

Radio Ground Control	As Required
Taxi Area	Clear
Brakes	Set
Parking Brakes	Release
Throttle	Apply Slowly
Brakes	Check
Steering	Check

**Autopilot Pre-flight Test: (optional)**

Trim Master ON/OFF Switch	On
HDG and VS Switches	Press / Release

(ENSURE HDG AND VS ARE HIGHLIGHTED ON THE ANNUNCIATOR)

Control Wheel Steering (CWS) Switch	Press / Release
-------------------------------------	-----------------

(VERIFY CSW AND VS ARE HIGHLIGHTED ON THE ANNUNCIATOR)

CWS Switch	Press / Hold
------------	--------------

(AUTOPILOT SERVOS DIS-ENGAGE & CONTROLS ARE FREE)

CWS Switch	Release
------------	---------

(SERVOS SHOULD RE-ENGAGE)

VS Knob	Rotate Clockwise
---------	------------------

(PITCH CONTROL SHOULD MOVE SLOWLY OUT)

VS Knob	Rotate Counter Clockwise
---------	--------------------------

(PITCH CONTROL SHOULD MOVE SLOWLY IN)

A/P DISC Trim Interrupt Switch on Yoke	Press
----------------------------------------	-------

(VERIFY AUTOPILOT DISCONNECTS)

HDG Mode	Press / Release HDG
----------	---------------------

(AUTOPILOT SERVOS ENGAGE)

HSI Hdg Bug on PFD	Move Left & Right
--------------------	-------------------

(ROLL CONTROL SHOULD FOLLOW THE HDG BUG)

Altitude Hold (ALT) Button	Press / Release
----------------------------	-----------------

(SLOWLY PULL OUT [NOSE UP] THE PITCH CONTROL. AUTOTRIM SHOULD RUN NOSE DOWN WITH TRIM FLASHING ON THE REMOTE ANNUNCIATOR AND ON THE AUTOPILOT AFTER 3 SECONDS)

(SLOWLY MOVE PITCH CONTROL FORWARD [NOSE DOWN]. AFTER 3 SECONDS, AUTOTRIM SHOULD MOVE NOSE UP WITH TRIM FLASHING ON THE REMOTE ANNUNCIATOR AND ON THE AUTOPILOT)

Trim Master ON/OFF Switch	Off
---------------------------	-----

(CENTER THE HSI COURSE ARROW UNDER THE LUBBER LINE AND PUSH THE NAV BUTTON. MOVE THE COURSE ARROW ON THE HIS LEFT THEN RIGHT. ROLL CONTROL SHOULD FOLLOW THE COURSE ARROW. CHANNEL A VALID VOR SIGNAL AND MOVE COURSE ARROW JUST ENOUGH TO DEFLECT THE LEFT/RIGHT NEEDLE 1 OR 2 DOTS. ROLL CONTROL SHOULD FOLLOW THE CDI LEFT/RIGHT NEEDLE DURING THE TEST [THIS TEST IS ONLY VALID IF THE LEFT/RIGHT NEEDLE IS CENTERED WITH THE COURSE ARROW UNDER THE LUBBER LINE.]

REV Mode Button	Press / Release
-----------------	-----------------

(ROLL CONTROL SHOULD RESPOND OPPOSITE TO THE COURSE ARROW AND CDI LEFT / RIGHT NEEDLE INPUTS)

**Autopilot Master Switch Select FD Only**

(PITCH, ROLL, TRIM SERVOS SHOULD DIS-ENGAGE & CONTROLS ARE FREE. THE STEERING BAR ON THE ATTITUDE INDICATOR SHOULD BE DISPLAYED.)

HDG Mode Button	Press / Release
-----------------	-----------------

(MOVE THE PFD HDG BUG 40° LEFT. THE ROLL STEERING BAR SHOULD SLOWLY INDICATE A LEFT STEERING COMMAND. REPEAT THE SAME TEST FOR THE RIGHT SIDE.)

VS Mode Button	Press / Release
----------------	-----------------

(SET VERTICAL RATE OF CLIMB ON THE PFD VS BUG TO 1500 FPM RATE OF CLIMB. THE PITCH STEERING BAR SHOULD MOVE SLOWLY UP. REPEAT THE SAME TEST FOR THE DOWN DIRECTION.)

