§ 35.39 Endurance test.

Endurance tests on the propeller system must be made on a representative engine in accordance with paragraph (a) or (b) of this section, as applicable, without evidence of failure or malfunction.

(a) Fixed-pitch and ground adjustable-pitch propellers must be subjected to one of the following tests:

(1) A 110-hour endurance test that must include the following conditions:

(A) Five hours at takeoff power and rotational speed and thirty 10-minute cycles composed of:

(A) Acceleration from idle,
(B) Five minutes at takeoff power and rotational speed,
(C) Deceleration, and
(D) Five minutes at idle.

(b) Variable-pitch propellers must be subjected to one of the following tests:

(1) A 110-hour endurance test that must include the following conditions:

(A) Acceleration from idle,
(B) Five minutes at takeoff power and rotational speed,
(C) Deceleration, and
(D) Five minutes at idle.