

N900DT

AIRFRAME and POWERPLANT
100 HOUR INSPECTION FORM
for
500A
500B
560F
680F
500U
500S

SERIAL NO. 3056
OWNER _____
ADDRESS _____

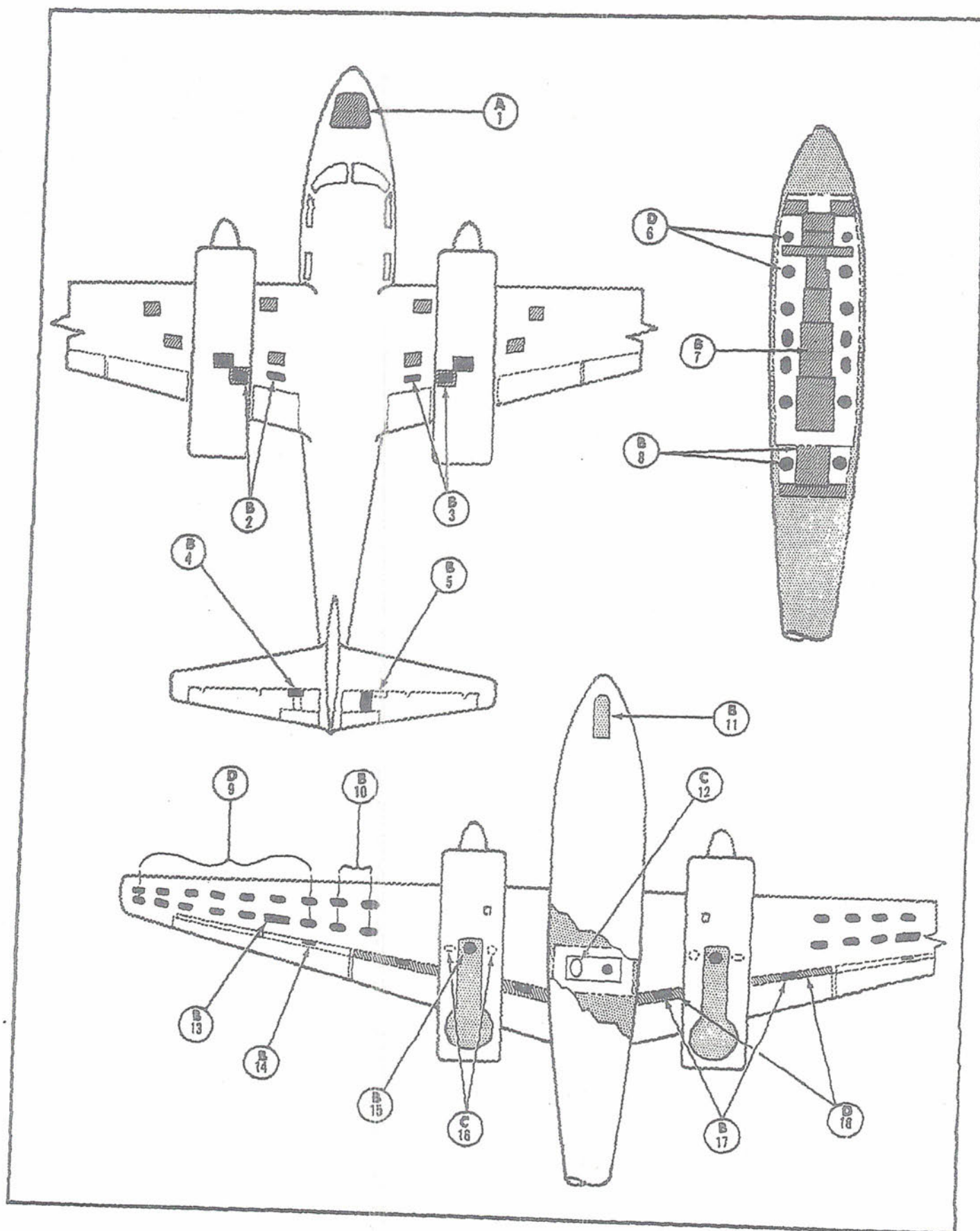
It is certified that this aircraft has been thoroughly inspected as required by Civil Air regulations, found to be airworthy and the appropriate entries made in the Aircraft Log Book.