Autopilot Master Switch	Select FD/AP
-------------------------	--------------

(THE SERVOS SHOULD RE-ENGAGE)

Trim Master ON/OFF Switch	On
---------------------------	----

Manual Electric Trim Command Switch	Push FWD or AFT
-------------------------------------	-----------------

(THE AUTOPILOT SHOULD DISCONNECT... THE MANUAL ELECTRIC TRIM COMMAND SWITCH WILL DISCONNECT THE AUTOPILOT ONLY IF THERE IS A PITCH MODE ENGAGED.)

HDG Mode Button	Press / Release
-----------------	-----------------

(AUTOPILOT SERVOS ENGAGE)

Control Wheel Autopilot Disconnect	Press RED Disconnect Button
------------------------------------	-----------------------------

(AUTOPILOT SERVOS DIS-ENGAGE & CONTROLS ARE FREE)

< conclusion of autopilot pre-flight test >

**TAXI**

Brakes	Check
--------	-------

Throttle	800 to 1200 RPM
----------	-----------------

Flight Instruments	Check
--------------------	-------

**GENERAL ARCHER III OPERATING NOTES:**

- Learn to trim for takeoff so that only a very light back pressure on the control wheel is required to lift the airplane off the ground.
- The best speed for takeoff is about 57 KIAS under normal conditions. Pulling the airplane off the ground at too low an airspeed decreases the controllability of the airplane in the event of engine failure.
- Flaps may be lowered at airspeeds up to 102 KIAS. To reduce operating loads on the flaps, it is desirable to have the airplane at a slower speed before extending the flaps. The flap step will not support weight if the flaps are in any extended position. The flaps must be placed in the "UP" position before they will lock and support weight on the step.
- Before attempting to reset any circuit breaker, allow a two to five minute cooling off period.
- The rudder pedals are suspended from a torque tube that extends across the fuselage. The pilot should become familiar with the proper positioning of feet on the rudder pedals, so as to avoid interference with the torque tube when moving the rudder pedals or operating the toe brakes.

**GROUND CHECK RUN-UP**

Parking Break	Set
---------------	-----

Flight Controls:	Free and Correct
------------------	------------------

- |                                  |                           |
|----------------------------------|---------------------------|
| • Aileron – Left Up / Right Down |                           |
| Control Wheel Left               | Check                     |
| • Aileron – Right Up / Left Down |                           |
| Control Wheel Right              | Check                     |
| • Stabilator Up / Down           |                           |
| Yoke Back / Forward              | Check                     |
| • Rudder Left / Right            | Check                     |
| • Clear obstacles from floor     | Pilot/Passenger feet area |

Fuel Pump	On
-----------	----

Trim	Set for Takeoff
------	-----------------

MFD Screen	ENGINE Page Displayed
------------	-----------------------

Mixture	Rich
---------	------

Throttle	2000 RPM
----------	----------

Magnetos	Check Left / Right
----------	--------------------

MAXIMUM DROP 175 RPM... MAXIMUM DIFFERENCE 50 RPM

Oil Temperature	Check
-----------------	-------

Oil Pressure	Check
--------------	-------

Air Conditioner	Check
-----------------	-------

Ammeter	Check
---------	-------

Buss Load	Check
-----------	-------

Annunciator Panel	Press to Test
-------------------	---------------

Carburetor Heat	On
-----------------	----

(APPROXIMATELY 75 RPM DROP)

Carburetor Heat	Off
-----------------	-----

Throttle	Retard to Idle
----------	----------------

(ENGINE DOES NOT STALL)

Ammeter	Check
---------	-------

Throttle	800-1000 RPM
----------	--------------

Circuit Breakers	In
------------------	----

Fuel Pump	Off
-----------	-----

**BEFORE TAKEOFF  
Initialization of Flight**

Battery Master Switch	Verify On
-----------------------	-----------

Alternator Switch	Verify On
-------------------	-----------

Magnetos Left / Right	Verify On
-----------------------	-----------

Takeoff Briefing	Complete
------------------	----------

Cabin Doors	Check Closed / Latched
-------------	------------------------

Seat Backs	Erect
------------	-------

Seats	Adjust and Lock in Position
-------	-----------------------------

Belts/Harness	Fasten and Check
---------------	------------------

Empty Seats	Seat Belts Secured
-------------	--------------------

Landing Light	On
---------------	----

(DAYTIME USE RECOGNITION LIGHTS)

