Cessna 172S Nav III

INTRODUCTION

This checklist contains information from the original manufacturer's Pilot Information Manual. Normal procedures associated with optional systems can be found in the Supplements, Section 9.

Information in BLACK is taken from the original manufacturer's Pilot Information Handbook.
Information in GREEN is Aspen Flying Club's recommendations for high altitude operations.

AIRSPEEDS

AIRSPEEDS FOR NORMAL OPERATION

Unless otherwise noted, the following speeds are based on a maximum weight of 2550 pounds and may be used for any lesser weight.

TAKEOFF:

Normal Climb Out..... 75 - 85 KIAS
Short Field Takeoff, Flaps 10°, Speed at 50 Feet ..... 56 KIAS

ENROUTE CLIMB, FLAPS UP:

Normal, Sea Level..... 75 - 85 KIAS
Normal, 10,000 Feet ..... 70 - 80 KIAS
Best Rate-of-Climb, Sea ..... 74 KIAS
Best Rate-of-Climb, 10,000 Feet..... 72 KIAS
Best Angle-of-Climb, Sea Level ..... 62 KIAS
Best Angle-of-Climb, 10,000 Feet ..... 67 KIAS

LANDING APPROACH:

Normal Approach, Flaps UP .....65 – 75 KIAS
Normal Approach, Flaps FULL..... 60 - 70 KIAS
Short Field Approach, Flaps FULL..... 61 KIAS

BALKED LANDING:

Maximum Power, Flaps 20° ..... 60 KIAS

MAXIMUM RECOMMENDED TURBULENT AIR PENETRATION SPEED:

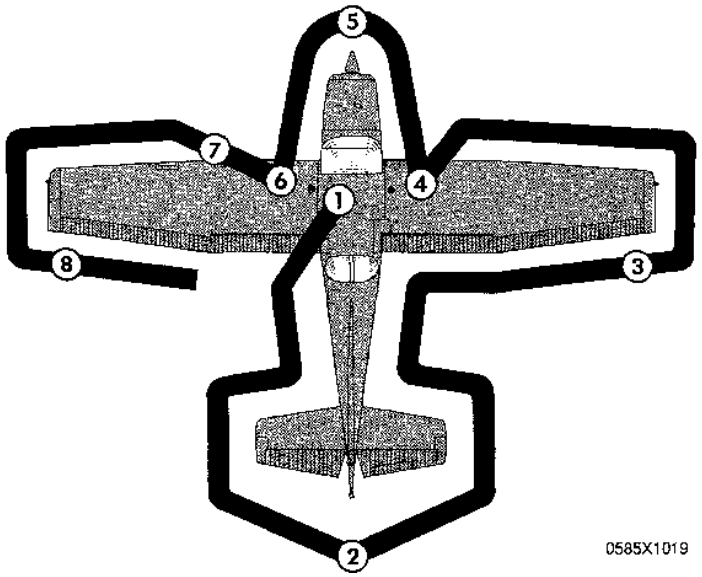
2550 POUNDS..... 105 KIAS
2200 POUNDS..... 98 KIAS
1900 POUNDS..... 90 KIAS

MAXIMUM DEMONSTRATED CROSSWIND VELOCITY:

Takeoff or Landing ..... 15 KNOTS

NORMAL PROCEDURES

PREFLIGHT INSPECTION



NOTE

Visually check airplane for general condition during walk-around inspection. Airplane should be parked in a normal ground attitude (refer to Figure 1-1) to make sure that fuel drain valves allow for accurate sampling. Use of the refueling steps and assist handles will simplify access to the upper wing surfaces for visual checks and refueling operations. In cold weather, remove even small accumulations of frost, ice or snow from wing, tail and control surfaces. Also, make sure that control surfaces contain no internal accumulations of ice or debris. Prior to flight, check that pitot heater is warm to touch within 30 seconds with battery and pitot heat switches on. If a night flight is planned, check operation of all lights, and make sure a flashlight is available.

