
Preflight Inspection

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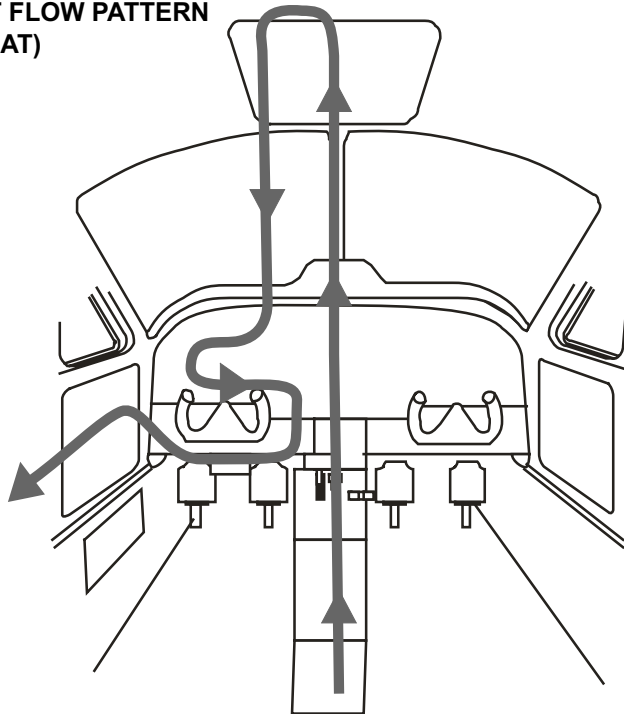
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CAE SimuFlite

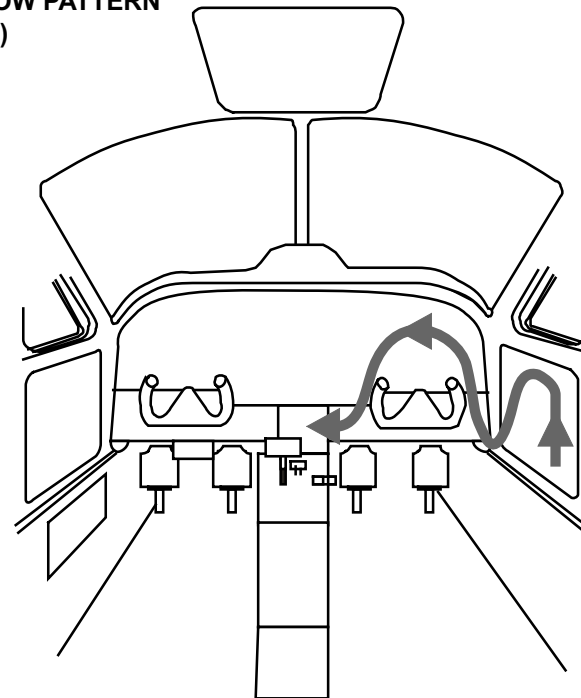
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Cockpit Flow Pattern

**COCKPIT FLOW PATTERN
(LEFT SEAT)**



**COCKPIT FLOW PATTERN
(RIGHT SEAT)**



B3CRH-PF001i

Power Off

GPU.....CONNECT/ON

NOTE: Prior to entering the aircraft for Preflight Inspection, pitot cover should be removed and ground power unit (GPU) should be connected and selected ON. EXT PWR annunciator should flash intermittently for the entire time GPU is connected until EXT PWR is switched ON.

Control Locks..... REMOVE

Parking Brake SET

Right Sidewall Circuit Breaker Panel.....CHECK

Alternate Static Air Switch GUARDED NORMAL

Copilot's Right SubpanelCHECK

Check vacuum, pneumatic, and oxygen gauges for proper indications.

Copilot's Instrument Panel.....CHECK

Check instruments for condition and proper indications.

Copilot's Left Subpanel Switches..... SET

Set all switches to OFF or normal positions.

Center Pedestal.....CHECK

Working forward, set all switches to OFF or normal positions. Oxygen control handles should be pushed in. Ensure all knobs, switches, and protective covers are free from damage.

Alternate Gear Extension Handle STOWED

The handle should be set all the way down, flush with the floor. If the handle was in the up position, ensure that the system has not been emergency extended during the previous flight.

Trim Controls..... SET ZERO

Make sure the trims are set to zero and indicated. Trim position should be checked during walk-around.

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Power Quadrant SET

Engine controls should be set as follows: power lever at FLIGHT IDLE, prop lever at FEATHER, and condition lever at FUEL CUTOFF.

Center Instrument Panel and GlareshieldCHECK

Make sure all switches are set to OFF or normal position. Ensure all the controls are in good condition and are properly installed. Ensure the glareshield has no cracks or damage.