Wing Strobes/Tail Beacon	On
--------------------------	----

Navigation Lights	On as Needed
-------------------	--------------

**NORMAL TAKEOFF**

Flight Instruments	Set and Check
--------------------	---------------

Fuel Selector	Proper Tank
---------------	-------------

Electric Fuel Pump Switch	On
---------------------------	----

Engine Gauges	Check
---------------	-------

Carburetor Heat	OFF
-----------------	-----

Mixture	Set Rich or As Required
---------	-------------------------

Pitot Heat	Set As Required
------------	-----------------

Flaps	Set for Takeoff
-------	-----------------

Trim	Set for Takeoff
------	-----------------

Transponder	Verify SBY or GND
-------------	-------------------

(TRANSPONDER WILL AUTOMATICALLY SWITCH TO ALT ON LIFTOFF DETECTION)

Air Conditioner	Off
-----------------	-----

Radio	As Required
-------	-------------

(IF THE AIR CONDITIONER SWITCH IS ON, IT SHOULD AUTOMATICALLY TURN OFF AND THE CONDENSER DOOR SHOULD RETRACT AT FULL THROTTLE, AND THEN RESUME WHEN THROTTLE IS RETARDED FROM FULL. TURNING OFF THE AIR CONDITIONER BEFORE TAKEOFF AND CLIMB IS THE POH RECOMMENDED PROCEDURE)

**CLIMB**

Flaps	As Required
-------	-------------

Best Rate Climb Vy	76 KIAS
--------------------	---------

Best Angle Climb Vx	64 KIAS
---------------------	---------

Cruise Climb (En Route)	87 KIAS
-------------------------	---------

**CRUISE**

Cruise Power	Set per Power Table
--------------	---------------------

Mixture	Adjust
---------	--------

Landing Light	Off
---------------	-----

Pitot Heat	As Required
------------	-------------

Fuel Selector	Set
---------------	-----

Fuel Pump	Off
-----------	-----

**DESCENT**

Radio Intent	As Required
--------------	-------------

PFD Avionics/Bugs	Set and Check
-------------------	---------------

Pitot Heat	As Required
------------	-------------

Engine Instruments	Check
--------------------	-------

Flight Instruments	Check / Set
--------------------	-------------

Approach Briefing	Complete
-------------------	----------

Fuel Selector	Fullest Tank
---------------	--------------

Seat Backs	Erect
------------	-------

Seats	Adjust and Lock In Position
-------	-----------------------------

Belts/Harness	Fasten / Adjust
---------------	-----------------

**NORMAL DESCENT**

Throttle 2500 RPM  
 Airspeed 122 KIAS  
 Mixture Set RICH  
 Carburetor Heat See Following Note

**POWER OFF DESCENT**

Carburetor Heat See Following Note  
 Throttle Closed  
 Airspeed As Required  
 Mixture As Required  
 Power Verify With Throttle  
 Every 30 Seconds

**Do not set carburetor heat, unless there is an indication of carburetor icing (see POH for Carburetor Heat procedure).**

**BEFORE LANDING**

Radio Intentions As Required  
 Traffic Pattern Airspeed 80 KIAS  
 1900 RPM to 2200 RPM  
 Landing Light On  
 Fuel Pump On  
 Fuel Selector Fullest Tank  
 Circuit Breakers In  
 Mixture RICH (or Set As Required)  
 Magnetos Left / Right Both On  
 Flaps Set – 102 KIAS Maximum  
 Engine Gauges Check  
 Air Conditioner Off  
 Carburetor Heat See Following Note  
 Initial Approach Speed 75 KIAS  
 Final Approach Speed (40° Flap) 66 KIAS

**Do not set carburetor heat, unless there is an indication of carburetor icing (see POH for Carburetor Heat procedure).**

