NORMAL PROCEDURES

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AIRSPEEDS FOR NORMAL OPERATIONS

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

TAKEOFF:

Normal Climb	70 - 80 KIAS
Short Field Takeoff, Flaps 20°, Speed at 50 Feet	58 KIAS

ENROUTE CLIMB, FLAPS UP:

Normal, Sea Level	85 - 95 KIAS
Best Rate-of-Climb, Sea Level	80 KIAS
Best Rate-of-Climb, 10,000 Feet	74 KIAS
Best Angle-of-Climb, Sea Level	65 KIAS
Best Angle-of-Climb, 10,000 Feet	68 KIAS

LANDING APPROACH:

Normal Approach, Flaps Up	70 - 80 KIAS
Normal Approach, Flaps Full	60 - 70 KIAS
Short Field Approach, Flaps Full	60 KIAS

BALKED LANDING:

Maximum Power, Flaps 20°	55 KIAS

MAXIMUM RECOMMENDED TURBULENT AIR PENETRATION SPEED:

3100 POUNDS	110 KIAS
2600 POUNDS	101 KIAS
2100 POUNDS	91 KIAS

MAXIMUM DEMONSTRATED CROSSWIND VELOCITY:

Takeoff or Landing	15 KNOTS

All references to Sections throughout this checklist refer to the corresponding Section of the Pilot's Operating Handbook.

NORMAL PROCEDURES
PREFLIGHT INSPECTION

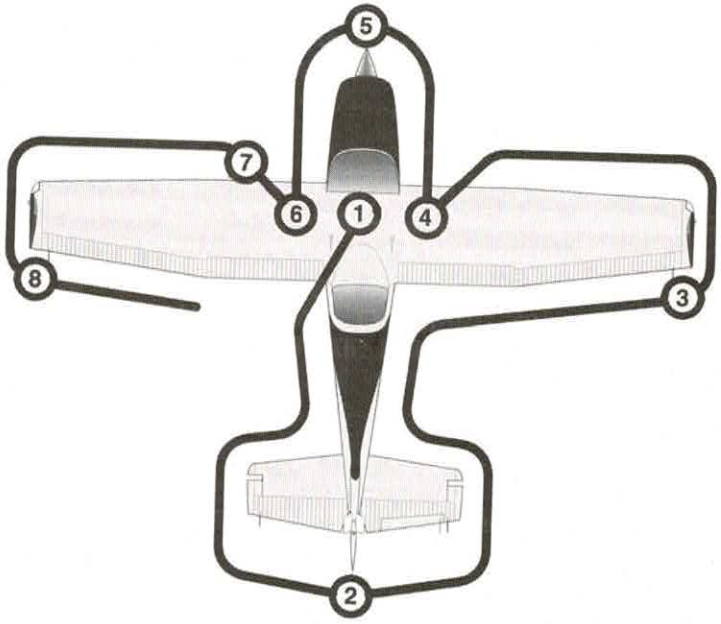

Figure 1

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 in the POH) to ensure 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.

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PREFLIGHT INSPECTION (Continued)

1 CABIN

1. Pitot Tube Cover . . . . . REMOVE (Check for pitot blockage)
2. Pilots' Operating Handbook . . . . . ACCESSIBLE TO PILOT
3. Garmin G1000™ 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) . . . . . VERIFY ON
11. FUEL QTY (L and R) . . . . . CHECK
12. LOW FUEL L and LOW FUEL R Annunciators . . . . . VERIFY OFF
13. OIL PRESSURE Annunciator . . . . . VERIFY ON
14. LOW VOLTS Annunciator . . . . . VERIFY ON
15. LOW VACUUM Annunciator . . . . . VERIFY ON
16. AVIONICS Switch (BUS 1) . . . . . ON
17. Forward Avionics Fan . . . . . CHECK AUDIBLY FOR OPERATION
18. AVIONICS Switch (BUS 1) . . . . . OFF
19. AVIONICS Switch (BUS 2) . . . . . ON

(Continued Next Page)

PREFLIGHT INSPECTION (Continued)

