

SPECIFICATION PERTINENT TO ALL MODELS

Certification Basis	Type Certificate No. 774 (CAR 4a)
Export eligibility	Eligible for export to all countries except as follows subject to the provisions of ASR 312 (MOP 2-4 contains the same information); Canada - Landplane only eligible. NOTE - Export license from State Department may be necessary prior to export of this type aircraft.

EQUIPMENT: A plus (+) or minus (-) sign preceding the weight of an optional item indicates net weight change between that item and the equivalent required item.

Propellers and Propeller Accessories

- | | |
|--|---------------|
| 1. Ham. Std. hub 2B20, blades 6135A-6 to 6135A-10
Diameter limits: 8'6-1/8" max., 8'1-7/8" min.
Pitch settings:
With 6135A-6, -7 & -8 blades 19° High, 6.5° Low
With 6135A-9 & -10 blades 19° High, 8° Low | 106 lbs. (+1) |
| 2. Ham. Std. hub 2B20, with Erco blades 3086A (AAF 42K18993)
Diameter limits: 8'6" max., 8'1-7/8" min.
Pitch settings: 22° High, 6.5° Low | 116 lbs. (+1) |
| 3. Ham. Std. governor (1012-G) | 5 lbs. (+9) |
| 4. Montgomery (Ajax Die Casing Co.) propeller Type D-72 spinner
for Hamilton Standard propeller | 8 lbs. (+1) |

Engines and Engine Accessories - Fuel and Oil System

- | | |
|--|---------------|
| 101. Carburetor heater | |
| 102. Carburetor air filter | |
| 103. Starter (Eclipse type 397 model 15) | 20 lbs. (+36) |
| 104. Omitted (March 5, 1947) | |
| 105. Vacuum pumps (Eclipse type 692 model 2) | |

Landing Gear

- | | |
|---|---------------|
| 201. 7.50-10 wheels (Goodrich);
8.5-10 6-ply tires and tubes;
Expander tube hydraulic brakes (Goodrich, Army G-2-210) | |
| 202. 10 in. tail wheel (Goodrich, Army B-3-28A);
10 in. S.C. 4-ply tire and tube | 5 lbs. (+298) |

Electrical Equipment

- | | |
|--|------------------------------|
| 301. Generator (Eclipse type 307 model 11) | 22 lbs. (+35) |
| 302. Battery (Exide R129DN) | 39 lbs. (+166) |
| 303. Landing light (Grimes) | 4 lbs. (+88.5) |
| 304. Generator control box (type 1035 model 2) | 4 lbs. (+67) |
| 305. Position lights
(a) 2 Grimes type C (Wing)
(b) 1 Grimes type A (Tail) | 2 lbs. (+91)
1 lb. (+299) |

Interior Equipment

401. Pilot's seat with Army type B-11 safety belt	12 lbs. (+84)
403. Heating system	6 lbs. (+38)
404. Ventilating system	2 lbs. (+85)
405. Escape hatch in roof of cabin 18" x 24"	

NOTE 1. Current weight and balance report including list of equipment included in certificated weight empty, and loading instructions when necessary, must be in each aircraft at the time of original certification and at all times thereafter (except in the case of air carrier operators having an approved weight control system).

NOTE 2. Prior to certification as a civil aircraft, the following must be accomplished:

A. Fuel and Oil Systems and Tanks:

- (1) Each fuel and oil tank filler opening, or the structure adjacent thereto, shall be placarded as to contents, capacity and octane rating.
- (2) A satisfactory means of measuring the oil shall be provided.
- (3) A suitable guard shall be placed over the fuel tank drain valve located on cabin floor between seats to prevent inadvertent opening during flight.
- (4) Fuel gages must be checked for accuracy.

B. Aircraft and Engine Nameplates:

- (1) The following information must be listed on the manufacturer's nameplates:
 - (a) Manufacturer's name, model designation, serial number, date of manufacture and date of conversion, on aircraft nameplate.
 - (b) Type certificate number, and if military engine, equivalent commercial designation on the engine nameplate.

C. Instruments:

- (1) All instruments must be marked for approved operating limitations.

D. Control System Lock:

- (1) The rudder pedal control lock on the co-pilot's side must be removed.

E. The following placard must be placed on the instrument panel in full view of the pilot:
"Intentional spinning prohibited."

F. A placard reading as follows must be installed in such a location that it will be unmistakably visible to anyone removing the co-pilot's controls:
"When co-pilot's controls are removed, the universal joint must also be removed."

G. Electrical System:

- (1) The "master" and "generator" switches should be ganged to provide simultaneous operation to the "off" position.
- (2) For day operation, circuit protectors in the circuits to electrical equipment used in the operation should be made accessible to the pilot in flight. The airplane should be restricted to day operation.
- (3) To make the airplane eligible for night operation, the following must be accomplished:
 - (a) Relocate all electrical circuit protective devices so they are accessible to the pilot in flight.
 - (b) Remove the resistors in the wing position light circuit and gang all position lights to operate simultaneously.

NOTE 3. Prior to certificate as a 4 or 5-place airplane, the following must be complied with:

Passenger seat, or seats, flooring and safety belt installations other than originally provided by the manufacturer must be shown to meet the requirements of CAR 4a.

The following manufacturers have fabricated rear seat kits which, when properly installed, meet the requirements set forth above:

Aircraft Utilities

Summit and Lafayette Streets, Toledo 4 Ohio

(Seat kits to be installed in accordance with the manufacturer's installation instructions dated July 27, 1946)

Carl E. Guldberg

610 Wolverine Bldg., Ann Arbor, Michigan

(Seat kits to be installed in accordance with the manufacturer's installation instructions dated August 8, 1946)

Allied Aircraft Co.

Clarendon Hills, Illinois

(Seat kits to be installed in accordance with the manufacturer's installation instructions dated August 9, 1946)

All American Aviation, Inc.

Wilmington, Delaware

(Seat kits to be installed in accordance with the manufacturer's installation instructions dated September 13, 1946)

.....END.....