**AFTER LANDING**

Mixture Lean (EGT/RPM) If Required  
 Carburetor Heat Off  
 Electric Fuel Pump Off  
 Flaps Retract  
 Landing Lights Off  
 Lights As required  
 Trim Set for takeoff  
 Transponder Verify SBY or GND  
 (TRANSPONDER WILL AUTOMATICALLY SWITCH FROM ALT TO GND / SBY IN 3 MINUTES AFTER LANDING)  
 Flight Plan Close

**SHUTDOWN**

Flaps Verify In FULL UP Position  
 Electric Fuel Pump Off  
 Air Vent Fan Off  
 Air Conditioner Off  
 FD/AP Switch (Flight Director/ Auto Pilot) Off  
 RADIO MASTER Switch Off  
 All Electrical Switches Off  
 Throttle Closed  
 Magneto Switches (Both) Off then On  
 Mixture Idle-Cut-Off

**WAIT FOR PROPELLER TO STOP SPINNING**

Magneto Switches Left / Right Off  
 Alternator Switch Off  
 BATT MASTR Switch Off

**MOORING**

Record HOBBS Time Check  
 Record Squawks Check  
 Clear Cockpit of Debris Check  
 Fuel Tanks Filling to FULL is  
 Appreciated in Cold Weather!  
 Parking Break Set  
 Flaps Verify In FULL UP Position  
 Control Wheel Secure With Belts  
 Left/Right Wing Tie Down Secure  
 Tail Tie Down Secure  
 Cockpit Door Secured and LOCKED  
 Cargo Door Secured and LOCKED  
 Right Wing Fuel Cap LOCKED  
 Left Wing Fuel Cap LOCKED

**V-SPEEDS**

Vr (Rotate to Climb) 60 KIAS  
 Vso (Landing Config. Stall) 45 KIAS  
 Vs1 (Min. Steady Flight Stall) 50 KIAS  
 Vx (Best Angle-of-Climb Speed) 64 KIAS  
 Vy (Best Rate-of-Climb Speed) 76 KIAS  
 Vfe (Max. Flap Extended) 102 KIAS  
 Va (Maneuvering Speed) 113 KIAS  
 Vno (Max. Cruising Speed) 125 KIAS  
 Vne (Never Exceed) 154 KIAS  
 Best Glide 76 KIAS  
 Steep Turns (Entry Speed) 113 KIAS  
 Maximum Demonstrated  
 Crosswind Velocity 17 KIAS

**NORMAL START - HOT ENGINE**

BATT MASTR Switch Remain On  
 ALTR Switch On  
 Fuel Pump On  
 Left Magneto Switch On  
 Right Magneto Switch OFF  
 Tail Strobe Light On  
 Throttle ½ inch Open  
 Mixture Full Rich  
 Propeller / Area Clear  
 Starter Engage  
 Right Magneto Switch (WHEN STARTED) On  
 Oil Pressure Check  
 Throttle Adjust to 800-1000 RPM  
 Engine Instruments Check  
 Fuel Pump OFF  
 Wing Strobes/Tail Beacon/Nav Lights ON  
 (AS REQUIRED)

**ENGINE START WHEN FLOODED**

BATT MASTR Switch Remain On  
 ALTR Switch On  
 Fuel Pump Off  
 Left Magneto Switch On  
 Right Magneto Switch OFF  
 Tail Strobe Light On  
 Throttle Full Open  
 Mixture Idle Cut-Off / Full Lean  
 Propeller / Area Clear  
 Starter Engage  
 Right Magneto Switch (WHEN STARTED) On  
 Mixture Advance  
 Throttle Retard  
 Throttle Adjust to 800-1000 RPM  
 Oil Pressure Check  
 Engine Instruments Check  
 Fuel Pump Off  
 Wing Strobes/Tail Beacon/Nav Lights ON  
 (AS REQUIRED)

**ENGINE WARM-UP**

Throttle Adjust to 800-1000 RPM

**WARM-UP NOTES:**

Warm-up the engine at 800 to 1200 RPM not more than two minutes in warm weather and four minutes in cold. Avoid prolonged idling at low RPM... results in fouled spark plugs.