1 CABIN (Continued)

20. Aft Avionics Fan . . . . . CHECK AUDIBLY FOR OPERATION
21. AVIONICS Switch (BUS 2). . . . . OFF
22. PITOT HEAT Switch . . . . . ON
    (Carefully check that pitot tube is warm to the touch within 30 seconds)
23. Stall Warning System . . . . . CHECK
    (Gently move the stall vane upward and verify that the stall warning horn is heard)
24. PITOT HEAT Switch . . . . . OFF
25. MASTER Switch (ALT and BAT) . . . . . OFF
26. Trim Controls . . . . . TAKEOFF position
27. FUEL SELECTOR Valve . . . . . BOTH
28. ALT STATIC AIR Valve. . . . . OFF
29. Fire Extinguisher . . . . . VERIFY gage green arc

2 EMPENNAGE

1. Baggage Compartment Door . . . . . CHECK latched, lock with key
2. Rudder Gust Lock (if installed). . . . . REMOVE
3. Tail Tiedown. . . . . DISCONNECT
4. Control Surfaces . . . CHECK for freedom of movement and security
5. Trim Tab . . . . . CHECK for security
6. Antennas . . . . . CHECK for security of attachment and general condition

3 RIGHT WING TRAILING EDGE

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

(Continued Next Page)

PREFLIGHT INSPECTION (Continued)

(4) RIGHT WING

1. Wing Tiedown . . . . . DISCONNECT
2. Fuel Tank Vent Opening . . . . . CHECK for blockage
3. Main Wheel Tire . . . . . CHECK for proper inflation and general condition (weather checks, tread depth and wear, etc.)
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 sump locations. Take repeated samples from **all** sump locations 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 SAMPLES, 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 FLIGHT.

5. Fuel Quantity . . . . . CHECK VISUALLY for desired level
6. Fuel Filler Cap . . . . . SECURE and VENT UNOBSTRUCTED

(Continued Next Page)

PREFLIGHT INSPECTION (Continued)

5 NOSE

1. Static Source Opening (right side of fuselage). . . . . CHECK for blockage
2. Fuel Strainer Quick Drain Valve (Located on lower right side of engine cowling) . . . . . 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 sump locations. Take repeated samples from **all** sump locations, including the fuel return line and the fuel selector, 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 SAMPLES, 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 FLIGHT.

3. Engine Oil Dipstick/Filler Cap . . . . . CHECK OIL LEVEL then check dipstick/filler cap SECURE.
   Do not operate with less than 4 quarts.
   Fill to 9 quarts for extended flight
4. Engine Cooling Air Inlets . . . . . CLEAR of obstructions
5. Propeller and Spinner . . . . . CHECK for nicks and security

(Continued Next Page)

PREFLIGHT INSPECTION (Continued)

5 NOSE (Continued)

6. Air Filter . . . . CHECK for restrictions by dust or other foreign matter
7. Nosewheel Strut and Tire . . . . . CHECK for proper inflation of strut and general condition of tire (weather checks, tread depth and wear, etc.)
8. Static Source Opening (left side of fuselage). . . . . CHECK for blockage

6 LEFT WING

1. Wing Tiedown . . . . . DISCONNECT
2. Fuel Quantity . . . . . CHECK VISUALLY for desired level
3. Fuel Filler Cap . . . . . SECURE and VENT UNOBSTRUCTED
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 sump locations. Take repeated samples from **all** sump locations 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.

(Continued Next Page)

PREFLIGHT INSPECTION (Continued)

6 LEFT WING (Continued)

WARNING

IF, AFTER REPEATED SAMPLES, 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 FLIGHT.

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

7 LEFT WING LEADING EDGE

1. Fuel Tank Vent Opening . . . . . CHECK for blockage
2. Stall Warning Opening . . . . . CHECK for blockage
3. Landing/Taxi Light(s) . . . . . CHECK for condition and cleanliness of cover

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, Seat Belts, Shoulder Harnesses . . . . . ADJUST and LOCK
   (Make sure inertia reel locks)
4. Brakes . . . . . TEST and SET
5. Circuit Breakers . . . . . CHECK IN
6. Electrical Equipment . . . . . OFF

CAUTION

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

7. AVIONICS Switch (BUS 1 and BUS 2) . . . . . OFF
8. Cowl Flaps . . . . . OPEN
9. FUEL SELECTOR Valve . . . . . BOTH

STARTING ENGINE (USING BATTERY)

