9885M CHECKLIST

Leave in Airplane

PREFLIGHT INSPECTION

CABIN

- (1) Pilot's Operating Handbook AVAILABLE IN THE AIRPLANE
- (2) Control Wheel Lock -- REMOVE.
- (3) Ignition Switch -- OFF.
- (4) Avionics Power Switch -- OFF
- (5) Master Switch -- ON.
- (6) Fuel Quantity Indicators -- CHECK QUANTITY.
- (7) Master Switch -- OFF.
- (8) Fuel Selector Valve -- BOTH.
- (9) Baggage Door -- CHECK for security, lock with key if child's seat is to be occupied.

EMPENNAGE

- (1) Rudder Gust Lock -- REMOVE.
- (2) Tail Tie-Down -- DISCONNECT.
- (3) Control Surfaces -- CHECK freedom of movement and security.

RIGHT WING Trailing Edge

(1) Aileron -- CHECK freedom of movement and security.

RIGHT WING

- (1) Wing Tie-Down -- DISCONNECT.
- (2) Main Wheel Tire -- CHECK for proper inflation.
- (3) Before first flight of the day and after each refueling, use sampler cup and drain small quantity of fuel from fuel tank sump quick-drain valve to check for water, sediment and proper fuel grade (Blue).
- (4) Fuel Quantity -- CHECK VISUALLY for desired level.
- (5) Fuel Filler Cap -- SECURE and vent unobstructed.

NOSE

- Static Source Openings (both sides of fuselage) -- CHECK for stoppage.
- (2) Propeller and Spinner -- CHECK for nicks, security and oil leaks.
- (3) Landing Lights -- CHECK for condition and cleanliness.
- (4) Carburetor Air Filter -- CHECK for restrictions by dust or other foreign matter.
- (5) Nose Wheel Strut and Tire -- CHECK for proper inflation.
- (6) Nose Tie-Down DISCONNECT
- (7) Engine Oil Level -- CHECK. 11 qts. Normal Do not operate with less than 9 qts. Fill to 12 qts. for extended flights only.
- (8) Before first flight of the day and after each refueling, pull out strainer drain knob for about four seconds to clear fuel strainer of possible water and sediment. Check strainer drain closed. If water is observed, the fuel system may contain additional water, and further draining of the system at the strainer, fuel tank sumps, and fuel selector valve drain plug will be necessary.

LEFT WING

- (1) Main Wheel Tire -- CHECK for proper inflation.
- (2) Before first flight of the day and after each refueling, use sampler cup and drain small quantity of fuel from fuel tank sump quick-drain valve to check for water, sediment, and proper fuel grade (Blue).
- (3) Fuel Quantity -- CHECK VISUALLY for desired level.
- (4) Fuel Filler Cap -- SECURE and vent unobstructed.

LEFT WING Leading Edge

- (1) Pitot Tube Cover REMOVE and check opening for stoppage.
- (2) Fuel Tank Vent Opening -- CHECK for stoppage.
- (3) Stall Warning Vane -- CHECK for freedom of movement while master switch is momentarily turned ON (horn should sound when vane is pushed upward).
- (4) Wing Tie-Down -- DISCONNÉCT.

LEFT WING Trailing Edge

(1) Aileron -- CHECK for freedom of movement and security.

BEFORE STARTING ENGINE

- (1) Preflight Inspection -- COMPLETE.
- (2) Seats, Belts, Shoulder Harnesses -- ADJUST and LOCK.
- (3) Fuel Selector Valve -- BOTH.
- (4) Avionics Power Switch, Autopilot, Electrical Equipment -- OFF.
- (5) Brakes -- TEST and SET.
- (6) Cowl Flaps -- OPEN (move lever out of locking hole to reposition).
- (7) Circuit Breakers -- CHECK IN.

STARTING ENGINE

- (1) Mixture -- RICH.
- (2) Propeller -- HIGH RPM.
- (3) Carburetor Heat -- COLD.
- (4) Throttle OPEN 1/2 INCH
- (5) Prime -- AS REQ'D (2-4 strokes max.)
- (6) Master Switch -- ON.
- (7) Propeller Area -- CLEAR.
- (8) Ignition Switch -- START (release when engine starts).

Note

If engine has been over-primed, start with throttle $\frac{1}{4}$ to $\frac{1}{2}$ open. Reduce throttle to idle when engine fires.

(9) Oil Pressure - CHECK.

Note

After starting, check for oil pressure indication within 30 seconds in normal temperatures and 60 seconds in cold temperatures. If no indication appears, shut off engine and investigate.

Speeds for Normal Operations – Max Weight

4	opocas for Horman operations	max woight	
1	Takeoff:		•
	Normal Climb Out	70-80	KIAS
	Maximum Performance Takeoff, Speed at	50 Feet 57	KIAS
	Enroute Climb, Flaps Up:		
	Normal, Sea Level	95	KIAS
	Normal, 10,000 Feet	85	KIAS
	Best Rate of Climb, Sea Level	80	KIAS
	Best Rate of Climb, 10,000 Feet	73	KIAS
	Best Angle of Climb, Sea Level	59	KIAS
	Best Angle of Climb, 10,000 Feet	63	KIAS
	Landing Approach:		
	Normal Approach, Flaps Up	70-80	KIAS
	Normal Approach, Flaps 40°		
	Short Field Approach, Flaps 40°	60	KIAS
	Balked Landing:		
	During Transition to Maximum Power, Flag	os 20°70	KIAS
Maximum Recommended Turbulent Air Penetration Speed:			
	2950 Lbs	110	KIAS
	2450 Lbs	100	KIAS
	1950 Lbs	89	KIAS
	Maximum Demonstrated Crosswind Velocit	y:	
	Takeoff	20 KN	NOTS
L	Landing		

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The POH should be considered the final authority on all matters.