Figure 4-1

(1) CABIN

1. Pitot Tube Cover - REMOVE (Check for pitot blockage)
2. Pilot's Operating Handbook - ACCESSIBLE TO PILOT
3. Garmin G1000TM Cockpit Reference Guide - ACCESSIBLE TO PILOT
4. Airplane Weight and Balance - CHECKED
5. Parking Brake - SET
6. Control Wheel Lock - REMOVE

WARNING

WHEN THE MASTER SWITCH IS ON, USING AN EXTERNAL POWER SOURCE, OR MANUALLY ROTATING THE PROPELLER, TREAT THE PROPELLER AS IF THE MAGNETOS SWITCH WERE ON. DO NOT STAND, NOR ALLOW ANYONE ELSE TO STAND, WITHIN THE ARC OF THE PROPELLER SINCE A LOOSE OR BROKEN WIRE, OR A COMPONENT MALFUNCTION, COULD CAUSE THE ENGINE TO START.

7. MAGNETOS Switch - OFF
8. AVIONICS Switch (BUS 1 and BUS 2) - OFF
9. MASTER Switch (ALT and BAT) - ON
10. Primary Flight Display (PFD) - CHECK (Verfiy PFD is ON)
11. FUEL QTY (L and R) – CHECK

11a. Do not rely upon fuel gauge reading for flight planning.

12. LOW FUEL L and LOW FUEL R Annunciators - CHECK (Verify annunciators are not shown on PFD)
13. OIL PRESSURE Annunciator - CHECK (Verify annunciator is shown)
14. LOW VACUUM Annunciator - CHECK (Verify annunciator is shown)
15. AVIONICS Switch (BUS 1) - ON
16. Forward Avionics Fan - CHECK (Verify fan is heard)
17. AVIONICS Switch (BUS 1) - OFF
18. AVIONICS Switch (BUS 2) - ON
19. Aft Avionics Fan - CHECK (Verify fan is heard)
20. AVIONICS Switch (BUS 2) - OFF
21. PITOT HEAT Switch - ON (Carefully check that pitot tube is warm to the touch within 30 seconds)

22. PITOT HEAT Switch - OFF
23. LOW VOLTS Annunciator - CHECK (Verify annunciator is shown)

23a. External lights/pitot heat – CHECK

23b. Flaps - EXTEND

24. MASTER Switch (ALT and BAT) - OFF
25. Elevator Trim Control - TAKEOFF position

25a. Compass Deviation Card - INSTALLED

26. FUEL SELECTOR Valve - BOTH
27. ALT STATIC AIR Valve - OFF (push full in)
28. Fire Extinguisher - CHECK (Verify gage pointer in green arc).

(2) EMPENNAGE

1. Baggage Door - CHECK (lock with key)
2. Autopilot Static Source (if installed) - CHECK (Verify opening is clear)
3. Rudder Gust Lock (if installed) - REMOVE
4. Tail Tiedown – DISCONNECT
5. Control Surfaces- CHECK freedom of movement and security
6. Elevator Trim Tab - CHECK security
7. Antennas - CHECK for security of attachment and general condition

(3) RIGHT WING Trailing Edge

1. Flap - CHECK for security and condition
2. Aileron - CHECK freedom of movement and security

(4) RIGHT WING

1. Wing Tiedown - DISCONNECT
2. Main Wheel Tire - CHECK for proper inflation and general condition (weather checks, tread depth and wear, etc.).

2a. Brake pads, rotor and lines - CHECK

3. Fuel Tank Sump Quick Drain Valves - DRAIN

Drain at least a cupful of fuel (using sampler cup) from each sump location to check for water, sediment, and proper fuel grade before each flight and after each refueling. If water is observed, take further samples until clear and then gently rock wings and lower tail to the ground to move any additional contaminants to the sampling points. Take repeated samples from all fuel drain points until all contamination has been removed. If contaminants are still present, refer to WARNING below and do not fly airplane.

NOTE

Collect all sampled fuel in a safe container. Dispose of the sampled fuel so that it does not cause a nuisance, hazard, or damage to the environment.

WARNING

IF, AFTER REPEATED SAMPLING, EVIDENCE OF CONTAMINATION STILL EXISTS, THE AIRPLANE SHOULD NOT BE FLOWN. TANKS SHOULD BE DRAINED AND SYSTEM PURGED BY QUALIFIED MAINTENANCE PERSONNEL. ALL EVIDENCE OF CONTAMINATION MUST BE REMOVED BEFORE FURTHER FLIGHT.

