DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A5IN
Revision No. 1
KWAD
(Mitchell)
(Pine AIR)

Super-V

October 13, 1978

TYPE CERTIFICATE DATA SHEET NO. A5IN

This data sheet which is a part of type certificate No. A5IN prescribes conditions and limitations under which the product for which they type certificate was issued meets the airworthiness requirements of the Civil Air Regulations and Federal Aviation Regulations.

Type Certificate Holder — KWAD Company
4530 Jetridge Drive NW
Atlanta, Georgia 30327

I - Model Super-V, 4 PCLM (Normal Category), Approved September 21, 1962

Engines — 2 Lycoming 0-360-A1D

Fuel — 91/96 min. grade aviation gasoline

Engine limits — For all operations, 2700 r.p.m. at 26.8 in.Hg. (170 hp.)

Propeller and propeller limits — 2 Hartzell full-feathering propellers
HC-92ZK/8447-12A
Diameter: Not over 72 in., not under 70 in.
Pitch setting at 30 in. station:
Low 12.3°, high 24.7°

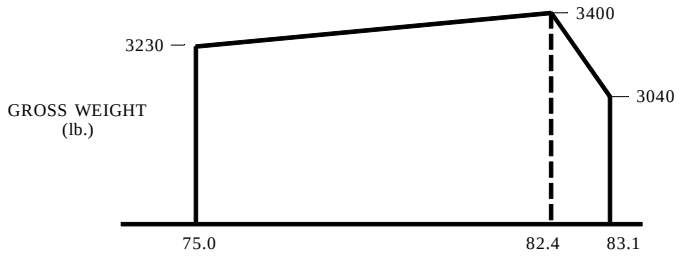
Airspeed limits (TIAS)

Never exceed	240 m.p.h.	(208 knots)
Maximum structural cruise	190 m.p.h.	(165 knots)
Maneuvering	152 m.p.h.	(132 knots)
Flaps extended	126 m.p.h.	(110 knots)
Landing gear extended	125 m.p.h.	(109 knots)

C.G. range (landing gear extended)

Gross Weight (lb.)	Fwd. Limit (in.)	Aft Limit (in.)
3040	75.0	83.1
3230	75.0	82.7
3400	82.4	82.4

Straight line variation between points shown.



Empty weight C.G. range

None

Datum

83.1 in. fwd. of the jack pads on the front spars.

Leveling means

Longitudinal: Leveling lugs are in the door jam of the baggage door right hand side of the aircraft.
Lateral: Top face of main spar in fuselage

Maximum weight

3400 lb.

No. of seats

4 (2 at +85, 2 at +117)

Maximum baggage

Fwd. compartment: 150 lb. (+30)
Aft compartment: 120 lb. (+140)

Fuel capacity

100 U.S. gal. (83.3 Imperial gal.), usable 98.8 U.S. gal. (82.3 Imp. gal.), distributed as follows:

No. Wing Tanks	Tank Capacity (gal.) U.S.	Imp.	Usable fuel (gal.) U.S.	Imp.	Location (Inches aft of datum)
2	20	16.7	19.5	16.2	+75.0
2	30	25.0	29.9	24.9	+77.1

Oil capacity

8 U.S. qt. (6.7 Imperial qt.) per engine. (6 U.S. qt. (5 Imp. qt.) usable.) (See NOTE 1 for unusable oil)

Control surface movements

Wing flaps		20° Down
Aileron tab		Fixed
Aileron	20° Up	20° Down
Elevator tab	10° Up	30° Down
"V" tail elevator action	20° Up	20° Down
"V" tail rudder action	21° Up	21° Down
"V" tail maximum combination rudder elevator action	35° Up	35° Down

Serial Nos. eligible

SV-110, -111, -112, -114 and up, plus the original Beech serial number.
Beech Serial Nos. eligible D-1 through D-2680 and D-15001.
Example: SV-110-D-2200

Certification basis

CAR 10. Type Certificate No. A5IN issued September 21, 1962.
Date of Application for Type Certificate May 17, 1962.

Each aircraft modified and any replacement parts manufactured in Canada must be designated as "Import" and clearly labeled as such in accordance with CAR 10.30.

A U.S. Airworthiness Certificate may be issued on the basis of an Export Certificate of Airworthiness signed by a representative of the Department of Transport (D.O.T) containing the following statement: "The airplane covered by this certificate was converted in Canada to a Model Super-V but was not manufactured in Canada; however, in letter of June 28, 1962, the Federal Aviation Agency has indicated that an export certificate of airworthiness issued under these conditions will be acceptable. The airplane has been examined and found to comply with U.S. Civil Air Regulation Part 3, dated May 15,1956, including Amendments 3-1 through 3-4, and conforms to T.C. A5IN.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following items of equipment are required:

(1) Approved equipment as shown in Report No. 12.
(2) D.O.T. approved Airplane Flight Manual.
(3) Stall warning indicator, Dwg. No. 403.

NOTE 1. (a) Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification.
(b) The certificated empty weight and the corresponding center of gravity locations must include unusable fuel of 7 lb. at (+75) and unusable oil of 7.5 lb. at (+37).

NOTE 2. The following placard must be displayed in front of and in clear view of the pilot:

"OPERATE IN NORMAL CATEGORY IN COMPLIANCE WITH THE APPROVED AIRPLANE FLIGHT MANUAL."

NOTE 3. The landing gear door system must be modified in accordance with the applicable drawings as listed in Beech Installation Bulletins:
(a) 35-604 (Model 35)
(b) 35-603 (Models A35 and B35)

NOTE 4. The Model Super-V aircraft is a conversion of the standard Beech models 35, A35 or B35, and is limited only to these specific models. (See Serial Nos. eligible.) When a Beech model is being converted to a model Super-V, it must be determined that the interrelationship between the Super-V conversion and all previously approved modifications will introduce no adverse effect upon the airworthiness of the airplane.

NOTE 5. Wing tip modification in accordance with Dwg. No. 711328 are considered optional.

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