Overhead PanelCHECK

All switches should be set to OFF or normal. Verify that 28V is present when EXT PWR is selected and that the battery has minimum of 20 volts. Check the standby compass for valid indications and condition.

EXT PWR28V

BATT20V (MIN)

Pilot's Instrument PanelCHECK

Check all instruments and switches for indication/position, security, and freedom from damage.

Pilot's Right Subpanel Switches SET

Set all switches to OFF and ensure that the landing gear handle is down-and-locked.

Pilot's Left Subpanel Switches SET

Set all switches to OFF or normal positions.

Fuel Panel Switches SET

Set the standby pump switches to OFF and the auxiliary transfer switches to AUTO.

Left Sidewall Circuit Breaker Panel CHECK IN

To set parking brake, apply pressure to the top of the rudder pedals; pull the parking brake handle and release the pressure applied to the rudder pedals.

Power On Checks

Battery Switch CONFIRM OFF

Battery Bus Switch. EMER OFF

Rotate the Voltmeter Bus Select switch through each position. Verify that the voltmeter indicates zero volts on all positions, except EXT PWR.

Battery Bus Switch. NORM

Rotate the Voltmeter Bus Select switch through each position. Verify that the voltmeter indicates zero volts for each position, except Battery Volts on BAT and EXT PWR positions.

Battery Switch ON

Rotate the Voltmeter Bus Select switch through each position.

Note battery voltage on BAT and CTR positions; TPL FED position should read slightly less than battery voltage. All other positions should show zero voltage, except EXT PWR.

Observe L DC GEN, R DC GEN, L GEN TIE OPEN, R GEN TIE OPEN, #1 AC BUS, #2 AC BUS annunciator illuminated.

Landing Gear Position Lights indicate 3 green.

GEN TIES Switch MAN CLOSE

Rotate the Voltmeter Bus Select switch through each position.

Note battery voltage on ALL bus positions except TPL FED, which should read slightly less than battery voltage. EXT PWR should still read 28V DC.

Observe L DC GEN, R DC GEN, MAN TIES CLOSE, #1 AC BUS, #2 AC BUS annunciators illuminated.

External Power Switch. ON

Observe MAN TIES CLOSE annunciator extinguished. EXT PWR annunciator illuminated steady.

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Rotate the Voltmeter Bus Select switch through each position. Note GPU voltage on all buses, with slightly less on TPL FED.

Bus Sense Switch TEST

Observe L GEN TIE OPEN, R GEN TIE OPEN, and BAT TIE OPEN annunciators illuminated.

Rotate the Voltmeter Bus Select switch through each position. Note zero voltage on all positions except BAT, EXT PWR, TPL FED and Center Bus.

Bus Sense Switch RESET/NORM

Observe L GEN TIE OPEN, R GEN TIE OPEN and BAT TIE OPEN annunciators extinguished.

GEN TIE Switch. OPEN

Observe L GEN TIE OPEN, R GEN TIE OPEN annunciators illuminated.

Rotate the Voltmeter Bus Select switch through each position. Note GPU voltage on CTR, BAT and slightly less on TPL FED. Zero volts on each GEN bus.

GEN TIE Switch. NORM

Inverter Switches (2) ON

No. 1 Inverter OFF

No. 1 AC BUS annunciator illuminated.

No. 1 Inverter BUS TRANSFER

No. 1 AC BUS annunciator extinguished.

No. 1 Inverter ON

No. 2 Inverter OFF

No. 2 AC BUS annunciator illuminated.

No. 2 Inverter BUS TRANSFER

No. 1 AC BUS annunciator extinguished.

No. 2 Inverter ON

No. 1 and 2 AC BUS annunciators extinguished.

Avionics Switch ON
EFIS Power Switches ON
Overhead Panel Master Panel LightsAS REQUIRED
EMERGENCY LIGHTSAS REQUIRED
NO SMK FSB Switch ON
Annunciators TEST

Press the test button on the glareshield and ensure each annunciator is illuminated by two lamps.

Fuel Panel Check

Fuel Quantity CHECK MAIN/AUX/TEST
Fuel Firewall Valves CLOSE

Pressing the ENG FIRE F/W VALVE PUSH CLOSED will close the shutoff valve and armed the fire extinguisher system. The firewall valve and extinguisher light switches will illuminate.

Boost Pumps ON
FUEL PRESSURE Annunciators ILLUMINATED

Fuel Firewall Valves OPEN
FUEL PRESSURE Annunciators EXTINGUISHED

Boost Pumps OFF
FUEL PRESSURE Annunciators ILLUMINATED

Crossfeed Switch ALTERNATE L/R
CROSSFEED Annunciator ON (each position)
FUEL PRESSURE Annunciators EXTINGUISHED
(each position)

Crossfeed Switch OFF
Aux Fuel Qty FUEL LOW LEVEL TEST

Oxygen System Check

Oxygen Pressure CHECK

See Normal Procedures section for correct oxygen pressure and duration for the flight.