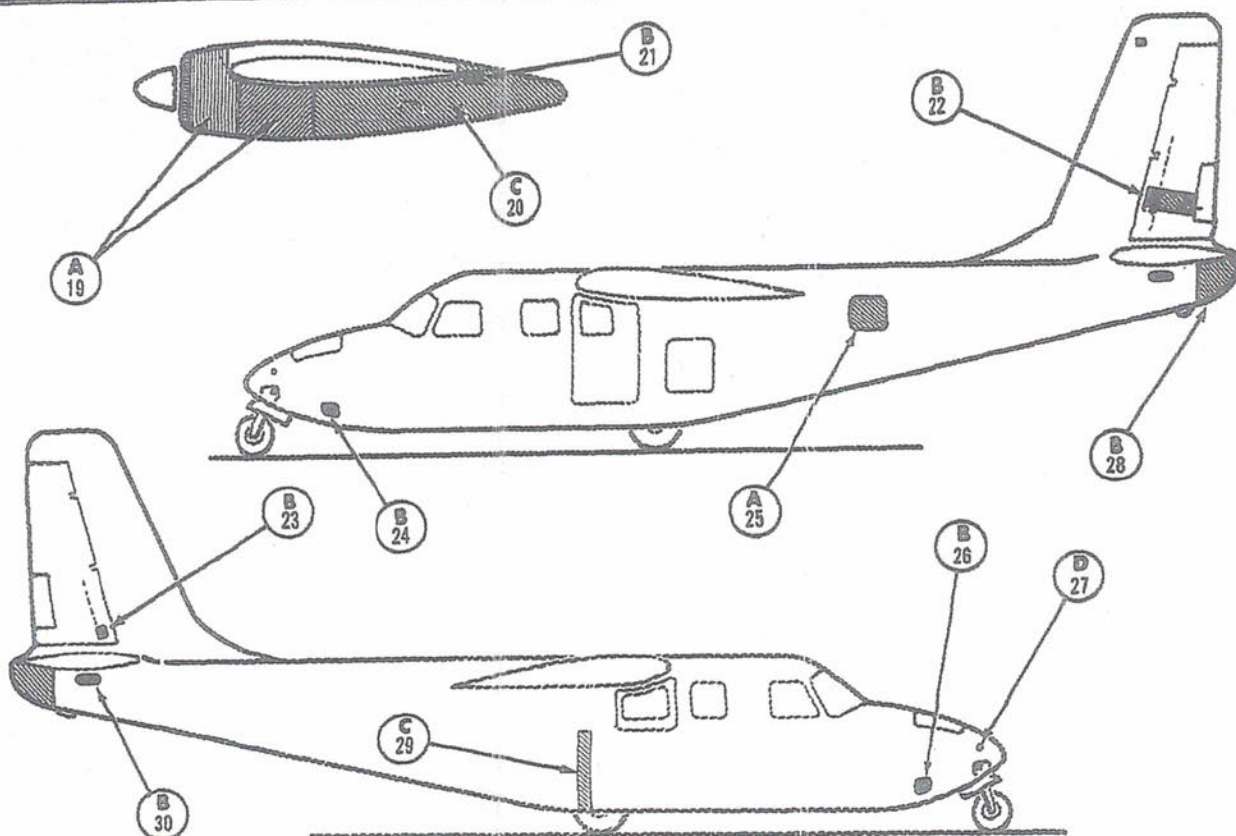
Signed:  _____

Date: 08-14-2020

LIST OF SQUAWKS

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.





