

Regal Air DHC-2 Checklist Excerpt

Takeoff

- (1) Fuel Selector – DESIRED TANK
- (2) Trim – SET
- (3) Mixture – RICH
- (4) Prop – FULL FORWARD
- (5) Flaps – DOWN TO TAKEOFF SETTING
- (6) Flap selector – DOWN EXCEPT WHEN RAISING FLAPS
- (7) Pulse light – ON
- (8) Transponder - ON
- (9) Water rudders – UP
- (10) Throttle – 35 INCHES NORMAL, 36.5 MAX

Climb

- (1) Airspeed – 80MPH UNTIL OVER OBSTACLES, THEN 95MPH BEST RATE OF CLIMB
- (2) Power – NORMAL CLIMB 30', 2000 RPM. MAX 32.5", 2200 RPM
- (3) Flaps – CLIMB

Cruise

- (1) Power – 1850 RPM, 28"
- (2) Flaps – CRUISE
- (3) Mixture - LEAN

Section II

2.9 TAKE-OFF

- (a) Make sure cylinder head temperature is below 450°F (230°C).
- (b) Adjust throttle lever friction knob.
- (c) Line up on take-off runway.
- (d) Open the throttle smoothly to maximum permissible take-off power. See Figure 4-1.
- (e) Anticipate tendency of aircraft to swing to the left.
- (f) Allow aircraft to fly itself off at 55 to 65 mph. in a tail down attitude and climb at 65 mph.
- (g) As soon as safe height has been attained, reduce power to 33.5 In.Hg. and 2200 rpm if aircraft is fully loaded, or 30 In.Hg. and 2000 rpm for normal weight.
- (h) Slowly increase air speed to 80 mph and retrim.
- (j) At altitude of 500 ft. - flaps to CLIMB and retrim.

2.10 CLIMB

Best rate of climb is obtained using Maximum Continuous Power (2200 rpm, 33.5 In.Hg.). Speed for best rate of climb is 95 mph IAS; speed for best angle of climb is 80 mph IAS.

Where circumstances warrant, Maximum Continuous Power may be used giving the rates of climb as stated in paragraph 4.10.

However, the engine manufacturer recommends, for reduced engine wear, that 2000 rpm and 30 In.Hg. AUTO RICH be used. The rates of climb will then be 540 fpm for the landplane, 460 fpm for the seaplane.

Refer to Cruise Power Chart in Appendix for recommended settings.

Keep cylinder head temperature consistent with limits in Figure 4-1. Low rpm at High Manifold Pressure helps to maintain climbing mixture strength and materially assists engine and oil cooling.

2.11 CRUISE

For continuous cruise, use Maximum Weak Mixture Power or less, taking the following steps:

- (a) Flaps to "Cruise".
- (b) Throttle back to 29.7 In.Hg. or less Manifold Pressure.
- (c) Propeller lever to give 2000 rpm or less.
- (d) Mixture lever to AUTO LEAN. Carburettor mixture temperature 40°F (4°C).
- (e) Keep cylinder head temperature and oil inlet temperature consistent with limits in Figure 4-1.

For Cruising power reduced below that obtained at maximum weak mixture use settings in Cruise Power Chart on page V in Appendix.

2.11.1 FUEL MANAGEMENT

For favourable CG travel, without long-range tanks:

- (a) Empty rear tank first, if aircraft is fully loaded, in order to move the CG progressively forward.

Operation on long range tanks

Since both long range belly tank and wing tip tanks contain more fuel (5 Imp. - 7 U.S. gal.) than the front or centre fuselage tank will hold (see para 1.8.2), fuel from long range tanks must be transferred in two stages.

When wing tip tanks are installed

CAUTION

On aircraft having rubber liners in the main fuel tanks (Modification 2/1376) and equipped with C2-PT-445A and C2-PT-446A wing tip tanks, transfer of fuel to the front main tank should be avoided during flight through snow or ice conditions. The air scoop at each tank vent may become blocked in these conditions and prevent fuel transfer. Transfer of fuel is dependent on gravity feed assisted by air pressure from the wing tip tank air scoops.