Oxygen Duration CHECK

Pilot/Copilot Mic Switches OXYGEN MASK

Pilot's Transmitter Switch. CABIN

Pilot's Audio Switch SPEAKER

Audio Emergency Switch. NORM

Paging Volume. AS DESIRED

Copilot's Audio Switch SPEAKER

Copilot's Transmitter Switch CABIN

System Ready T-Handle PULL

Crew Masks REMOVE

Mask Plugs, Mic Plugs. CHECK SECURITY

Regulators CHECK/100%

Flowmeters CHECK GREEN

Headband INFLATE/DEFLATE CHECK

Mask Microphones. CHECK EACH

With yoke radio transmitter switch depressed, brief handling of the mask, or gas release from regulator, should be audible over cabin speaker. Check each side.

Crew Masks STOW

Audio Panel Switches RESET FOR FLIGHT

Pilot/Copilot Mic Switches NORMAL

Warning System Check

Gear Handle Lights TEST

Ensure that both handle lamps illuminate.

HYD FLUID SENSOR Button PUSH/HOLD

Allow 5 seconds for illumination of HYD FLUID LOW annunciator.

Flap Indicator ZERO

LDG GEAR WARN TEST

The landing gear warning switch will test the horn and landing gear handle lights.

STALL WARN TEST

Pressing the stall warn test will activate the warning system and a warning tone should sound. Observe movement of the wing lift transducer.

OVERSPEED WARN. TEST

Pressing the overspeed warn test switch will test the system and a warning tone should sound.

CABIN DIFF WARN. TEST

Observe red CABIN DIFF HI annunciator.

CABIN ALT WARN. TEST/SILENCE

Note aural tone, silence button operation, and observe both CABIN ALTITUDE and CABIN ALT HI annunciators.

ENG FIRE DET TEST

Placing the ENG FIRE TEST switches into the DET position will test the detection circuitry and illuminate the ENG FIRE and flashing MASTER WARNING annunciators.

ENG FIRE EXT TEST

Selecting the ENG FIRE TEST to EXT position will test the discharging system and illuminate the corresponding engine EXTINGUISHER PUSH and DISCHARGED annunciators.

Electric Trim System Check

Electric Trim Switch RESET/ON

Observe that the ELEC TRIM OFF annunciator is extinguished.

Pilot's Trim Switches ACTIVATE INDIVIDUALLY

Individual activation of the dual-element trim switches should cause no trim wheel motion.

Pilot's Trim Switches ACTIVATE TOGETHER

Pressing the dual-element switch on the pilot or copilot control will move the control surfaces to the selected position.

Trim Disconnect Switch PUSH

<p>NOTE: Trim wheel movement stops. ELEV TRIM OFF annunciator illuminates.</p>

Electric Trim Switch RESET/ON

Copilot's Trim Switch REPEAT

Pilot's Trim Switches ACTIVATE

Observe pilot's ability to override copilot's trim actuation when switches are used in opposite directions.

Autopilot and Yaw Damp Check

Manual Pitch Trim TAKEOFF POSITION

ELEV Trim Switch ON

Yaw Damp Button ENGAGE

Note rudder pedals respond to yaw damp engagement.

Rudder Boost Switch YAW CONTROL TEST/RELEASE

Observe YD DISC flash momentarily on EFIS ADI, then extinguish.

Rudder pedals released.

Rudder Boost/Yaw Control Test Switch RUDDER BOOST

Control Yoke RELAX

Preflight Inspection

Autopilot Button ENGAGE

Note trim wheel movement stops. ELEV TRIM OFF annunciator illuminates. AP and YD illuminate steady on EFIS.

Electric Pitch Trim ACTUATE

Electric pitch trim switches should be tested in both directions with the autopilot engaged to verify the autopilot disconnects with all switch activations.

Repeat for both pilot and copilot.

Control Yoke CENTER

Autopilot Button ENGAGE

Allow green AP and YD annunciators to illuminate steady on EFIS ADI.

Control Yoke PUSH/PULL

Move the yoke in both the forward and aft directions to verify the autopilot attempts to trim off the applied pressure.

Turn Knob L/R

Confirm that the control wheel responds appropriately to control from the detent position.

Turn Knob CENTER DETENT

HDG Mode ENGAGE

HDG Control Knob PUSH SYNC

HDG Control L/R

Observe control yoke follows heading commands.