- A. REMOVE THESE PLATES AT EACH 50 HR. INSPECTION
 B. REMOVE THESE PLATES AT EACH 100 HR. INSPECTION
 C. REMOVE THESE PLATES AT EACH 500 HR. INSPECTION
 D. REMOVE THESE PLATES AT EACH 1000 HR. INSPECTION

- | | |
|--|---|
| 1. NOSE COMPARTMENT COVER | 17. FLAP SHEAVE INSP. PLATES (R & L) |
| 2. L. WING TUNNEL INSP. PLATES | 18. FLAP CLOSEOUT SKINS (R & L) |
| 3. R. WING TUNNEL INSP. PLATES | 19. ENGINE COWLING (R & L) |
| 4. L. ELEVATOR TRIM TAB ACCESS COVER & PLATE | 20. AFT NACELLE SECTION |
| 5. R. ELEVATOR TRIM TAB ACCESS COVER & PLATE | 21. GENERATOR CIRCUIT BREAKER INSP. PLATE |
| 6. FUSELAGE STRUCTURE INSP. PLATES (R & L) | 22. RUDDER TRIM TAB TRANSMITTER ACCESS COVERS |
| 7. CENTER FLOOR REMOVABLE PANELS | 23. RUDDER TORQUE TUBE ATTACH INSP. PLATES |
| 8. BAGGAGE FLOOR REMOVABLE PANELS | 24. POWER BRAKE VALVE ACCESS PLATE |
| 9. WING STRUCTURE INSP. PLATES (R & L) | 25. BATTERY DOOR |
| 10. WING JOINING INSP. PLATES (R & L) | 26. NOSE GEAR BUNGEE & HEATER INSP. PLATES |
| 11. NOSE GEAR WHEEL WELL DOORS | 27. NOSE GEAR TRUNNION SNAP PLUGS (R & L) |
| 12. CENTER TANK SUMP ENCLOSURE | 28. TAIL CONE |
| 13. AILERON BELLCRANK INSP. PLATES (R & L) | 29. TUBING INSPECTION COVER (R & L) |
| 14. AILERON CABLE INSP. PLATES (R & L) | 30. RUDDER & ELEVATOR INSP. PLATES (R & L) |
| 15. ENGINE CONTROL CABLE INSP. PLATES (R & L) | |
| 16. LANDING GEAR TRUSS ATTACH INSP. PLATES (R & L) | |

Refer to the Aero COMMANDER Maintenance Manual for clearances, tolerances and other pertinent information.

Check for compliance of all Aero Commander, Inc., Lycoming Service Bulletins and Airworthiness Directives Notes.

Remove all inspection plates and covers as shown on page 3 and 4.

Record all pilot squawks and discrepancies on page 2.

Record all 100 hour inspection discrepancies on page 2.

POWER PLANT	L/H	R/H	MECH		L/H	R/H	MECH
1. Run complete ground operation check on engines. Feather propellers when stopping engines. 2. Drain oil. 3. Remove cowling. 4. Check for oil leaks. 5. Remove clean, reinstall and safety: A. Oil pressure screen B. Oil sump screen C. Injector oil screen 680F only 6. Wash down engine, cowling, nacelle and main landing gear. 7. Check condition of following items: A. Engine accessories B. All fluid carrying lines C. Cooling shrouds D. Firewall E. Firewall bellcranks, pulleys, pulley brackets fittings F. Push pull rods G. Magneto H. Starter brushes I. Generator brushes J. Engine baffles K. Cylinder hold down nuts L. Propeller governor cable M. Engine mount N. Lord mounts O. Induction alternate air doors P. Ignition leads, electrical leads and cannon plugs Q. Cowling				R. Remove lower spark plugs, take differential compression check (Record) L/H #1 <u>75</u> #2 <u>78</u> #3 <u>78</u> #4 <u>76</u> #5 <u>78</u> #6 <u>78</u> R/H #1 <u>78</u> #2 <u>78</u> #3 <u>78</u> #4 <u>78</u> #5 <u>78</u> #6 <u>78</u> S. Exhaust stacks and clamps T. Cowl flaps and motor 8. Spark plugs. 9. Cigarettes. 10. Coil on 680Fs. 11. Induction air filter screens. 12. Service oil tanks. 13. Injector pump fuel screen. 14. Pressure check fuel system and operation of fuel shutoff valves. 15. Replace cowling.			
				PROPELLER			
				1. Check for condition of following items: A. Spinner B. Spinner bulkhead C. Stop pins D. Blades and hubs 2. Lubricate propeller			