1. Throttle Control . . . . . OPEN 1/4 INCH
2. Propeller Control . . . . . HIGH RPM
3. Mixture Control . . . . . IDLE CUT OFF
4. STBY BATT Switch
   a. TEST - (Hold for 20 seconds, verify that green TEST lamp does not go out)
   b. ARM - (Verify that PFD comes on)
5. Engine Indicating System . . . . . CHECK PARAMETERS
   (Verify no red X's through ENGINE page indicators)
6. BUS E Volts . . . . . VERIFY 24 VOLTS minimum
7. M BUS Volts . . . . . VERIFY 0 VOLTS
8. BATT S Amps . . . . . VERIFY DISCHARGE (negative)
9. STBY BATT Annunciator . . . . . VERIFY ON
10. Propeller Area . . . . . CLEAR
11. MASTER Switch (ALT and BAT) . . . . . ON

(Continued Next Page)

STARTING ENGINE (USING BATTERY) (Continued)

NOTE

If engine is warm, omit priming procedure of steps 12, 13 and 14 below.

12. FUEL PUMP Switch . . . . . ON
13. Mixture Control . . . . . ADVANCE to FULL RICH wait until fuel flow indication is stable, then return to IDLE CUT OFF position
14. FUEL PUMP Switch. . . . . OFF
15. MAGNETOS Switch . . . . . START release when engine starts
16. Mixture Control . . . . . ADVANCE smoothly to FULL RICH when engine starts

NOTE

If the engine floods, place the mixture control in the IDLE CUT OFF 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.

17. OIL Pressure . . . . . CHECK
18. AMPS (M BATT and BATT S). . . . . CHECK charge (positive)
19. LOW VOLTS Annunciator. . . . . VERIFY OFF
20. BEACON Light Switch. . . . . ON as required
21. NAV Lights Switch . . . . . ON as required
22. AVIONICS Switch (BUS 1 and BUS 2). . . . . ON

STARTING ENGINE (USING EXTERNAL POWER)

1. Throttle Control . . . . . OPEN 1/4 INCH
2. Propeller Control . . . . . HIGH RPM
3. Mixture Control . . . . . IDLE CUT OFF
4. STBY BATT Switch
   a. TEST - (hold for 20 seconds, verify that green TEST lamp does not go out)
   b. ARM - (verify that PFD comes on)
5. Engine Indication System . . . . . CHECK PARAMETERS (Verify no red X's through ENGINE page indicators)
6. BUS E Volts . . . . . VERIFY 24 VOLTS minimum
7. M BUS Volts . . . . . VERIFY 0 VOLTS
8. BATT S Amps . . . . . VERIFY discharge (negative)
9. STBY BATT Annunciator . . . . . VERIFY ON
10. Propeller Area . . . . . CLEAR
11. AVIONICS Switch (BUS 1 and BUS 2) . . . . . OFF
12. MASTER Switch (ALT and BAT) . . . . . OFF
13. External Power . . . . . CONNECT to ground power receptacle
14. MASTER Switch (ALT and BAT) . . . . . ON
15. M BUS VOLTS . . . . . VERIFY external power volts

NOTE

If engine is warm, omit priming procedure of steps 16, 17 and 18 below.

16. FUEL PUMP Switch . . . . . ON
17. Mixture Control . . . . . Advance to FULL RICH wait until indicated fuel flow stabilizes, then return to IDLE CUT OFF position
18. FUEL PUMP Switch . . . . . OFF
19. MAGNETOS Switch . . . . . START release when engine starts
20. Mixture Control . . . . . ADVANCE smoothly to FULL RICH when engine starts

(Continued Next Page)

STARTING ENGINE (USING EXTERNAL POWER) (Continued)

NOTE

If the engine floods, place the mixture control in the IDLE CUT OFF 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.

