

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

AS3EU
Revision 1
THUNDER & COLT LTD
Model GA-42
July 9, 1993

TYPE CERTIFICATE DATA SHEET NO. AS3EU

This data sheet which is part of Type Certificate No. AS3EU prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder. THUNDER & COLT LTD.
Maesbury Road
Oswestry
Shropshire SY10 8HA
United Kingdom

I. Model GA-42 (Normal Category), approved November 17, 1992.

Engine. 1 x Teledyne Continental 0-200-B

Fuel. Avgas minimum grade 80/87.

Engine Limits. Maximum continuous operation 100 HP/2750 RPM
Maximum recommended cruise 75 HP/2500 RPM

Propeller. 1 x Hoffman H04/14 HM - 150B69LD
Number of blades: 4
Diameter : 1500 MM (59.05")
Fixed pitch

Airspeed Limits (IAS). Vmo (maximum operating) : 39 knots
Vra (rough air) : 39 knots
Vmc (minimum control) : 0 knots

C.G. Range. Reference Airship Flight Manual p 2-4
No critical range exists provided crew, ballast and fuel are loaded in prescribed areas and airship is within take-off height and static heaviness limitations.

Weights. Maximum weight 1361 kg
Maximum static heaviness 100 kg
Minimum static heaviness 0 kg
(equilibrium)
Provided the static heaviness and ballonet fill limitations as stated in the Flight Manual are observed, it is not possible to take off at weights exceeding the Maximum Weight.

Lifting Gas. Helium is the only approved lifting gas.

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<u>Envelope and Ballonets.</u>	Envelope gross volume	:	1189 cu.metres (42 000 cu.ft.)
	Maximum envelope pressure	:	50 mm WG (2" WG)
	Minimum envelope pressure	:	0 mm WG
	Ballonet volume (MAX)	:	26% of envelope gross volume
	Maximum ballonet differential pressure	:	25 mm WG (1" WG)

DATA PERTINENT TO ALL MODELS

Ser. Nos. Eligible. The United Kingdom Certificate of Airworthiness for Export endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for Certification is made.

Import Requirements.

a) To be considered eligible for operation in the United States, each aircraft manufactured under this type certificate must be accompanied by a certificate of airworthiness for export or certifying statement endorsed by the exporting foreign civil airworthiness authority which states (in the English language): This aircraft conforms to its U.S. type design (type certificate number AS3EU) and is in a condition for safe operation.

b) The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 and exported by the country of manufacture is FAR Sections 21.183(c) or 21.185(c).

c) The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 exported from countries other than the country of manufacture (e.g., third party country) is FAR Sections 21.183(d) or 21.813(b).

Certification Basis. Based on the provisions of 14 CFR FAR 21.17, the Bilateral Airworthiness Agreement between the United States of America and the United Kingdom of Great Britain and Northern Ireland and TC AS3EU, the certification basis is as follows:

a) FAA P-8110-2, Airship Design Criteria (ADC)
Application for Type Certificate dated 4 October 1989.

Equipment. The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification .

Thunder & Colt Master Equipment Register, GA-42 Airship dated February 1991 identifies all required equipment approved by the CAA of the United Kingdom. In addition, FAA approved Flight Manual, GA-42, FAA-FM, as appropriately amended in relation to the actual modification standard of the airship is required.

Service Information. Service bulletins, structural repair manuals, vendor manuals, aircraft flight manuals, and overhaul and maintenance manuals, which contain a statement that the document is British CAA approved, are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.

NOTES.

Note 1.

Airworthiness Limitations.

The CAA approved Maintenance Schedule MS/GA-42/1 specifies mandatory replacement times, structural inspection intervals and related structural procedures, and operational checks. These airworthiness limitations may not be changed without FAA approval.