9885M CHECKLIST

Leave in Airplane

BEFORE TAKEOFF

- (1) Cabin Doors and Windows -- CLOSED and LOCKED.
- (2) Flight Controls -- FREE and CORRECT.
- (3) Elevator and Rudder Trim -- TAKEOFF.
- (4) Flight Instruments SET
- (5) Radios Set.
- (6) Autopilot -- OFF
- (7) Fuel Selector Valve BOTH
- (8) Parking Brake SET
- (9) Mixture RICH
- (10) Throttle -- 1700 RPM.
 - Magnetos -- CHECK (RPM drop should not exceed 150 RPM on either magneto or 50 RPM differential between magnetos).
 - Propeller -- CYCLE from high to low RPM; return to high RPM (full in).
 - c. Carburetor Heat -- CHECK for RPM drop and indication on carburetor temperature gage).
 - d. Engine Instruments and Ammeter -- CHECK.
 - e. Suction Gage -- CHECK.
- (11) Flashing Beacon, Navigation Lights and/or Strobe Lights ON as required.
- (12) Throttle Friction Lock -- ADJUST.
- (13) Wing Flaps 0° 20°
- (14) Parking Brake -- Release.

TAKEOFF

NORMAL TAKEOFF

- (1) Wing Flaps -- 0° 20°.
- (2) Carburetor Heat -- COLD.
- (3) Power FULL THROTTLE & 2600 RPM
- (4) Elevator Control -- LIFT NOSE WHEEL at 50 KIAS.
- (5) Climb Speed -- 70 KIAS (flaps 20°). 80 KIAS (flaps UP).

MAX PERFORMANCE TAKEOFF

- (1) Wing Flaps -- 20°.
- (2) Carburetor Heat -- COLD.
- (3) Brakes -- APPLY.
- (4) Power FULL THROTTLE & 2600 RPM
- (5) Brakes -- RELEASE.
- (6) Elevator Control -- MAINTAIN SLIGHTLY TAIL LOW ATTITUDE.
- (7) Climb Speed -- 57 KIAS (until all obstacles are cleared).
- (8) Wing Flaps -- RETRACT slowly alter reaching 70 KIAS.

ENROUTE CLIMB

NORMAL CLIMB

- (1) Airspeed 90 KIAS.
- (2) Power -- 23 INCHES Hg and 2450 RPM.
- (3) Fuel Selector Valve -- BOTH.
- (4) Mixture LEAN (as required for power, temperature and smoothness).
- (5) Cowl Flaps -- OPEN as required.

MAXIMUM PERFORMANCE CLIMB

- (1) Airspeed -- 80 KIAS at sea level to 73 KIAS at 10,000 feet.
- (2) Power FULL THROTTLE & 2600 RPM
- (3) Mixture -- FULL RICH unless engine is rough.
- (4) Cowl Flaps -- FULL OPEN.

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CRUISE

- Power -- 15-23 IN. Hg, 2200-2450 RPM (no more than 75% power).
- (2) Elevator and Rudder Trim -- ADJUST.
- (3) Mixture -- LEAN.
- (4) Cowl Flaps -- CLOSED.

DESCENT

- (1) Power -- AS DESIRED.
- 2) Carburetor Heat -- AS REQUIRED to prevent carburetor icing.
- (3) Mixture ENRICHEN as required
- (4) Cowl Flaps -- CLOSED.
- (5) Wing Flaps -- AS DESIRED (0° 10° below 140 KIAS, 10° 40° below 95 KIAS).

BEFORE LANDING

- (1) Seats, Belts, Shoulder Harnesses -- ADJUST and LOCK.
- (2) Fuel Selector Valve -- BOTH.
- (3) Propeller HIGH RPM
- (4) Cowl Flaps CLOSED
- (5) Carburetor Heat ON (apply full heat before closing throttle).
- (6) Airspeed 70-80 KIAS (flaps UP)
- (7) Wing Flaps 0° 40° (below 95 KIAS)
- (8) Airspeed 60-70 KIAS (flaps DOWN)
- (9) Elevator and Rudder Trim ADJUST.
- (10) Autopilot OFF.

BALKED LANDING

- (1) Power FULL THROTTLE & 2600 RPM
- (2) Carburetor COLD
- (3) Wing Flaps -- RETRACT to 20°.
- (4) Airspeed -- 70 KIAS
- (5) Wing Flaps -- RETRACT slowly.
- (6) Cowl Flaps -- OPEN.

NORMAL LANDING

- (1) Touchdown -- MAIN WHEELS FIRST.
- (2) Landing Roll -- LOWER NOSE WHEEL GENTLY.
- (3) Braking -- MINIMUM REQUIRED.

AFTER LANDING

- (1) Wing Flaps -- UP.
- (2) Carburetor Heat -- COLD.
- (3) Cowl Flaps -- OPEN.

SECURING AIRPLANE

- (1) Parking Brake -- SET.
- (2) Avionics Power Switch, Electrical Equipment, Autopilot -- OFF.
- (3) Throttle -- IDLE.
- (4) Mixture -- IDLE CUT-OFF (pulled out).
- (5) Ignition Switch -- OFF.
- (6) Master Switch -- OFF.
- (7) Control Lock - INSTALL.
- (8) Fuel Selector Valve RIGHT to prevent cross-feeding.