

# Garmin G1000 and KAP 140 Checkout

## Radios

- Intercom
  - Pilot and copilot volume
  - Manual squelch
  - Pilot and copilot isolate and crew mode
  - CVR playback
- Communication radios
  - Manual tuning and the tuning box
  - Switching radios for transmit and the active green color
  - Monitoring more than one radio
  - Setting volume
  - Manual squelch break
  - Comm 1/2 split
  - Auto-tuning from PFD and MFD
- Navigation radios
  - Manual tuning and the tuning box
  - Monitoring and IDing (auto and manual)
  - Setting volume
  - CDI select and the active green color
  - Auto-tuning from PFD and MFD
- SPKR mode
- Marker beacon sense level and mute

## PFD

- GPS information
- Attitude indicator
- Slip triangle
- Airspeed
  - Airspeed bugs
  - Color ranges
  - Trend indicator
  - TAS
- Altimeter
  - Setting barometric pressure
  - Altitude bug
  - MDA/DH minimum and bug*
  - Required vertical speed bug*
  - Vertical deviation indicator*
  - VNAV target altitude*
- HSI
  - Heading bug and sync
  - Track bug*
  - CDI nav source select
  - Course select
  - Turn rate indicator
  - GPS integrity (*LOI, WARN, DR*)
  - GPS OBS mode
  - DME
  - RMI bearing pointers

- Wind*
- Timer / reference speeds (*MDA/DH minimum*)
- Nearest pages
- Cautions, warnings, and alerts
- Inset map setup, zoom, and pan
- Transponder
  - Automatic GND/ALT switch
  - Manual SBY/ON/ALT function
  - IDENT
  - Squawk code selection
  - VFR code selection

## MFD

- Engine monitoring
  - Fuel used and reset
  - Leaning
- NAV pages
  - Map
    - Zoom range
    - Panning
    - Setup
      - Orientation
      - Wind vector
      - Fuel range ring
    - Measuring bearing and distance
  - Airways*
  - Topo overlay and dedicated page
  - Terrain overlay and dedicated page
  - Traffic overlay and dedicated page
  - Stormscope/XM WX overlay and dedicated page
- WPT pages
  - Airports (INFO, DP, STAR, APR)
  - Intersections, VORs, NDBs
- AUX pages
  - Trip planning
    - AUTO or MANUAL
    - Direct-to (P.POS or WPT) or FPL
  - Utilities
    - Timers
    - Odometers
  - GPS status page
    - RAIM prediction
  - XM radio
  - System status
- NRST pages
  - Airports (APT, RNWY, FREQ, APR)
  - Intersections, VORs, NDBs
  - Frequencies
- Checklist*
- SafeTaxi/ChartView/FliteCharts*

**Basic GPS Navigation (PFD and MFD)**

- Direct-to function
  - Direct-to waypoint
  - Resetting based on current position
  - Canceling
  - Direct-to FPL/NRST/RECENT
  - Direct-to using a course
  - VNAV *altitude*
- Flight planning
  - Adding and deleting waypoints
  - Direct-to a flight plan waypoint
  - Activating a flight plan leg
  - Adding, changing, deleting an airway*
  - Expand and collapse airways*
  - Vertical navigation – preloaded, manual, clear, enable/disable*
  - Along-track offset*
  - Wide and narrow view, leg-leg and cum*
  - Store, delete, invert a flight plan
  - Stored flight plans: New, activate, invert, edit, copy, and delete
- VNAV

**Instrument Procedures**

- Loading
- Activating
- Vectors-to-Final
- Adding a STAR
- Adding a DP
- Holding and OBS mode
- Automatic switch to NAV mode on an ILS
- Use of OBS/SUSP at MAP

**Gotchas**

- AHRS failure
  - Removes RMI
  - Removes heading numbers on HSI
- ADC failure
  - Terrain information is taken from the barometric ADC altitude, not the GPS altitude
- GPS failure
  - MFD and PFD maps revert to heading mode, but don't change position (can still pan, which might be useful for terrain info)
  - Dead reckoning (DR) mode*
- LOC/ILS approaches
  - Frequency is automatically loaded into standby or main, depending on whether it's in use
  - HSI automatically switches to LOC mode at FAC intercept when close enough to FAF

**Autopilot Operations**

- Preflight test (see POH)
- Baro set
- Disconnect
- AP engage
- Lateral modes
  - HDG
  - NAV (VOR and GPS)
  - APR (required for GS)
  - REV (no GS)
- Vertical modes
  - ALT capture, up/down adjustments (ALT toggle)
  - VS, up/down adjustments (ALT toggle)
  - Setting altitude alerter
  - ARM

**Required Instrument Procedures**

- Fully coupled ILS including localizer intercept
- Fully coupled GPS including descents
- Hand-flown approach with AHRS failure

**Emergencies**

- PFD failure
- MFD failure
- AHRS failure
- ADC failure
- GPS failure
- Reversionary mode

*Items in italics represent Garmin software version 0563.03 or later.*