21. OIL Pressure . . . . . CHECK
22. Engine RPM . . . . . REDUCE to idle
23. External Power. . . . . DISCONNECT from ground power receptacle
24. Engine RPM . . . . . 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. . . . . VERIFY OFF
27. Internal Power . . . . . CHECK
    a. MASTER Switch (ALT) . . . . . OFF
    b. TAXI and LANDING Light Switches . . . . . ON
    c. Engine RPM . . . . . REDUCE to idle
    d. MASTER Switch (ALT and BAT) . . . . . ON
    e. Engine RPM . . . . . INCREASE (to approximately 1500 RPM)
    f. Main Battery (M BATT) Ammeter . . . . . CHECK, (Battery charging, Amps positive)
    g. LOW VOLTAGE Annunciator . . . . . VERIFY OFF

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. BEACON Light Switch. . . . . ON as required
29. NAV Lights Switch . . . . . ON as required
30. AVIONICS Switch (BUS 1 and BUS 2). . . . . ON

BEFORE TAKEOFF

1. Parking Brake . . . . . SET
2. 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
8. G1000 ALT SEL. . . . . SET
9. KAP 140 Altitude Preselect . . . . . SET

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 correct level

NOTE

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

12. Mixture Control . . . . . RICH
13. FUEL SELECTOR Valve . . . . . RECHECK BOTH
14. Elevator and Rudder Trim . . . . . SET for takeoff
15. Manual Electric Trim (MET) . . . . . CHECK
    (Refer to the POH/AFM, Supplement 3 for Manual Electric Trim check procedures)

(Continued Next Page)

BEFORE TAKEOFF (Continued)

16. Throttle Control . . . . . 1800 RPM
    a. MAGNETOS Switch . . . . . CHECK
       (RPM drop should not exceed 175 RPM on either magneto or 50 RPM differential between magnetos)
    b. Propeller Control . . . . . CYCLE from high to low RPM; return to high RPM (full in)
    c. VAC Indicator . . . . . CHECK
    d. Engine Indicators . . . . . CHECK
    e. Ammeters and Voltmeters . . . . . CHECK
17. Annunciators . . . . . CHECK none illuminated
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 GPS2 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.

(Continued Next Page)

BEFORE TAKEOFF (Continued)

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 ROL 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 ROL MODE OPERATION. IN ROL 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
27. Wing Flaps . . . . . 0° - 20° (10° preferred)
28. Cowl Flaps . . . . . OPEN
29. Cabin Windows . . . . . CLOSED and LOCKED
30. STROBE Lights Switch . . . . . ON
31. Brakes . . . . . RELEASE

TAKEOFF

NORMAL TAKEOFF

1. Wing Flaps . . . . . 0° - 20° (10° preferred)
2. Throttle Control . . . . . FULL
3. Propeller Control . . . . . 2400 RPM
4. Mixture Control . . . . . FULL RICH
   (Above 5000 feet pressure altitude, lean for maximum RPM)
5. Elevator Control . . . . . LIFT NOSEWHEEL AT 50 - 60 KIAS
6. Climb Airspeed . . . . . 70 KIAS (FLAPS 20°)
   80 KIAS (FLAPS 0°)
7. Wing Flaps . . . . . RETRACT at safe altitude

SHORT FIELD TAKEOFF

1. Wing Flaps . . . . . 20°
2. Brakes . . . . . APPLY
3. Throttle Control . . . . . FULL
4. Propeller Control . . . . . 2400 RPM
5. Mixture Control . . . . . FULL RICH
   (Above 5000 feet pressure altitude, lean for maximum RPM)
6. Brakes . . . . . RELEASE
7. Elevator Control . . . . . SLIGHTLY TAIL LOW
8. Climb Airspeed . . . . . 58 KIAS
   (Until all obstacles are cleared)
9. Wing Flaps . . . . . RETRACT SLOWLY
   (When airspeed is more than 70 KIAS)

BEFORE TAKEOFF (Continued)

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 ROL 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 ROL MODE OPERATION. IN ROL 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
27. Wing Flaps . . . . . 0° - 20° (10° preferred)
28. Cowl Flaps . . . . . OPEN
29. Cabin Windows . . . . . CLOSED and LOCKED
30. STROBE Lights Switch . . . . . ON
31. Brakes . . . . . RELEASE

