

MODELS: Grumman (Navy) F8F-1 (Approved 8/29/47)

SPEC. NUMBER: L-23-2

(Eligible for Certification in Limited Category only.)

(Holder of Limited Type Certificate: Grumman Aircraft Engineering Corp., Bethpage, Long Island, NY.)

Engine	Pratt & Whitney R-2800-34 or R-2800-34W
Fuel	Grade 100/130
Engine limits	Maximum, except takeoff Low Blower: (Sea level) 44 in. Hg., 2600 rpm (1700 hp) (8000 ft.) 41.5 in. Hg., 2600 rpm (1700 hp) High Blower: (11,500 ft.) 43.5 in. Hg., 2600 rpm (1500 hp) (18,000 ft.) 42.2 in. Hg., 2600 rpm (1500 hp) Takeoff (five minutes) (Sea level) 54 in. Hg., 2900 rpm (2100 hp)
Propeller	Aeroproducts Model A642-G1, H-20F-162-11M5 steel blades. Diameter 12'7". Regulator #6500690. (See NOTE 2) Dive or glide - 490 mph
Airspeed limits	9000 lbs.
Maximum gross weight	19.26 percent to 27/71 percent wheels down
C.G. range	L.E. of wing 35 inches outboard of fuselage station 68.57
Datum	MAC 87.55 inches. L.E. MAC 3.1" aft of datum (same as fuselage station 71.67)
Other Operating Limitations	Army Technical Order AN-01-85FD-1 and/or Navy Technical Order 72-45
Certification basis	Limited Type Certificate No. 23 (CAR 9 effective 11/21/46)
Production basis	None may be produced under this approval
Export eligibility	Not eligible for a Certificate of Airworthiness for Export

EQUIPMENT:

No equipment other than engines and propellers are specified. However, such equipment as required by Civil Air Regulations Part 43.30 for the particular operation authorized for NC aircraft must be installed. Also, any additional equipment necessary for the proper operation of the aircraft.

In addition, the aircraft may incorporate such military equipment (except armament) as was originally incorporated in the type for military or naval service. Additional equipment may be installed as can be substantiated on the basis that it presents no obvious hazard to safety.

NOTE 1. Weight and Balance Report including list of equipment included in equipment included in the certificated empty weight must be submitted for each aircraft. Army or Navy weight records in current condition may be submitted in lieu of an actual weight. The equipment list need include no more than the following:

- (a) Required equipment as defined under "EQUIPMENT" above.
- (b) Additional items as may be reasonably considered removable and are so located or of such weight that their removal or addition could noticeably affect the weight and balance of the aircraft. Items built into the aircraft structure need not be listed. The equipment list must be prepared by the applicant for the approval of the certificating C.A.A. representative, and in such form that it can be attached to the C.A.A. Operation Limitations.

NOTE 2. The following placards must be prominently displayed in the positions indicated:

- (a) In full view of passengers: "This is a military type aircraft and under the Civil Air Regulations shall not be used for the carriage of passengers or cargo for compensation or hire."
- (b) In the cockpit in full view of the pilot:
"Do not raise or lower landing gear above 200 mph."
"Do not lower or fly with flaps above 250 mph."

NOTE 3. The following statement must appear on the Operation Limitations: "This airplane must be operated at all times within the limitations set forth in Army Technical Order No. AN-01-85FD-1 except for limitations specifically called out in Aircraft Specification AL-23 in which case the values given in this Specification must be observed. A copy of Army Technical Order AN-01-85FD-1 and Aircraft Specification AL-23 must be carried during flight." In all cases it will be the responsi-

bility of the applicant to secure copies of the Army Technical Orders. The C.A. does not have these documents available for distribution.

NOTE 4. If any repairs or modifications (other than those covered in the pertinent repair manual or made by the aircraft manufacturer) are made prior to and/or subsequent to NL certification, it is the responsibility of the owner to furnish sufficient evidence to a C.A.A. representative to show that the modified airplane maintains the same degree of airworthiness as the original. The C.A.A. can give no technical assistance on such matters since complete structural data for NL aircraft are not required by Part 9 and therefore are not available in the C.A.A.

NOTE 5. For certification for night flying the following must be accomplished:

- (a) Replace the wing position lights with certificated units or satisfactorily modify the lights if pertinent.
Note: Type A-9 wing position lights (AN-3033-5 through -8) may be satisfactorily modified by painting the inside frosted portion of the cover black. Type A-9 (AN-3033-1 through -4) are satisfactory without modification.
- (b) Replace the tail light with a certificated unit.
- (c) If "Bright and Dim" conditions are provided for the position lights, either the resistors should be disconnected from the circuits and a single-pole-single-throw switch should be used to replace the two single-pole-double-throw switches presently installed for wing-tip and tail lights, or the switches should be placarded to indicate that only the "bright condition" should be used. In either case the tail light and wing-tip lights should operate on one switch.

No original NL airworthiness certificates may be issued after 8/31/48. The list of mandatory changes required prior to original certification may be obtained from CAA Aircraft Service, Washington 25, D.C. Attn: A-298.