

TAD-494.6

AC NO: 61-79

DATE: 10/10/74



ADVISORY CIRCULAR

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

SUBJECT: SUBSTITUTE "ACCEPTABLE PERFORMANCE GUIDELINES" APPLICABLE TO
AC 61-57, MULTIENGINE AIRPLANE CLASS AND TYPE RATINGS FLIGHT
TEST GUIDE

1. **PURPOSE.** This supplementary Advisory Circular, AC 61-79, is to be used in conjunction with AC 61-55, COMMERCIAL PILOT-AIRPLANE FLIGHT TEST GUIDE, and Section 1 of AC 61-57, MULTIENGINE AIRPLANE CLASS AND TYPE RATINGS FLIGHT TEST GUIDE, in conducting the flight test of an individual who is applying for a multiengine airplane land or a multiengine airplane sea class rating at the commercial pilot skill level.
 2. **BACKGROUND.** According to Part 61 (revised) of the Federal Aviation Regulations, an individual who is applying for a pilot certificate with an associated class rating, or for an additional class rating after his pilot certificate has been issued to him, must pass a flight test appropriate to his pilot certificate and applicable to the aircraft category and class rating sought. Since Section 1 of AC 61-57 does not set forth separate performance standards for the private pilot who is applying for a multiengine airplane class rating, nor for the commercial pilot who is applying for that rating, the performance standards given in AC 61-57 for those maneuvers which appear on pages 2 and 3 of this supplementary Advisory Circular, AC 61-79, will be considered to apply to the private pilot. The higher performance standards for those maneuvers which appear in this supplementary Advisory Circular, AC 61-79, apply ONLY to the commercial pilot skill level. AC 61-80 provides additional guidance in determining which flight test guide and supplementary advisory circular is to be used in administering private and commercial flight tests for initial certification or for additional class ratings in airplanes.
 3. **APPLICATION.** For the commercial pilot skill level, the following "Acceptable Performance Guidelines" are to be substituted for the corresponding guidelines on the referenced pages of AC 61-57, MULTIENGINE AIRPLANE CLASS AND TYPE RATINGS FLIGHT TEST GUIDE.
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Initiated by: AAC-240

- a. Taxiing (Seaplanes). (Page 13, B.2., Acceptable Performance Guidelines.) The applicant shall display a high degree of competence and professional ability in taxiing under various conditions. Performance shall be evaluated on the applicant's knowledge of, and ability to precisely and accurately use flight controls, differential power, and water rudder with consideration of wind effect and water currents to precisely maneuver the seaplane along a predetermined course. Any lack of knowledge or ability to analyze and cope with existing conditions, faulty technique, or hesitation in the proper use of controls shall be disqualifying.
- b. Normal and Crosswind Takeoffs (Seaplanes). (Page 18, D.2., Acceptable Performance Guidelines.) The applicant shall display a high degree of competence and professional ability during takeoffs under various conditions. Performance shall be evaluated on the applicant's knowledge of, and ability to use proper power and flight controls to achieve precise directional control, to achieve a prompt and efficient planing and takeoff attitude, and to make a smooth effective transition to flight. He shall fully consider wind conditions and other factors that may adversely affect the takeoff. Any lack of knowledge or ability to cope with existing conditions, or failure to achieve a proper planing or takeoff attitude, or failure to take timely action to prevent porpoising while on the step shall be disqualifying.
- c. Normal and Crosswind Landings (Seaplanes). (Page 19, E.2., Acceptable Performance Guidelines.) The applicant shall display a high degree of competence and professional ability during landings under various conditions. Performance shall be evaluated on the applicant's knowledge of, and ability to use the power and flight controls in such a manner as to achieve precise and accurate approaches that will lead to smooth touchdowns within the area specified by the examiner. This shall include correction for wind effect and the maintenance of the desired final approach speed. Any lack of knowledge or ability to analyze and cope with existing conditions, or improper technique to achieve accurate approaches and landings shall be disqualifying.
- d. Maneuvering at Minimum Controllable Airspeed. (Page 20, A.2., Acceptable Performance Guidelines.)

Altitude ----- ± 80 feet
 Airspeed ----- ± 5 knots
 Heading ----- ± 7°

e. Steep Turns. (Page 22, C.2., Acceptable Performance Guidelines.)

Altitude ----- \pm 100 feet

Airspeed ----- \pm 10 knots

Bank ----- \pm 5°

Assigned heading ----- \pm 10°

f. Normal Maneuvers and Recovery from Unusual Flight Attitudes.
(Page 24, A.1.c., Acceptable Performance Guidelines.)

Preselected heading ----- \pm 10°

g. Maneuvering with One Engine Inoperative. (Page 27, A.2., Acceptable Performance Guidelines.)

Altitude ----- \pm 80 feet

Heading ----- \pm 10°

h. Use of Engine-Out Best Rate-Of-Climb Speed. (Page 29, C.2., Acceptable Performance Guidelines.)

Airspeed ----- \pm 5 knots

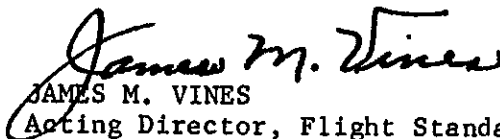
Heading ----- \pm 7°

i. Effects of Airplane Configuration on Engine-Out Performance.
(Page 29, D.2., Acceptable Performance Guidelines.)

Airspeed ----- \pm 5 knots

Heading ----- \pm 7°

4. CONCLUSION. Separate performance standards for the private pilot and the commercial pilot will be incorporated in the text of the next revision of the Multiengine Airplane Class and Type Ratings Flight Test Guide.


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