Yoke CWS/SYNC button PUSH/RELEASE

Confirm roll response from previous step becomes inactive when button pressed.

Repeat previous four steps for both pilot and copilot.

GA Button PUSH

Observe EFIS command bars pitch to +7 degrees.
Autopilot disconnects but yaw damp remains engaged.

Autopilot Button ENGAGE

AP/Trim Disconnect PUSH first level

AP DISC and YD DISC flash momentarily on EFIS, then extinguish.

Repeat for both pilot and copilot side.

A/P test button PUSH

All annunciators illuminate, then extinguish. GA remains illuminated. Any other annunciator remaining illuminated indicates a malfunction.

EFIS test button PUSH

Anti-Ice System Check

Pitot, Fuel Vent, Stall Warning Heat Switches ON

CAUTION: Ensure pitot covers are removed.

Ensure that the optional L or R PITOT HEAT annunciator extinguishes when switch is selected on.

Pilot/Copilot Windshield
Heat Switches CHECK EACH POSITION

Ensure that both windshields are getting heat in low and high settings. Observe magnetic compass deflection.

ENGINE ANTI-ICE Actuator Switches STANDBY

ENGINE ANTI-ICE Switches ON

Observe that the L and R ENG ANTI-ICE annunciators are illuminated.

ENGINE ANTI-ICE Switches OFF

Observe that the L and R ENG ANTI-ICE annunciators are extinguished.

ENGINE ANTI-ICE Actuator Switches MAIN

Pitot, Fuel Vent, Stall Warning Heat Switches OFF

Cockpit Preflight Continued

Trim Controls SET

Trim should be set for takeoff and indicator readings must match trim positions.

External Light SwitchesCHECK

Functionally check all the lights before flight; see minimum equipment list (MEL) for required lights.

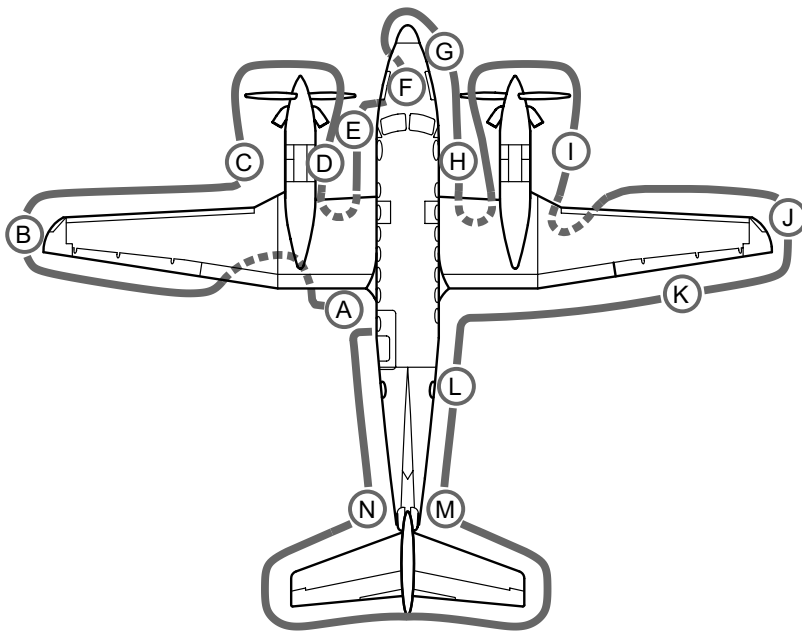
Cockpit Fire Extinguisher CHECK PRESSURE

Flight ManualCHECK

Cabin Preflight

- Forward Cabin Sign ON
Fwd Emergency Exit Sign TEST/RESET
Emergency Exits UNLOCKED
 Interior lock must be in the unlock position to permit access from outside the aircraft in case of an emergency.
Coffee Bar AS REQUIRED
 The coffee bar should be in the stowed position (door closed) and loose items should be stored.
Cabin Seats, Seat Belts, Shoulder Harnesses . . AS DESIRED
 Ensure all seat belt and shoulder harnesses are present and in good condition.
Tray Tables, Cabinets STOWED/AS REQUIRED
Loose Articles SECURED
Cabin Windows AS DESIRED
Gasper Vents/Reading Lights AS DESIRED
Cabin Fire Extinguisher CHECK PRESSURE
Aft Emergency Exit Sign TEST/RESET
Aft Cabin Sign ON
First Aid Oxygen Mask. CHECK
Toilet Knife Valve OPEN
Documents. CHECK
Baggage Area SECURE
Baggage Light AS REQUIRED

Preflight Inspection Walkaround Path



020001 DE0002

Exterior Preflight

General

Before starting the exterior inspection, obtain the following:

- flashlight
- wiping cloth
- standard and Phillips head screwdrivers
- step stool
- container for fuel sample disposal.