ENROUTE CLIMB

NORMAL CLIMB

1. Airspeed . . . . . 85 - 95 KIAS
2. Throttle Control . . . . . 23 in.hg. or FULL (if less than 23 in.hg.)
3. Propeller Control . . . . . 2400 RPM
4. Mixture Control . . . . . 15 GPH or FULL RICH (if less than 15 GPH)
5. FUEL SELECTOR Valve . . . . . BOTH
6. Cowl Flaps . . . . . OPEN as required

MAXIMUM PERFORMANCE CLIMB

1. Airspeed . . . . . 80 KIAS at Sea Level
74 KIAS at 10,000 Feet
2. Throttle Control . . . . . FULL
3. Propeller Control . . . . . 2400 RPM
4. Mixture Control . . . . . FULL RICH or SET to Maximum Power Fuel Flow placard value for altitude
5. FUEL SELECTOR Valve . . . . . BOTH
6. Cowl Flaps . . . . . OPEN

CRUISE

1. Power . . . . . 15 - 23 in.hg. at 2000 - 2400 RPM (No more than 80% power recommended)
2. Elevator and Rudder Trim . . . . . ADJUST
3. Mixture Control . . . . . LEAN
4. Cowl Flaps . . . . . CLOSE
5. FMS/GPS . . . . . REVIEW and BRIEF OBS/SUSP softkey operation for hold pattern procedure (IFR)

DESCENT

1. Power . . . . . AS DESIRED
2. Mixture . . . . . ENRICHEN AS REQUIRED (for smooth operation)
3. Cowl Flaps . . . . . CLOSED
4. Altimeters:
   a. PFD (BARO) . . . . . SET
   b. Standby Altimeter . . . . . SET
   c. KAP 140 Autopilot (BARO). . . . . SET
5. G1000 ALT SEL. . . . . SET
6. KAP 140 Altitude Preselect . . . . . SET

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.

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

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.

(Continued Next Page)

DESCENT (Continued)

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 ROL 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 ROL MODE OPERATION. IN ROL 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.

9. FUEL SELECTOR Valve . . . . . BOTH
10. Wing Flaps . . . . . AS DESIRED
(0° - 10° below 140 KIAS)
(10° - 20° below 120 KIAS)
(20° - FULL below 100 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
5. Propeller Control . . . . . HIGH RPM
6. LANDING and TAXI Light Switches . . . . . ON
7. Autopilot . . . . . OFF

LANDING

NORMAL LANDING

1. Airspeed . . . . . 70 - 80 KIAS (Flaps UP)
2. Wing Flaps . . . . . AS DESIRED
   (0° - 10° below 140 KIAS)
   (10° - 20° below 120 KIAS)
   (20° - FULL below 100 KIAS)
3. Airspeed . . . . . 60 - 70 KIAS (Flaps FULL)
4. Trim . . . . . ADJUST
5. Touchdown . . . . . MAIN WHEELS FIRST
6. Landing Roll . . . . . LOWER NOSEWHEEL GENTLY
7. Braking . . . . . AS REQUIRED

SHORT FIELD LANDING

1. Airspeed . . . . . 70 - 80 KIAS (Flaps UP)
2. Wing Flaps . . . . . FULL (below 100 KIAS)
3. Power . . . . . REDUCE TO IDLE
   (As obstacle is cleared)
4. Airspeed . . . . . 60 KIAS (until flare)
5. Trim . . . . . ADJUST
6. Touchdown . . . . . MAIN WHEELS FIRST
7. Brakes . . . . . APPLY HEAVILY

BALKED LANDING

1. Power . . . . . FULL THROTTLE and 2400 RPM
2. Wing Flaps . . . . . RETRACT TO 20°
3. Climb Speed . . . . . 55 KIAS
4. Wing Flaps . . . . . RETRACT SLOWLY
   (After reaching a safe altitude and 70 KIAS)
5. Cowl Flaps . . . . . OPEN

AFTER LANDING

1. Wing Flaps . . . . . UP
2. Cowl Flaps . . . . . OPEN

SECURING AIRPLANE

1. Parking Brake . . . . . SET
2. Throttle Control . . . . . IDLE
3. Electrical Equipment . . . . . OFF
4. AVIONICS Switch (BUS 1 and BUS 2) . . . . . OFF
5. Mixture Control . . . . . IDLE CUT OFF
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)