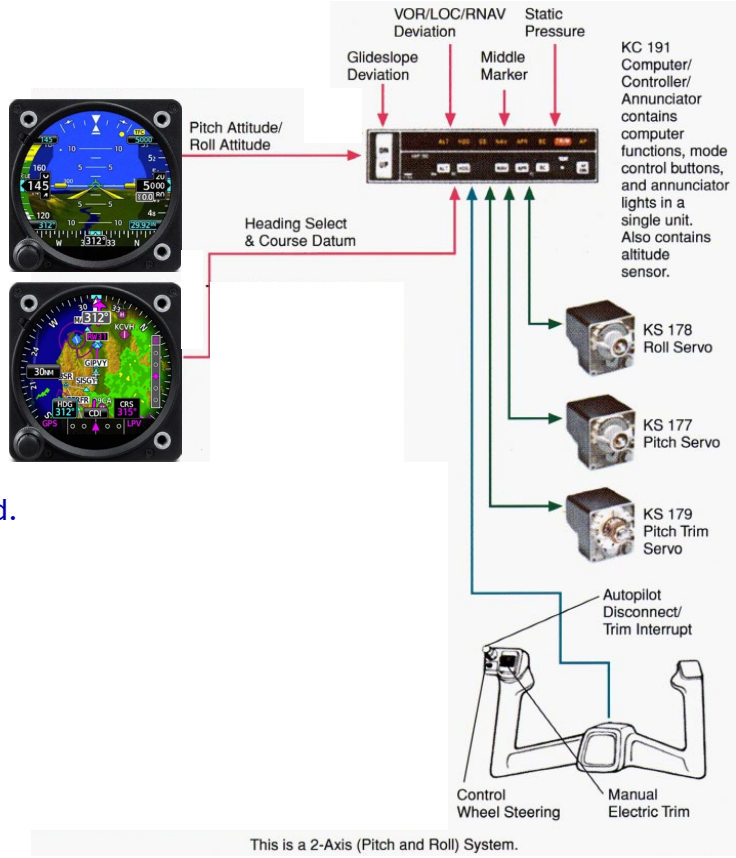
Bendix/King KAP-150 Autopilot

Pre-Flight Checklist Test

- Press “AP ENG” to Engage
- Lateral Guidance via:
  - HDG Mode: Heading Bug on GI 275
  - NAV Mode: GTN 650 Xi (**GPS** or **VLOC**)
    - Built-In GPS Steering (GPSS) will “automatically” fly Holds and Procedure Turns
  - APR Mode: GTN 650Xi (**GPS** or **VLOC**)
    - **ILS**, **LOC**, **LNAV**, **LNAV/VNAV**, and **LPV** Approaches
    - **Glide Slope** / **Glide Path** Capturing
- Altitude Hold:
  - Present Altitude Held when ALT Button is Pressed
  - Aircraft Should Trimmed in Level Flight when ALT Mode is Engaged.
- Control Wheel Steering (CWS):
  - Allows Pilot to Maneuver Aircraft in Pitch and Roll Without Disengaging Autopilot
  - When CWS Switch is Released, Autopilot Resumes Control of the Aircraft
- Yoke-Mounted Disconnect Switch:
  - Autopilot Disconnect and Altitude Disconnect



This is a 2-Axis (Pitch and Roll) System.

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Horizon P-1000 Digital Tachometer

- Left Button:
  - Example: Engine Hours = 1500.83
  - Press and Hold for (1) Second to Display Integer Portion of Engine Hours, (1500)
  - Release to Display Fractional Portion of Engine Hours for (5) Seconds, (.83)
  - After (5) Seconds, the Display Reverts back to RPM
- RPM Arc Indicators:
  - (3) LED Indicators at Top Right of Tach.
  - GREEN = Normal Operating Range
  - YELLOW = Caution Range
  - RED = Red Line
- Magneto Drop Display Mode:
  - Loss of Either Mag. Causes Corresponding “Status” LED Indicator to Turn RED.
  - RPM Drop is Displayed as a Negative Number
  - A Positive Number Indicates an Increase in RPM

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Insight G3 GEM

Graphic Engine Monitor

- Improved Engine Performance and Efficiency
- Real-Time Monitoring and Logging of Engine Parameters
- Optimizes the Leaning Process:
  - Press the “SEL” button to enable lean mode.
  - Slowly lean the mixture until one of the EGT lean boxes appears at the top of the EGT bars.
  - The first “lean box” to appear identifies the leanest cylinder (the first to reach peak EGT).
  - Continue leaning until lean boxes appear on all cylinders.
  - To operate Rich of Peak, enrich the mixture until the boxes are solid cyan with a black ‘R’ number inside.

NOTE: Lycoming recommends operation at Peak EGT for power settings of 75% and less.

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Insight G3 GEM

Graphic Engine Monitor

- Totalization Function Provides Precise Monitoring of Fuel Flow over Time
  - Fuel Remaining
  - Fuel Endurance
- Requires the Pilot to Update Fuel Added after Re-Fueling!

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Condor Fleet at a Glance

- The Dakota Meets the Requirements of a Technically Advanced Aircraft (TAA)!

Per FAA Notice 8900.463 (April 24, 2018)
Removed Complex Aircraft Requirement from Commercial and Certified Flight Instructor Practical Tests

- You Can Obtain your Commercial Pilot Certificate in the Dakota!

- You Can Obtain your Certified Flight Instructor Certificate in ANY Condor Aircraft!

	549	104	573	4SP	06M	63T	35M
Complex Airplane: FAR 61.1(b)						✓	
Retractable Gear, Flaps, C/S Prop						•	
Hi-Perf. Airplane: FAR 61.31(f)(1)							✓
Engine Produces >200 HP							•
TAA Airplane: FAR 61.129(j)							✓
(1) PFD (using AHRS source),							•
(2) MFD (using GPS w/Mov. Map),	•	•	•	•	•	•	•
(3) 2-Axis A/P (HDG/NAV and ALT Hold),				•	•		•
(4) and (j)(1) and (2) must be visible.							•
Comm'l Certificate: FAR 61.129(a)(3)(ii)						✓	✓
(10) Hours Training in a Complex, or						•	
Turbine, or							
TAA Airplane							•
CFI Certificate: FAR 61.183(h)(1)	✓	✓	✓	✓	✓	✓	✓
Aircraft that is Representative...	•	•	•	•	•	•	•

FAR 61.129(j) TAA Airplane

(1) An electronic Primary Flight Display (PFD) that includes, at a minimum, an airspeed indicator, turn coordinator, attitude indicator, heading indicator, altimeter, and vertical speed indicator;

(2) An electronic Multifunction Display (MFD) that includes, at a minimum, a moving map using Global Positioning System (GPS) navigation with the aircraft position

(3) A two-axis autopilot (HDG/NAV & ALT Hold) integrated with the navigation and heading guidance system; and

(4) The display elements described in paragraphs (j)(1) and (2) of this section must be continuously visible.

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Helpful Links

- Condor Document Library
  - Dakota POH
  - Garmin Pilot's Guides
  - Bendix/King Autopilot Pilot's Guide
  - P-1000 Digital Tachometer
  - Insight G3 Graphic Engine Monitor

- YouTube Videos
  - GI 275 ADI & HSI Overview (C-150)
    (Think GTN 650Xi when he shows GTN 750)
  - IFR Demo: (2) GI 275s and KFC-150
    (GPSS vs NAV Mode, very detailed)

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Questions ?