All Surfaces FREE FROM SNOW/ICE/FROST

Protective Covers/Plugs REMOVE/STOW

Remove safety covers from the engines, static ports and pitot probes.

All Intakes/Exhausts CLEAR

Fasteners/Panels ALL SECURE

Verify that all fasteners and panels are secure. Remove keys from locks.

General Condition UNDAMAGED

Perform a general condition check of the entire aircraft. Note any fuel, oil or hydraulic leaks. Determine the cause and have corrected before flight.

NOTE: If night flight is anticipated, check actual operation of navigation and strobe lights.

A Left Wing Trailing Edge

- Left Side Cabin Windows CHECK
- Flap Symmetry CHECK

The inboard flap should lay flush with the bottom of the fuselage fillet. Lateral movement of any flap panel is unacceptable.

Do not exceed one flap travel every 10 minutes on the ground.

Both flap panels should be fully retracted. Ensure they are not bent or distorted. Some movement of the flaps should be possible, and there should be no sign of flap binding. Note especially the condition of rivets on top of the flaps. The inboard flap must be flush with the bottom of the fuselage; the outboard flap trailing edge may vary from 1/4-inch above to 1/4-inch below the inboard flap.

Landing Gear and Doors:

Ensure tires are in good condition, doors are secure, struts are properly inflated, and wheel wells are clean and free of fluid leaks. Linkage should be secure with no signs of unusual wear or cracking. Check uplock and downlock microswitches for condition. Brake deice lines, when installed, should be secure and free of fuel, oil, and hydraulic fluid. The deice manifold should be securely attached to the axle and free of damage. Brake lines should be secure and free of fraying or leaking.

- Tire Pressure CHECK
- Strut Inflation/Cleanliness CHECK
- All Linkages CHECK

Brakes, Lines & PlumbingCHECK

Main Gear Condition		
Aircraft Loading	Tire Inflation (PSI)	Strut Extension (Inches)¹
Unloaded	83-87	3.23-3.49
Loaded	88-92	3.23-3.49

¹ Strut extension is with full fuel and oil.

Table 2A; Main Gear Conditions

Fire Extinguisher PressureCHECK

Check that the fire extinguisher cylinder is properly serviced. The cylinder is located aft in the main wheel well. Refer to Table below for fire extinguisher cylinder pressure.

Fire Extinguisher Cylinder		
Ambient Temperature		Indicated Pressure (PSI)
°F	°C	
-40	-40	190-240
-20	-29	220-275
0	-18	250-315
20	-7	290-365
40	4	340-420
60	16	390-480
80	27	455-550
100	38	525-635
120	49	605-760

Table 2-B; Fire Extinguisher Cylinder Pressure

Oil Breather Vent CLEAR

Fuel Sump (outboard of wheel nacelle) DRAIN

Six fuel sumps must be drained on each wing. Two sumps are quick-drain style and four are flush-mounted. Use a fuel tester probe to push up on the spring-loaded push-to-drain type valve. Check for water and/or sediment. Dispose of samples in a fuel sample container. At this point, check the gravity feed line from wing tanks to nacelle (aft of wheel well).

Inverter Louvers CLEAR

Heated/NACA Fuel Vents CLEAR/WARM

Aileron, Tab, Static Wicks (5) CHECK/NEUTRAL

Limitations

All wicks must be installed in good condition when using VLF equipment.

The aileron and the trim tab should be in the neutral position, as previously set in the cockpit. The aileron can be as much as 1/2-inch above or below the flap trailing edge. Check general condition and freedom of movement of the aileron. Check bonding wires for secure attachment. The trim tab should be aligned with the aileron. The hinge should not have excess play.

Check for three static wicks on the left aileron and two static wicks on the winglet.

NOTE: One wick may be damaged or missing on any one surface.

Bonding Cables (1 each hinge) CHECK

Outboard Fuel Vents CLEAR

B Left Wing Leading Edge

Wing Tip Light Group CHECK (NO CRACKS)

Check the light assembly for lens cracks, security, and any indication of a burned out bulb.

Main Tank Cap CHECK/SECURE/NO LEAKS

Ensure there are no leaks in the main fuel tank. Check the fuel cap near the wing tip; the locking tab should be flush with the surface of the cap and pointing aft.

Stall Warning Vane CHECK FREEDOM/WARM

Check that the stall warning vane on the leading edge of the left outboard wing section moves freely and that the vane and mounting assembly are in good condition.