	L/H	R/H	MECH		L/H	R/H	MECH
3. Propeller. 4. Check reduction gear back lash. 5. Reinstall propeller spinner dome.				F. Hydraulic accumulator assembly 600 p.s.i. G. Control cables H. Pulleys and pulley bracket I. Structure J. Uplock assembly			
MAIN GEAR				STATION 5.5 FORWARD			MECH
1. Place aircraft on jacks, use weighted tail stand support. Minimum weight 300#. 2. Remove main landing gear wheels. Check the condition of the following items: A. Tire B. Wheel C. Brake disc D. Disc drive keys E. Brake housing F. Brake lines G. Brake linings H. Wheel bearings and races 3. Reinstall wheel. 4. Check the condition of the following items on the main landing gear: A. Strut B. Scissors C. Drag links D. Cord bungees E. Micro switches F. Retract cylinder G. Yoke H. Main landing gear truss I. Air cylinder for pressure 300 p.s.i. 5. Lubricate all zerk fittings.				1. 5.5 inspection door left side - check the following for condition: A. Power brake valve B. Hydraulic lines and fittings C. All structure D. Rudder buss cable E. Heater ducts 2. 5.5 inspection door right side - check the following items for condition: A. Heater relays B. Nose gear spring bungee C. All structure D. Rudder buss cable E. Heater ducts 3. Top of nose section - check the following items for condition: A. Heater and heater components B. All electrical units, connections and wire bundles C. #2 junction box D. All structure E. Replace "J" box cover and inspection plates			
NACELLE				NOSE GEAR WHEEL WELL			
1. Check the condition of the following items: A. All fluid carrying lines B. All electrical units, connections and wire bundles C. All fluid carrying valves D. Main gear doors, arms and bearings E. Hydraulic reservoir				1. Check condition of the following items: A. Doors B. Door actuating rods and rod ends C. Nose steering bypass valve D. Heater fuel boost pump Model 500A E. All fluid carrying lines			

	MECH		MECH
☒ F. Heater fuel train ☒ G. All structure ☒ H. Micro switches		☒ D. Elevator push pull rods, idler tube and stops ☒ E. Aileron sprockets and drum assembly ☒ F. Rudder torque tube ☒ G. Engine control cable pulley cluster ☒ H. Structure ☒ I. Drain holes (Open) ☒ J. Friction locks	
NOSE GEAR			
1. Check the condition of the following items: ☒ A. Nose wheel and tire ☒ B. Wheel bearings repack ☒ C. Retract cylinder ☒ D. Drag links ☒ E. Nose strut trunion ☒ F. Scissors ☒ G. Steering cylinder ☒ H. Lubricate gear		2. Check control column ☒ A. Freedom of operation ☒ B. Attach points ☒ C. Check chain and sprockets (Lubricate lightly)	
2. Replace wheel.		3. Rudder pedals.	
GEAR RETRACTION TEST		4. Check the following items for condition and/or clearance behind instrument panel: ☒ A. All fluid carrying lines and tubing ☒ B. All electrical connections, bundles and cannon plugs ☒ C. Heater distribution box ☒ D. Hot air and fresh air inlets ☒ E. Parking brake valve ☒ F. Instrument panel shock mounts ☒ G. Check pitot and static systems for leak ☒ H. Remove static system drain plug	
1. Install external hydraulic pump. 2. Check for operation of following items: ☒ A. Gear safe lights ☒ B. Position indicator ☒ C. Horn and heater blower 3. Main landing gear for clearance 4. Gear uplock mechanism 5. Nose gear for clearance 6. Fairing nose gear and main gear doors 7. Gear handle in down and locked position 3 green lights 8. Remove external hydraulic pump and hook up lines 9. Remove airplane from jacks.		5. Drop trim tab panel - switch panels and circuit breaker panels.	
		6. Check all instruments.	
		7. Check field barometric pressure against field elevation on altimeter.	
		8. Check the following items for condition: ☒ A. Windshield ☒ B. Seats ☒ C. Seat belts ☒ D. All side windows ☒ E. Cabin door 1. Hinges 2. Operation of lock 3. Seals	
STATION 5.5 TO 134			
1. With center floor removed check the following items for condition and/or clearance: ☒ A. All fluid carrying lines ☒ B. Control cables ☒ C. Idler pulleys		STATION 134 TO 165	
		☒ A. Remove floor and side panels in baggage compartment.	