4. Fuel Quantity - CHECK VISUALLY for desired level
5. Fuel Filler Cap - SECURE and VENT CLEAR

(5) NOSE

0. Windscreen – CHECK/CLEAN

1. Fuel Strainer Quick Drain Valve (Located on bottom of fuselage) - DRAIN

Drain at least a cupful of fuel (using sampler cup) from valve to check for water, sediment, and proper fuel grade before each flight and after each refueling. If water is observed, take further samples until clear and then gently rock wings and lower tail to the ground to move any additional contaminants to the sampling points. Take repeated samples from all fuel drain points, including the fuel reservoir and fuel selector, until all contamination has been removed. If contaminants are still present, refer to WARNING below and do not fly the airplane.

NOTE

Collect all sampled fuel in a safe container. Dispose of the sampled fuel so that it does not cause a nuisance, hazard, or damage to the environment.

WARNING

IF, AFTER REPEATED SAMPLING, EVIDENCE OF CONTAMINATION STILL EXISTS, THE AIRPLANE SHOULD NOT BE FLOWN. TANKS SHOULD BE DRAINED AND SYSTEM PURGED BY QUALIFIED MAINTENANCE PERSONNEL. ALL EVIDENCE OF CONTAMINATION MUST BE REMOVED BEFORE FURTHER FLIGHT.

2. Engine Oil Dipstick/Filler Cap - CHECK oil level, then check dipstick/filler cap SECURE. Do not operate with less than 5 quarts. Fill to 8 quarts for extended flight.
3. Engine Cooling Air Inlets - CLEAR of obstructions.
4. Propeller and Spinner - CHECK for nicks and security.
5. Air Filter - CHECK for restrictions by dust or other foreign matter.
6. Nosewheel Strut and Tire - CHECK for proper inflation of strut and general condition of tire. (weather checks, tread depth and wear, etc.)
7. Static Source Opening - CHECK (Verify opening is clear)
8. **Exhaust - CHECK**

(6) LEFT WING Leading Edge

1. Fuel Tank Vent Opening - CHECK for blockage
2. Stall Warning Opening - CHECK for blockage. To check the system, place a clean handkerchief over the vent opening and apply suction; a sound from the warning horn will confirm system operation.
3. Landing/Taxi Light(s) - CHECK for condition and cleanliness of cover.

(7) LEFT WING

1. Wing Tiedown - DISCONNECT
2. Fuel Quantity - CHECK VISUALLY for desired level
3. Fuel Filler Cap - SECURE and VENT CLEAR
4. Fuel Tank Sump Quick Drain Valves - DRAIN

Drain at least a cupful of fuel (using sampler cup) from each sump location to check for water, sediment, and proper fuel grade before each flight and after each refueling. If water is observed, take further samples until clear and then gently rock wings and lower tail to the ground to move any additional contaminants to the sampling points. Take repeated samples from all fuel drain points until all contamination has been removed. If contaminants are still present, refer to WARNING below and do not fly airplane.

NOTE

Collect all sampled fuel in a safe container. Dispose of the sampled fuel so that it does not cause a nuisance, hazard, or damage to the environment.

WARNING

IF, AFTER REPEATED SAMPLING, EVIDENCE OF CONTAMINATION STILL EXISTS, THE AIRPLANE SHOULD NOT BE FLOWN. TANKS SHOULD BE DRAINED AND SYSTEM PURGED BY QUALIFIED MAINTENANCE PERSONNEL. ALL EVIDENCE OF CONTAMINATION MUST BE REMOVED BEFORE FURTHER FLIGHT.

5. Main Wheel Tire - CHECK for proper inflation and general condition (weather checks, tread depth and wear, etc.).

5a. Brake pads, rotors, and lines – CHECK.

(8) LEFT WING Trailing Edge

1. Aileron - CHECK freedom of movement and security
2. Flap - CHECK for security and condition

BEFORE STARTING ENGINE

1. Preflight Inspection - COMPLETE
2. Passenger Briefing - COMPLETE
3. Seats and Seat Belts - ADJUST and LOCK (Verify inertia reel locking)
4. Brakes - TEST and SET

5. Circuit Breakers - CHECK IN
6. Electrical Equipment - OFF
7. AVIONICS Switch (BUS 1 and BUS 2) - OFF

CAUTION

THE AVIONICS SWITCH (BUS 1 AND BUS 2) MUST BE OFF DURING ENGINE START TO PREVENT POSSIBLE DAMAGE TO AVIONICS.