Flush Drain DRAIN

Deice Boot/Stall Strip CHECK/SECURE

The deice boot should be securely attached to the leading edge. Ensure that it is undamaged. Check for significant scratches or cuts in the boot. Check condition of the stall strip attached to the boot.

Access Panels SECURE

Main Tank Fuel Sumps DRAIN

Drain the flush-mounted nacelle fuel pump, strainer, and fuel filter drains forward of the wheel well. Check condition of samples.

Ice Inspection Light CHECK

Check ice inspection light for condition and security.

C Left Engine Nacelle

Firewall Sump	DRAIN
Nacelle and Strainer Sump	DRAIN
Engine Oil Breather Vent	CLEAR
Oil Cooler and Ice Vane Exhaust.	CLEAR
Engine Oil	CHECK
Left Engine Cowling:	
Linkages, Lines, Hoses, Accessories.	CHECK SECURITY/CONDITION
Bonding Straps, Cable Ties.	CHECK SECURITY/CONDITION
Oil Dipstick	SECURE
Cowling	CAMLOCS/LATCHES/SCREWS
Exhaust Stacks and Scuppers	CHECK
Forward Cowl Air Intakes.	CLEAR
Propeller	CHECK SECURITY/LEAKAGE/ NICKS/BOOTS
Engine Intake.	CLEAR
Oil Cooler Inlet.	CLEAR
Ice Vane	RETRACTED
Right Engine Cowling:	
Linkages, Lines, Hoses, Accessories.	CHECK SECURITY/CONDITION
Bonding Straps, Cable Ties.	CHECK SECURITY/CONDITION
Generator Blast Tube	CHECK
Swing Check Valve Louver	CLEAR
No obvious evidence of fluid leaks, heat damage, chafing, loose hardware, or rubbing on interior of cowl covers, etc.	
Cowling	CAMLOCS/LATCHES/SCREWS

D Left Wing Root

Aux Tank Cap SECURE

Inspect the wing in the area of the auxiliary fuel tank, and ensure the fuel cap is secure and locked with the tab pointing aft. Ensure the hydraulic gear service door is secure and that the hydraulic gear overfill and vent lines are clear.

Hydraulic Powerpack Service Door SECURE

Inboard Deice Boot CHECK CONDITION

The deice boot should be securely attached to the leading edge. Check for significant scratches or cuts in the boot.

Heat Exchanger Inlet and Exhaust CLEAR

Check the heat exchanger inlet and outlet for cracks or obstructions.

Hydraulic Gear Powerpack Vents CLEAR

Make sure that the vents are not dented, damaged or leaking.

Aux Fuel Drain DRAIN

Access Panels SECURE

Lower Antennas SECURE/UNDAMAGED

Check the underside of the aircraft for signs of fuel or other leaks. Check antennas, beacon and panels for security and condition.

E Left Nose

Emergency Exit FLUSH/SECURE

Temperature ProbeCHECK SECURITY/CONDITION

Ensure that the security and condition of the temperature probe on the lower fuselage is satisfactory.

Relief TubeCHECK

Brake Reservoir Vent. CLEAR

Windshield and Wiper CONDITION/SECURE/PARKED

The windshield should be clean, free from cracks, discoloration, and excessive delamination. Ensure security and condition of the pilot wiper arm assembly.

Avionics Door. SECURE

Condenser BlowerCLEAR/UNDAMAGED

Pitot TubeCLEAR/WARM

Ensure the pitot cover is removed and that the pitot tube is secure and in good condition.

F Nose Gear

Radome CHECK/UNDAMAGED

Radome should be clean and free of cracks. Verify that the radome is properly secure.

Landing/Taxi LightsCHECK/SECURE

Check condition and security of the landing and taxi lights. Ensure chocks are removed. Verify functionality of all lights.

Nose Strut CHECK CONDITION

Nose Gear Condition	
Tire Inflation (PSI)	Strut Extension (inches)¹
55-60	3.77-4.06

¹ Strut extension is with full fuel and oil.

Table 2A-A; Nose Gear Conditions

Shimmy Damper SECURE

Turn Limit Stop. CLEAN/UNDAMAGED

Metal plate should be straight and holes should be circular.

Gear Doors SECURE

Check that the nose gear door hinges are in good condition. Ensure turn limits on the nosewheel strut have not been exceeded. Check condition of the uplock and downlock microswitches. Check tire, wheels, strut linkages and doors.

Air Conditioning Reset CB UNTRIPPED

Wheel Well Access Panels SECURE

G Right Nose

Pitot Tube CLEAR/WARM

Ensure the pitot cover is removed and that the pitot tube is secure and in good condition.

Condenser Inlet CLEAR/SECURE

Check that the inlet duct is free of obstructions.