Takeoff as soon as the ground check is completed. Do not takeoff if there is backfiring, skipping or engine oil pressure reduction at full throttle.

**AFTER START - BEFORE TAXI**

Circuit Breakers In  
 RADIO MASTR Switch On  
 Audio Panel Annunciator Press TEST  
 NAV/COMM RADIOS:

Top GNS 430 Self-Test Wait for OK  
 Verify Database Effective/Expire Dates  
 Press ENT Twice

Bottom GNS 430 Self-Test Wait for OK  
 Verify Database Effective/Expire Dates  
 Press ENT Twice

COMM Radios Set as Required  
 ATIS As Required  
 Flight Instruments Check Activation  
 Barometer on PFD Set for Pressure  
 ...or for Altitude at Field Elevation  
 Barometer on Backup Altimeter Set  
 Backup Attitude Indicator:

Cage Horizon Gently Pull Cage Knob  
 Push & Hold STBY PWR Button >>>  
 Amber Light Flashes  
 Release STBY PWR Button >>>>>  
 Green Test Light = Good Battery  
 Red Test Light = Discharged Battery

FD/AP Switch Set to FD/AP  
 (Flight Director/Auto Pilot)  
 AP Self-Test RDY Stays On  
 Manual Electric Trim Test:  
 Trim Master ON/OFF Switch On

- **Move each segment** of the Manual Electric Trim Command **independently** FWD and AFT. Trim should not run.
- **Move both segments** of the Trim Command Switch **FWD**. Trim should run nose down. Manual Trim Wheel should roll forward.
- **Move both segments** of the Trim Command Switch **AFT**. Trim should run nose up. Manual Trim Wheel should roll backward.
- **RE-TRIM aircraft for takeoff** and check controls for freedom of movement.
- Be sure the **autopilot and trim servos are dis-engaged** (press **RED** Button on control wheel).

GNS 430 Flight Plan Load as Required  
 MFD Settings Configure as Required  
 PFD Settings Configure as Required

Left Wing Fuel Quantity	Check (Note Gallons)
Left Wing Fuel Filler Cap	Secured
Left Wing Tie Down	Remove
Left Wing Lower Surface	Check
Stall Warning Opening	Check
Pitot Mast	Check
Left Wing Leading Edge	Check
Left Wingtip Condition / Lights	Check
Left Wing Upper Surface	Check
Left Flap and Aileron	Check
Left Side Fuselage	Check
Static Port	Check
Antennas Above/Below Fuselage	Check
Empennage	Check
Stabilator and Trim	Check
Control Surfaces	Check
Tail Tie Down	Remove
Right Side Fuselage	Check
ELT Antenna Above Fuselage	Check
Baggage Door	Locked

**ADDING FUEL**

Static Charge Ground	Connected
Fuel Added	As Necessary
Static Charge Ground	Disconnected
Right Wing Fuel Filler Cap	Secure/Lock
Left Wing Fuel Filler Cap	Secure/Lock
Record Fuel Added	Logged

**INTERIOR FLIGHT DECK  
PREFLIGHT INSPECTION**

Flaps	Retract
BATT MASTR Switch	On
(FOLLOW PFD/MFD INSTRUCTIONS)	
Interior Lighting	On and Check
MFD Fuel Gauge	Set/Check Quantity
MFD Page	Set to ENGINE Page
Fuel Selector	Fullest Tank
Annunciator Panel	Test
(THE ANNUNCIATOR LIGHTS ARE LIKE CIRCUIT BREAKERS. IF A LIGHT IS EXTENDED OUT, THEN SLIGHTLY PULL AND THEN PUSH IN TO RESEAT THE LIGHT. BE CAREFUL NOT TO PULL OUT TOO FAR OR THE TENSION SPRINGS WILL FALL OUT.)	
Pitot Heat Switch	On
Pitot INOP Annunciator	Extinguished
Pitot Heat Switch	Off
Pitot INOP Annunciator	Illuminated
Exterior Lights	On and Check

Stall Warning Horn	Check
Pitot	Warm
All Lighting Switches	Off
Pitot Heat Switch	Off