8. FUEL SELECTOR Valve - BOTH
9. FUEL SHUTOFF Valve - ON (push full in)

STARTING ENGINE (With Battery)

1. Throttle Control - OPEN 1/4 INCH
2. Mixture Control - IDLE CUTOFF (pull full out)
3. STBY BATT Switch:
   a. TEST - (Hold for 20 seconds, verify that green TEST lamp does not go off)
   b. ARM - (Verify that PFD comes on)
4. Engine Indicating System - CHECK PARAMETERS (Verify no red X's through ENGINE page indicators)
5. BUS E Volts - CHECK (Verify 24 VOLTS minimum shown)
6. M BUS Volts - CHECK (Verify 1.5 VOLTS or less shown)
7. BATT S Amps - CHECK (Verify discharge shown (negative))
8. STBY BATT Annunciator - CHECK (Verify annunciator is shown)
9. Propeller Area – CLEAR (Verify that all people and equipment are at a safe distance from the propeller)
10. Master Switch (ALT and BAT) - ON
11. BEACON Light Switch - ON

NOTE

If engine is warm, omit priming procedure steps 12 thru 14 below.

12. FUEL PUMP Switch - ON
13. Mixture Control - SET to FULL RICH (full forward) until stable fuel flow is indicated (approximately 3 to 5 seconds), then set to IDLE CUTOFF (full aft) position.
14. FUEL PUMP Switch - OFF
15. MAGNETOS Switch - START (release when engine starts)
16. Mixture Control - ADVANCE smoothly to RICH when engine starts.

NOTE

If the engine is primed too much (flooded), place the mixture control in the IDLE CUTOFF position, open the throttle control 1/2 to full, and engage the starter motor (START). When the engine starts, advance the mixture control to the FULL RICH position and retard the throttle control promptly.

16a. Throttle – 1000 RPM

17. Oil Pressure - CHECK (Verify that oil pressure increases into the GREEN ARC range in 30 to 60 seconds).
18. AMPS (M BATT and BATT S) - CHECK charge (positive)
19. LOW VOLTS Annunciator - CHECK (Verify annunciator is not shown)
20. NAV Lights Switch - ON as required
21. AVIONICS Switch (BUS 1 and BUS 2) - ON

STARTING ENGINE (With External Power)

1. Throttle Control - OPEN 1/4 INCH
2. Mixture Control - IDLE CUTOFF (pull full out)
3. STBY BATT Switch:
   a. TEST - (Hold for 20 seconds, verify green TEST lamp does not go off)
   b. ARM - (Verify that PFD comes on)
4. Engine Indication System - CHECK PARAMETERS (Verify no red X's through ENGINE page indicators)
5. BUS E Volts - CHECK (Verify 24 VOLTS minimum shown)
6. M BUS Volts - CHECK (Verify 1.5 VOLTS or less shown)
7. BATT S Amps - CHECK (Verify discharge shown (negative))
8. STBY BATT Annunciator - CHECK (Verify annunciator is shown)
9. AVIONICS Switch (BUS 1 and BUS 2) - OFF
10. MASTER Switch (ALT and BAT) - OFF
11. Propeller Area - CLEAR (Verify that all people and equipment are at a safe distance from the propeller)
12. External Power - CONNECT to ground power receptacle
13. MASTER Switch (ALT and BAT) - ON
14. BEACON Light Switch - ON
15. M BUS VOLTS - CHECK (Verify that approximately 28 VOLTS is shown)

NOTE

If engine is warm, omit priming procedure steps 16 thru 18 below.

16. FUEL PUMP Switch - ON
17. Mixture Control - SET to FULL RICH (full forward) until stable fuel flow is indicated (approximately 3 to 5 seconds), then set to IDLE CUTOFF (full aft) position.
18. FUEL PUMP Switch - OFF
19. MAGNETOS Switch - START (release when engine starts)
20. Mixture Control - ADVANCE smoothly to RICH when engine starts.

NOTE

If the engine is primed too much (flooded), place the mixture control in the IDLE CUTOFF position, open the throttle control 1/2 to full, and engage the starter motor (START). When the engine starts, advance the mixture control to the FULL RICH position and retard the throttle control promptly.