Avionics Door SECURE

Check that the right access panel and all fasteners are securely attached.

Windshield and Wiper CONDITION/SECURE/PARKED

The windshield should be clean, free from cracks, discoloration, and excessive delamination. Ensure security and condition of the pilot wiper arm assembly

CAUTION: Do not operate the windshield wiper on a dry windshield; damage to wiper and windshield can occur.

H Right Wing Root

Emergency Exit FLUSH/SECURE

Aux Tank Cap SECURE

Ensure there are no leaks. Check the fuel cap; the locking tab should be flush with the surface of the cap and pointing aft.

Inboard Deice Boot CHECK CONDITION

The deice boot should be securely attached to the leading edge. Check for significant scratches or cuts in the boot.

Heat Exchanger Inlet and Exhaust CLEAR

Check the heat exchanger inlet and outlet for cracks or obstructions. Ensure ejector exhaust is clear of any obstructions.

Vacuum Ejector Exhaust CLEAR

Aux Fuel Tank Drain DRAIN

Six fuel sumps need to be drained on each wing. Two sumps are quick-drain style and four are flush-mounted. Use a fuel tester probe to push up on the spring-loaded push-to-drain type valve. Check for water and/or sediment. Dispose of samples in a fuel sample container. At this point, check the inboard fuel tank sump on the underside of the auxiliary tank near the fuselage.

Battery Box Drain CLEAR

Battery Air Inlet and Exhaust CLEAR

The battery air inlet is on the bottom of the wing between the nacelle and the fuselage. The thermostatically controlled valve should be securely in place, should not bind, and should be in the proper position for battery box temperature (fully open at 70 to 80°F and fully closed at 30°F).

Ensure that the battery outlet vent on top of the wing is unobstructed and the access panel is secure. Check the battery box drain for obstructions.

Lower Panels SECURE

I Right Engine Nacelle

Firewall Sump DRAIN
Nacelle and Strainer Sump DRAIN
Engine Oil Breather Vent CLEAR
Oil Cooler and Ice Vane Exhaust CLEAR
Engine Oil CHECK

Left Engine Cowling:

Linkages, Lines, Hoses,
Accessories CHECK SECURITY/CONDITION

Bonding Straps,
Cable Ties CHECK SECURITY/CONDITION

Oil Dipstick SECURE

AC Compressor Drive Belt SECURE

Cowling CAMLOCKS/LATCHES/SCREWS

Exhaust Stacks and Scuppers CHECK

Forward Cowl Air Intakes CLEAR

Propeller CHECK SECURITY/LEAKAGE/
NICKS/BOOTS

Engine Intake CLEAR

Oil Cooler Inlet CLEAR

Ice Vane RETRACTED

Right Engine Cowling:

Linkages, Lines, Hoses,
Accessories CHECK SECURITY/CONDITION

Bonding Straps,
Cable Ties CHECK SECURITY/CONDITION

Generator Blast Tube CHECK

Preflight Inspection

- Swing Check Valve Louver CLEAR
- No obvious evidence of fluid leaks, heat damage, chafing,
loose hardware, or rubbing on interior of cowl covers, etc.
- Cowling CAMLOCKS/LATCHES/SCREWS

J Right Wing Leading Edge

Landing Gear and Doors:

Ensure tires are in good condition, doors are secure, struts are properly inflated, and wheel wells are clean and free of fluid leaks. Linkage should be secure with no signs of unusual wear or cracking. Check uplock and downlock microswitches for condition. Brake deice lines, when installed, should be secure and free of fuel, oil, and hydraulic fluid. The deice manifold should be securely attached to the axle and free of damage. Brake lines should be secure and free of fraying or leaking.

Tire Pressure CHECK

Strut Inflation/Cleanliness CHECK

Check for evidence of leaks and friction, general condition and proper installation (refer to **Table 2-A**).

All Linkages CHECK

Check for wear and evidence of friction; all linkages should have free movement.

Brakes Lines and Plumbing CHECK

Fire Extinguisher Pressure CHECK

Check that the fire extinguisher cylinder is properly serviced (refer to **Table 2-B**). The cylinder is located aft in the main wheel well.

GPU Access Door CLOSED (IF GPU DISCONNECTED)

Confirm that the door is closed, undamaged and properly latched. If GPU is still connected to the aircraft, ensure that the door is properly closed after removal.

Inverter Louvers CLEAR

Nacelle and Strainer Sump DRAIN

Preflight Inspection

Firewall Sump DRAIN

Drain the flush-mounted firewall fuel filter drain; it is flush with the bottom of the firewall. Check condition of sample.

Ice Inspection Light CHECK

Check ice inspection light for condition, security and operation.