**BEFORE START**

Interior Flight Deck Preflight Inspection	
	Completed
BATT MASTR Switch	Remain On
Seats / Belts / Harness	Adjust and Lock
(CHECK HARNESS INERTIA REEL)	
Cabin Doors	Closed and Latched
Passengers	Secured / Briefed
Parking Brakes	Set and Hold
Circuit Breakers	Check All are IN
Alternate Static Source	Off
Carburetor Heat	Full Cold
RADIO MASTR Switch	Off
FD/AP Switch (Flight Director/ Auto Pilot)	Off
Fuel Selector	Fullest Tank

**NORMAL START - COLD ENGINE**

BATT MASTR Switch	Remain On
ALTR Switch	On
Fuel Pump	On
Left Magneto Switch	On
Right Magneto Switch	OFF
Tail Strobe Light	On
Throttle	¼ inch Open
Mixture	Full Rich
Prime Switch	Press for 3 Seconds
Propeller / Area	Clear
Starter	Engage
Right Magneto Switch (WHEN STARTED)	On
Oil Pressure	Check
Throttle	Adjust to 800-1000 RPM
Engine Instruments	Check
Fuel Pump	OFF
Wing Strobes/Tail Beacon/Nav Lights	ON
(AS REQUIRED)	

(IF ENGINE DOES NOT START WITHIN 10 SECONDS, PRIME AND REPEAT STARTING PROCEDURE)

**ENGINE START (General) NOTES:**

- Do not attempt flight if there is no indication of alternator output.
- If a positive oil pressure is not indicated within 30 seconds following engine start, stop the engine and determine the trouble. In cold weather it will take a few seconds longer to get a positive oil pressure indication.
- Limit start cranking periods to 30 seconds with two minute rests.

**AIRSPEEDS FOR SAFE  
OPERATION**

Stall Speeds	
• 2550 lbs (0° Flaps)	50 KIAS
• 2550 lbs (40° Full Flaps)	45 KIAS
Maneuvering Speeds	
• 2550 lbs	113 KIAS
• 1634 lbs	89 KIAS
Never Exceed Speed	154 KIAS
Power Off Glide Speed	
• 2550 lbs (0° Flaps)	76 KIAS
Traffic Pattern Speed	80 KIAS
• 1900 RPM in Cool Temperatures	
• 2200 RPM in Warm Temperatures	

**KEY METRICS**

Oil	Minimum 6 qt. ~ Maximum 8 qt.
Max. Landing Weight	2550 lbs.

**ENGINE FAILURES****DURING TAKEOFF**

Throttle	Idle
Brakes	Apply
Mixture	Idle Cut-Off
Ignition	Off
BATT MASTR Switch	Off

**IMMEDIATELY AFTER TAKEOFF**

Airspeed	Set Attitude for 76 KIAS
Attempt Engine Restart Procedure	
(IF TIME PERMITS)	

If Engine Does Not Start:

• Mixture	Idle Cut-Off
• Fuel Valve	Off
• Ignition Switch	Off
• Flaps	As Required
• BATT MASTR Switch	Off
• Cabin Door	Unlatch
• Land	As Briefed

**IN CRUISE FLIGHT  
(RESTART PROCEDURE)**

Airspeed	76 KIAS
Possible Landing Area	Identify
Fuel Selector	Switch to fullest tank
Mixture	Rich
Fuel Pump	On
Carburetor Heat	On
Starter	Engage (if propeller stopped)

When Power is restored:

- Carburetor Heat Off
- Fuel Pump Off

If Power is not restored, prepare for Forced Landing.