20a. Throttle – 1000 RPM

21. Oil Pressure - CHECK (Verify oil pressure increases into the green arc range in 30 to 60 seconds)
22. Power - REDUCE to idle
23. External Power - DISCONNECT from ground power. (Latch external power receptacle door)
24. Power - INCREASE (to approximately 1500 RPM for several minutes to charge battery)
25. AMPS (M BATT and BATT S) - CHECK charge (positive)
26. LOW VOLTS Annunciator - CHECK (Verify annunciator is not shown)
27. Internal Power - CHECK
    a. MASTER Switch (ALT) - OFF
    b. TAXI and LANDING Light Switches - ON
    c. Throttle Control - REDUCE to idle
    d. MASTER Switch (ALT and BAT) - ON
    e. Throttle Control - INCREASE (to approximately 1500 RPM)
    f. Main Battery (M BATT) Ammeter - CHECK (Battery charging, Amps positive)
    g. LOW VOLTAGE Annunciator - CHECK (Verify annunciator is not shown)

WARNING

IF M BATT (MAIN BATTERY) DOES NOT SHOW + AMPS, REMOVE THE MAIN BATTERY FROM THE AIRPLANE AND SERVICE OR REPLACE THE BATTERY BEFORE FLIGHT.

28. NAV Lights Switch - ON as required
29. AVIONICS Switch (BUS 1 and BUS 2) – ON

BEFORE TAKI

1. **Transponder – 1200 and ALT**
2. **Throttle - 1200**
3. **Mixture – Lean for peak RPM**
4. **Throttle – As needed**

BEFORE TAKEOFF

1. Parking Brake – SET
2. Pilot and Passenger Seat Backs – MOST UPRIGHT POSITION
3. Seats and Seat Belts - CHECK SECURE
4. Cabin Doors - CLOSED and LOCKED
5. Flight Controls - FREE and CORRECT
6. Flight Instruments (PFD) - CHECK (no red X's)
7. Altimeters:
   a. PFD (BARO) - SET
   b. Standby Altimeter - SET
   c. KAP 140 Autopilot (BARO) - SET (if installed)
8. G1000 ALT SEL - SET
9. KAP 140 Altitude Preselect - SET (if installed)

NOTE

There is no connection between the G1000 ALT SEL feature and the KAP 140 autopilot altitude preselect or altitude hold functions. G1000 and KAP 140 altitudes are set independently.

10. Standby Flight Instruments - CHECK
11. Fuel Quantity - CHECK (Verify level is correct)

NOTE

Flight is not recommended when both fuel quantity indicators are in the yellow arc range.

12. Mixture Control – RICH

12a. Mixture – set for altitude

13. FUEL SELECTOR Valve - SET BOTH

13a. Fuel shutoff – Check on

14. Elevator Trim Control - SET FOR TAKEOFF
15. Manual Electric Trim (MET) System (if installed) - CHECK (Refer to the POH/AFM, Supplement 3, for Manual Electric Trim check procedures)
16. Throttle Control - 1800 RPM

aa. Mixture – set for altitude

   a. MAGNETOS Switch - CHECK (RPM drop should not exceed 150 RPM on either magneto or 50 RPM differential between magnetos)
   b. VAC Indicator - CHECK
   c. Engine Indicators - CHECK
   d. Ammeters and Voltmeters - CHECK

17. Annunciators - CHECK (Verify no annunciators are shown)
18. Throttle Control - CHECK IDLE
19. Throttle Control - 1000 RPM or LESS
20. Throttle Control Friction Lock - ADJUST
21. COM Frequency(s) - SET
22. NAV Frequency(s) - SET
23. FMS/GPS Flight Plan - AS DESIRED

NOTE

Check GPS availability on AUX-GPS STATUS page. No annunciation is provided for loss of GPS2.

