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New York Airways Collection - Manuals, Flight Operations Manual (2 of 2), 1959

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NEW YORK AIRWAYS

6.3.6 ENGAGING ROTORS - Continued

1. Throttle -- 1000 rpm. Set friction.
2. Collective pitch -- Down and locked
3. Cyclic stick and directional pedals -- Neutral.
4. Friction clutch switch -- Engage.

CAUTION: Needles must be synchronized before engaging the jaw clutch.

5. Jaw clutch switch -- Jaw (until light goes off)

NOTE: There is no time restriction on running the engine with the rotors disengaged; however, the engine should be running smoothly and engine oil temperature should read 40° C prior to engagement.

7. Transmission oil pressure gages -- Check. (If no pressure, shutdown and determine causes).
8. Hydraulic boost valve lever -- Boost on. (Check pressure at 1000 psi. Operate the hydraulic flight controls for proper response).
9. Auxiliary power unit -- Disconnected.
10. Master and battery switches -- On.
11. Radio switches -- On.

CAUTION: Allow a minimum warm-up before depressing transmitting switch (UHF radio) to prevent damage to transmitter.

12. Voltmeter -- Check (28.5 volts above 2000 engine rpm).

NOTE: Generator warning light will not go off until 1250 engine rpm, at which time the reverse current relay cuts in.

13. Generator switch -- Off.
14. Battery switch -- Emerg. Functionality check proper operation of emergency electrical equipment. A check of fuel quantity gage will indicate system is operating properly.
15. Generator switch -- On.
16. Battery switch -- Return to on.
17. Carburetor air temperature gage -- Check with limits.
18. Ignition system -- Check magnetos -- 25 inches Hg at 2300 engine rpm.
 - a. Ignition switch -- "L". Observe rpm drop.
 - b. Ignition switch -- BOTH Stabilize rpm.
 - c. Ignition switch -- "R" Observe rpm drop
 - d. Ignition switch -- BOTH A drop of 50 to 75 rpm is normal while a maximum drop of 100 rpm is permissible on one magnet o providing there is no engine roughness.
19. Transmission oil temperature gages -- Check within limits.
20. Transmission oil pressure gages -- Check within limits.
21. Overrunning clutch check:
 - a. Throttle -- 2500 engine rpm.
 - b. Collective pitch lever -- Down.
 - c. Throttle - retard; sufficiently to desynchronize (split) the tachometer needles.

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8. Hydraulic boost valve lever -- Boost on. (Check pressure at 1000 psi. Operate the hydraulic flight controls for proper response).
9. Auxiliary power unit -- Disconnected.
10. Master and battery switches -- On.
11. Radio switches -- On.

CAUTION: Allow a minimum of two minutes warm-up before depressing transmitting switch (UHF radio) to prevent damage to transmitter.

12. Voltmeter -- Check (28.5 volts above 2000 engine rpm).

NOTE: Generator warning light will not go off until 1250 engine rpm, at which time the reverse current relay cuts in.

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