**FORCED LANDINGS****WITHOUT ENGINE POWER**

Transponder	7700
Radio(s)	121.5 (if time permits)
Seats / Belts	Upright / Locked
Airspeed	76 KIAS
Flaps	As required
Throttle	Closed
Mixture	Idle-Cut-Off
Magnetos	Off
BATT MASTR Switch	Off
ALTR Switch	Off
Fuel Selector	Off
Seats And Seat Belts	Tight

**FIRES****ENGINE FIRE DURING START**

Cranking	Continue
Mixture	Idle Cut-Off
Throttle	Full open
Electric Fuel Pump	Off
Fuel Selector	Off
If Fire Continues, Abandon Plane	

**FIRE IN FLIGHT**

Source Of Fire	Check
<b>Electrical Fire:</b>	
BATT MASTR Switch	Off
ALTR Switch	Off
Vents	Open
Cabin Heat	Off
Land As Soon As Possible	

**Engine Fire:**

Fuel Selector	Off
Throttle	Closed
Mixture	Idle Cut-Off
Electric Fuel pump	Off
Heater / defroster	Off
Proceed With Power-Off Landing	

**Always Check POH For Other  
Emergency Checklists**

**AUTOPILOT System Failure and Caution Annunciations**

The System Fifty Five X contains a number of automatic failure and caution annunciations to advise the pilot of operational problems. They are as follows:

ANNUNCIATION	CONDITION	ACTION
Flashing <b>RDY</b> for 5 seconds with audible tone (RED Control Wheel button pressed)	Indicates autopilot disconnect. All annunciations except <b>RDY</b> are cleared.	<i>N/A</i>
Flashing <b>RDY</b> with audible tone then extinguished	Turn Coordinator Gyro Rotor Speed low. Autopilot disconnects and cannot be re-engaged.	Check Power to Turn Coordinator. Conduct other system checks as necessary.
Flashing <b>NAV, REV, or APR</b>	Indicates off navigation course by 50% needle deviation or more.	Use <b>HDG</b> Mode until problem is identified. Crosscheck raw <b>NAV</b> data, compass <b>HDG</b> , and radio operation.
Flashing <b>NAV, REV, or APR</b> Steady <b>FAIL</b>	Indicates invalid Radio Navigational Signal.	Check <b>NAV</b> Radio for proper reception. Use <b>HDG</b> Mode until problem is corrected.
Flashing <b>VS</b>	Indicates excessive Vertical Speed Error over selected <b>VS</b> (usually during climb).	Reduce <b>VS</b> command and/or adjust power as appropriate.
Flashing <b>GS</b>	Indicates off glide-slope centerline by 50% needle deviation or more.	Check altitude / power. Add or reduce power as appropriate.
Flashing <b>GS</b> , steady <b>FAIL</b>	Indicates invalid glide-slope radio navigation signal.	Disconnect autopilot and initiate go-around or missed approach as appropriate. Inform Air Traffic Control.
Flashing <b>VS</b> and number (with 01282 only)	Indicates incorrect <b>VS</b> polarity for target altitude.	Enter the appropriate <b>VS</b> value
Flashing <b>GS</b> plus <b>ALT</b>	Indicates Manual glide-slope disable.	Re-enable by pushing <b>APR</b> Mode Switch.

**Operating Instructions 4300-4xx Series Electric Attitude Indicator****In-Flight Emergency Procedure  
Loss Of Main DC Power**

In the event of a loss or interruption of main power, the amber standby power light will start flashing, warning the pilot that the Electric Attitude Indicator has lost its main DC power source. The following is a checklist to activate the standby battery in the Electric Attitude Indicator.

- Amber** Light: **Illuminated and flashing**
- "STBY PWR" button: **Press one time**
- Attitude Indicator: **Gyro warning flag out of view**  
If the red warning flag is in view, the indicator is inoperative and must not be used.
- Indicator will run for approximately one hour if battery was fully charged.
- If the "STBY PWR" was not pressed during the one-minute warning mode but internal battery operation is required - **press the "STBY PWR" one time** to turn the indicator on.

**Standby Operation Ground Check  
Emergency Mode**

- Master switch: **On - Unit running for 5 minutes minimum**  
Red gyro warning flag out of view
- Master switch: **Off**
- Amber light: **Illuminated and flashing**
- Press "STBY PWR" button: **Once**
- Amber light: **Extinguished and not flashing**
- Gyro warning flag: **Not in view**
- Press "STBY PWR" button: **Once**
- Gyro warning flag: **In view**
- Master switch: **On**
- Gyro warning flag: **Not in view**
- Master switch: **Off**
- Amber light: **Illuminated and flashing for one Minute, then extinguish.**

**NOTE:** Standby internal dial light automatically illuminates when Electric Attitude Indicator is in the standby mode. This light has no dimming capabilities.