	MECH		MECH
2. Check for the following condition and/or clearance: ☒ A. Control cables ☒ B. Fair leads ☒ C. Tubing ☒ D. Structure ☒ E. Drain holes ☒ F. Baggage compartment curtain (Forward and aft) ☒ G. Door ☒ H. Evidence of fuel leakage ☒ I. Fuel sump vapor box ☒ J. Center fuel system liquidometer cannon plug		☒ B. Rudder hinges and attach points ☒ C. Elevator hinges and attach points ☒ D. Elevator trim tabs attach points ☒ E. Rudder torque tube and stops ☒ F. Trim tab chains ☒ G. Trim tab sprockets and flexible shafts 2. Secure battery.	
STATION 165 TO 363		WING	
1. Battery compartment door open. 2. Check upper and lower pulley cluster at station 165. 3. Visual condition of cables. 4. Check the following electrical units for condition and security. ☒ A. All cannon plugs ☒ B. All electrical bundles (Clamps, connections, etc.) ☒ C. Master powerpanel ☒ D. Flap potentiometer ☒ E. Radio rack (Radio Mounts etc.) ☒ F. Voltage regulator ☒ G. Reverse current relay ☒ H. Boost pump resistor 500A, 500B 5. Flap actuating cylinder. 6. Flap master, primary sheave and connecting rod. 7. Vacuum regulators and warning switches. 8. Structure. 9. Pull battery out. ☒ A. Hydrometer reading ☒ B. Condition of vent and drain hose ☒ C. Lubricate tracks and bayonets		☒ 1. Check the following items for condition: ☒ A. Inboard and outboard flap ☒ B. Aileron bell cranks ☒ C. Wing tips (Reflectors) ☒ D. Cables ☒ E. Tubing ☒ F. Electrical bundles ☒ G. Internal structure ☒ H. Skin ☒ I. Fuel and oil filler necks Complete inspections with: ☒ 1. Check rudder travel ☒ 2. Check elevator travel ☒ 3. Check trim tab travel ☒ 4. Check aileron travel ☒ 5. Check flap travel ☒ 6. Replace all inspection plates	L/H R/H MECH
EMPENNAGE		PRE-RUN	MECH
1. Check the following items for condition and security: ☒ A. Rudder and elevator transmitter		☒ 1. Clean cabin area. ☒ 2. Replace carpet, seats, etc. ☒ 3. Baggage compartment clean - curtain in place. ☒ 4. Windows clean. ☒ 5. Airplane clean outside. ☒ 6. Oil level caps secured. ☒ 7. Fuel caps secured. ☒ 8. Hydraulic reservoir serviced. ☒ 9. Gear emergency bottle pressure	

	MECH		MECH
✓ 10. Final preflight walk around inspection. ✓ 11. Landing lights operation. ✓ 12. Position lights operation. ✓ 13. Rotating beacon operation. ✓ 14. 570 p.s.i. emergency pump operation ✓ 15. Parking brake set 16. Start engines, run in accordance with pilots check list.			
THE FOLLOWING ITEMS ARE IN ADDITION TO THE STANDARD 100 HOUR INSPECTION WHERE APPLICABLE: 1. De-Icer system A. Distributor valves left and right wing. B. Distributor valve tail section 312. C. Combination unit station 264 (Clean annually) D. Electronic timer E. Pressure 15# F. Cycling operation G. Boots, condition and security 2. Oxygen System A. Bottle charged B. Security of bottles C. Consol operation D. Mask, condition	N/A ↓ N/A ↓		