24. XPDR - SET
25. CDI Softkey - SELECT NAV source

CAUTION

THE G1000 HSI SHOWS A COURSE DEVIATION INDICATOR FOR THE SELECTED GPS, NAV 1 OR NAV 2 NAVIGATION SOURCE. THE G1000 HSI DOES NOT PROVIDE A WARNING "FLAG" WHEN A VALID NAVIGATION SIGNAL IS NOT BEING SUPPLIED TO THE INDICATOR. WHEN A VALID NAVIGATION SIGNAL IS NOT BEING SUPPLIED, THE COURSE DEVIATION BAR (D-BAR) PART OF THE INDICATOR IS NOT SHOWN ON THE HSI COMPASS CARD. THE MISSING D-BAR IS CONSIDERED TO BE THE WARNING FLAG.

WARNING

WHEN THE KAP 140 AUTOPILOT IS ENGAGED IN NAV, APR OR REV OPERATING MODES, IF THE HSI NAVIGATION SOURCE IS CHANGED FROM GPS TO NAV1, AUTOMATICALLY OR MANUALLY (USING THE CDI SOFTKEY), OR MANUALLY FROM NAV2 TO GPS, THE CHANGE WILL INTERRUPT THE NAVIGATION SIGNAL TO THE AUTOPILOT AND WILL CAUSE THE AUTOPILOT TO REVERT TO ROLL MODE OPERATION. NO WARNING CHIME OR PFD ANNUNCIATION WILL BE PROVIDED. THE PREVIOUSLY SELECTED MODE SYMBOL SHOWN ON THE AUTOPILOT DISPLAY WILL BE FLASHING TO SHOW THE REVERSION TO ROLL MODE OPERATION. IN ROLL MODE, THE AUTOPILOT WILL ONLY KEEP THE WINGS LEVEL AND WILL NOT CORRECT THE AIRPLANE HEADING OR COURSE. SET THE HDG BUG TO THE CORRECT HEADING AND SELECT THE CORRECT NAVIGATION SOURCE ON THE HSI USING THE CDI SOFTKEY BEFORE ENGAGING THE AUTOPILOT IN ANY OTHER OPERATING MODE.

26. Autopilot - OFF (if installed)
27. CABIN PWR 12V Switch - OFF (if installed)

27a. Takeoff Briefing

28. Wing Flaps - UP - 10° (10° preferred)
29. Cabin Windows - CLOSED and LOCKED
30. STROBE Lights Switch - ON
31. Brakes - RELEASE

TAKEOFF

NORMAL TAKEOFF

1. Wing Flaps - UP - 10° (10° preferred)
2. Throttle Control - FULL (push full in)
3. Mixture Control - RICH
   (Above 3000 feet pressure altitude, lean for maximum RPM)
4. Elevator Control - LIFT NOSEWHEEL AT 55 KIAS
5. Climb Speed - 70 - 80 KIAS
6. Wing Flaps - RETRACT at safe altitude

SHORT FIELD TAKEOFF

1. Wing Flaps - 10°
2. Brakes - APPLY
3. Throttle Control - FULL (push full in)
4. Mixture Control – RICH
   (Above 3000 feet pressure altitude, lean for maximum RPM)
5. Brakes - RELEASE
6. Elevator Control - SLIGHTLY TAIL LOW
7. Climb Speed - 56 KIAS (Until all obstacles are cleared)
8. Wing Flaps - RETRACT SLOWLY (When airspeed is more than 60 KIAS)

ENROUTE CLIMB

1. Airspeed - 70 - 85 KIAS
2. Throttle Control - FULL (push full in)
1. Mixture Control – RICH
   (Above 3000 feet pressure altitude, lean for maximum RPM)

CRUISE

1. Power - 2100 - 2700 RPM (No more than 75% power is recommended)

NOTE

If a maximum performance climb is necessary, use speeds shown in the Rate-of-Climb chart in section 5.

2. Elevator Trim Control - ADJUST
3. Mixture Control - LEAN for desired performance or economy
4. FMS/GPS – REVIEW and BRIEF OBS/SUSP softkey operation for holding pattern procedure (IFR)

DESCENT

1. Power - AS DESIRED
2. Mixture - ADJUST if necessary to make the engine run smoothly.
3. Altimeters:
   a. PFD (BARO) - SET
   b. Standby Altimeter - SET
   c. KAP 140 Autopilot (BARO) - SET (if installed)
4. G1000 ALT SEL - SET
5. KAP 140 Altitude Preselect - SET (if installed)

NOTE

There is no connection between the G1000 ALT SEL feature and the KAP 140 autopilot altitude preselect or altitude hold functions. G1000 and KAP 140 altitudes are set independently.