**CHECKLIST****PIPER ARCHER III PA28-181 N184CF**

THIS CHECKLIST IS DESIGNED TO PROVIDE STANDARDIZED METHODS OF CHECKS FOR PREFLIGHT, FLIGHT, AND POST FLIGHT CONTROL UNDER "NORMAL" CONDITIONS. AS CONDITIONS CHANGE, THE CHECKLIST AS APPLIED BY THE PILOT WILL NEED TO BE ADJUSTED. REFERENCE THE **PROCEDURES GUIDE** FOR FLIGHT CONTROL UNDER OTHER THAN NORMAL CONDITIONS.

**Disclaimer:** Cherokee Flyers Club does not explicitly or implicitly guarantee accuracy of any information on this page. Pilots may use this checklist as a quick reference, but must consult the airplanes official **Pilot's Operating Handbook (POH)** for any information used in actual operations of the airplane.

**FLIGHT PREPARATION**

Prepared a Flight Plan **Check**  
Contact FSS Briefer (1-800-WX-BRIEF) **Check**  
Weight and Balance **Check**

**INTERIOR PREFLIGHT  
PREPARATION**

Hobbs Recorded **Check**  
Certificates and Documents **Check**  
POH for airplane, PFD, MFD **Check**  
POH for GPS/NAV Radios **Check**  
Control Wheel Restraints **Remove**  
Parking Brake **Set**  
Air Vent Fan **Off**  
Circuit Breakers **Check**  
Carburetor Heat **Off**  
Mixture **Idle Cut-Off**  
Throttle **Idle**  
RADIO MASTER Switch **Off**  
FD/AP Switch (Flight Director/ Auto Pilot) **Off**  
Magnetos **Off**  
Interior Lights (front and back) **Off**  
All Other Electrical Switches **Off**  
Inside Windshield **Check Clean**  
(USE CLEANING SUPPLIES IN THE BAGGAGE CADDY TO CLEAN WINDSHIELD. DO NOT WIPE WINDSHIELDS WITH A DRY TOWEL)  
PFD/MFD/GPS Screens **Check Clean**  
(USE CLEANING SUPPLIES IN THE PASSENGER MAP POUCH TO CLEAN SCREENS. DO NOT WIPE SCREENS WITH A DRY TOWEL)  
Flaps **Extend**  
Trim **Neutral**  
Pitot/Static Systems **Drain**  
Alternate Static Closed **Check**

**EXTERIOR PREFLIGHT  
INSPECTION**

Right Flap and Aileron **Check**  
Right Wing Tip Condition / Lights **Check**  
Right Wing Leading Edge **Check**  
Right Wing Tie Down **Remove**  
Right Wing Lower Surface **Check**  
Right Wing Fuel Sump **Sample**  
Right Wing Fuel Tank Vent **Check**  
Right Main Gear Assembly **Check**  
(Extension 4.5 ± .25 in.)  
Right Wing Fuel Quantity **Check**  
(Note Gallons)  
Right Wing Fuel Cap **Secured**  
Right Wing Upper Surface **Check**  
Fresh Air Inlet **Check**  
Windshield **Check Clean**  
(USE CLEANING SUPPLIES IN THE BAGGAGE CADDY TO CLEAN WINDSHIELD. DO NOT WIPE WITH A DRY TOWEL)  
Cowling **Secure**  
Oil **6-8 Quarts**  
(SPARE QUART OF OIL IS IN THE BAGGAGE CADDY)  
Dipstick **Properly Seated**  
Oil Filler Cap **Secured**  
Exhaust **Check**  
Propeller / Spinner **Check**  
Engine Cooling Inlets **Check**  
Nose Wheel Strut and Tire **Check**  
(Extension 4.5 ± .25 in.)  
Air Filter Inlet **Check**  
Cowling **Secure**  
Fuel Strainer **Drain / Sample**  
Fresh Air Inlet **Clear**  
Left Main Gear Assembly **Check**  
(Extension 4.5 ± .25 in.)  
Left Wing Fuel Sump **Sample**  
Left Wing Fuel Tank Vent **Check**