Main Tank Fuel Sumps DRAIN

Heated/NACA Fuel Vents CLEAR/WARM

Deice Boot/Stall Strip CHECK/SECURE

The deice boot should be securely attached to the leading edge. Ensure that it is undamaged. Check for significant scratches or cuts in the boot. Check condition of the stall strip attached to the boot.

Access Panels SECURE

Main Tank, Cap CHECK/SECURE/NO LEAKS

Ensure there are no leaks in the main fuel tank. Check the fuel cap near the wing tip; the locking tab should be flush with the surface of the cap and pointing aft.

Outboard Fuel Vents CLEAR

Check the general condition of the siphon break vent on the aft side of the wing tip. It should be clear and free of obstructions.

Wing Tip Light Group CHECK (NO CRACKS)

Check the light assembly for lens cracks, security, and any indication of a burned out bulb.

K Right Wing Trailing Edge

Aileron, Tab, Static Wicks (5) CHECK/NEUTRAL

The aileron and the trim tab should be in the neutral position, as previously set in the cockpit. The aileron can be as much as 1/2-inch above or below the flap trailing edge. Check general condition and freedom of movement of the aileron. Check bonding wires for secure attachment. The trim tab should be aligned with the aileron. The hinge should not have excess play.

Check for three static wicks on the left aileron and two static wicks on the winglet.

NOTE: One wick may be damaged or missing on any one surface.

Bonding Cables (1 each hinge) CHECK

Fuel Sump (outboard of wheel nacelle) DRAIN

Drain the gravity feed line from wing tanks to nacelle (aft of wheel well).

Flap Symmetry CHECK

The inboard flap should lay flush with the bottom of the fuselage fillet. Lateral movement of any flap panel is unacceptable.

Do not exceed one flap travel every 10 minutes on the ground.

Both flap panels should be fully retracted. Ensure they are not bent or distorted. Some movement of the flaps should be possible, and there should be no sign of flap binding. Note especially the condition of rivets on top of the flaps. The inboard flap must be flush with the bottom of the fuselage; the outboard flap trailing edge may vary from 1/4-inch above to 1/4-inch below the inboard flap.

L Right Rear Fuselage

Right Side Cabin WindowsCHECK

Do a visual inspection of the windows, ensure they are clean, properly installed and free of any cracks.

Oxygen Door SECURE

Verify that the door is secure, latches are not loose and door is undamaged.

Static Ports. CLEAR

Ensure that the ports are clean and no evidence of corrosion exists.

Tailcone Access Panels SECURE

Ensure that the tailcone access door and inspection panels are secure.

ELT ARMED

The emergency locator transmitter (ELT) is aft of the oxygen door and static ports on the fuselage. Push the door in and ensure the switch is in the ARMED/AUTO position. Check the ELT antenna for condition and security.

All Antennas. CHECK/UNDAMAGED

Check the underside of the aircraft for leaks. Check antennas and beacon for security and condition. Ensure aft relief tube drain is unobstructed. Check the aft compartment bottom access panels for condition and security.

M Empennage

Ventral Fin Drain Holes CLEAR

Ensure the ventral fin water drain is unobstructed.

Control Surfaces/Tabs SECURE/NEUTRAL

Ensure trim tabs are in line with control surfaces. Check drain holes on underside of elevator. Verify all trim tabs are in the neutral position. The elevator trim tab neutral position (previously set in the cockpit) can be checked by observing that the trailing edge of the trim tab aligns with the trailing edge of the elevator when the elevator is resting against the downstops.

Static Wicks (13) SECURE

NOTE: One wick may be damaged or missing on any one surface.

Check for four static wicks on each elevator, four static wicks on the rudder, and one static wick on the vertical stabilizer.

Bonding Cables SECURE

Limitations

All wicks must be installed in good condition when using VLF equipment.

The cables should be properly installed and undamaged.

Exterior Light Groups CLEAN/UNDAMAGED

Visually inspect the navigation lights, strobe lights and floodlights.

Surface Deice Boots CLEAN/UNDAMAGED

The deice boots should be secure and in good condition.

Antennas CHECK

Check the VOR antennas for condition and security.

N Left Rear Fuselage

Access Panels SECURE

Ensure all access panels are secure.

Static Ports CLEAR

Check static ports for condition.

Oxygen Overpressure Discharge Vent CLEAR

Relief Tube CHECK

Ensure that the relief tube is clear and undamaged.

Cabin Door

Circuitry Check COMPLETE

Door Seal CLEAN/UNDAMAGED

Latching Bayonets CHECK CONDITION

Piano Hinge/Rivets/Snubber CHECK CONDITION

Steps FIRM

Cable, Air Supply, Wiring CHECK