6. CDI Softkey - SELECT NAV source
7. FMS/GPS – REVIEW and BRIEF OBS/SUSP softkey operation for holding pattern procedure (IFR).

CAUTION

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WARNING

WHEN THE KAP 140 AUTOPILOT IS ENGAGED IN NAV, APR OR REV OPERATING MODES, IF THE HSI NAVIGATION SOURCE IS CHANGED FROM GPS TO NAV1, AUTOMATICALLY OR MANUALLY (USING THE CDI SOFTKEY), OR MANUALLY FROM NAV2 TO GPS, THE CHANGE WILL INTERRUPT THE NAVIGATION SIGNAL TO THE AUTOPILOT AND WILL CAUSE THE AUTOPILOT TO REVERT TO ROLL MODE OPERATION. NO WARNING CHIME OR PFD ANNUNCIATION WILL BE PROVIDED. THE PREVIOUSLY SELECTED MODE SYMBOL SHOWN ON THE AUTOPILOT DISPLAY WILL BE FLASHING TO SHOW THE REVERSION TO ROLL MODE OPERATION. IN ROLL MODE, THE AUTOPILOT WILL ONLY KEEP THE WINGS LEVEL AND WILL NOT CORRECT THE AIRPLANE HEADING OR COURSE. SET THE HDG BUG TO THE CORRECT HEADING AND SELECT THE CORRECT NAVIGATION SOURCE ON THE HSI USING THE CDI SOFTKEY BEFORE ENGAGING THE AUTOPILOT IN ANY OTHER OPERATING MODE.

8. FUEL SELECTOR Valve – BOTH
9. Wing Flaps - AS DESIRED (UP - 10° below 110 KIAS, 10° - FULL below 85 KIAS)

BEFORE LANDING

1. Pilot and Passenger Seat Backs – MOST UPRIGHT POSITION
2. Seats and Seat Belts - SECURED and LOCKED
3. FUEL SELECTOR Valve - BOTH
4. Mixture Control – RICH

4a. Mixture set for altitude

5. LANDING and TAXI Light Switches - ON
6. Autopilot - OFF (if installed)
7. CABIN PWR 12V Switch - OFF (if installed)

LANDING

NORMAL LANDING

1. Airspeed - 65 - 75 KIAS (Flaps UP)
2. Wing Flaps - AS DESIRED (UP - 10° below 110 KIAS, 10° - FULL below 85 KIAS)
3. Airspeed - 60 - 70 KIAS (Flaps FULL)
4. Elevator Trim Control - ADJUST
5. Touchdown - MAIN WHEELS FIRST
6. Landing Roll - LOWER NOSEWHEEL GENTLY
7. Braking - MINIMUM REQUIRED

SHORT FIELD LANDING

1. Airspeed - 65 - 75 KIAS (Flaps UP)
2. Wing Flaps - FULL
3. Airspeed - 61 KIAS (until flare)
4. Elevator Trim Control - ADJUST
5. Power - REDUCE to idle after clearing obstacle
6. Touchdown - MAIN WHEELS FIRST
7. Brakes - APPLY HEAVILY

7a. Caution! Excessive brake application may cause tire damage.

8. Wing Flaps - UP

BALKED LANDING

1. Throttle Control - FULL (push full in)
2. Wing Flaps - RETRACT to 20°
3. Climb Speed - 60 KIAS
4. Wing Flaps - 10° (until obstacles are cleared), then UP (after reaching a safe altitude and 65 KIAS)

AFTER LANDING

1. Wing Flaps – UP

2. Throttle – 1200

3. Mixture – Lean for max RPM

4. Throttle – as needed for taxi

SECURING AIRPLANE

1. Parking Brake - SET
2. Throttle Control - IDLE (pull full out)
3. Electrical Equipment - OFF
4. AVIONICS Switch (BUS 1 and BUS 2) - OFF
5. Mixture Control - IDLE CUTOFF (pull full out)
6. MAGNETOS Switch - OFF
7. MASTER Switch (ALT and BAT) - OFF
8. STBY BATT Switch - OFF
9. Control Lock – INSTALL
10. FUEL SELECTOR Valve – LEFT or RIGHT (to prevent crossfeeding between tanks)