

Maximum Operating Altitude: 10,000 feet

Type Operations Allowed: Day, Night, Visual Flight Rules (VFR), and Instrument Flight Rules (IFR). Flight into known or forecast icing conditions is prohibited.

Serial Numbers Eligible: 101 through 106, 108 and on

II - Model A-1-70 Airship (Approved March 25, 2005)

Envelope: Volume 170,000 cu. ft.
Maximum Pressure 2.0 in. H₂O
Minimum Pressure 1.3 in. H₂O

Lifting Gas: Use of helium gas only as a lifting gas.

Engine: Two (2) Lycoming Model IO-360-B1G6, Engine Type Certificate Data Sheet 1E10.

Fuel: 100LL minimum grade aviation fuel.

Oil: See Engine Type Certificate Data Sheet 1E10.

Engine Limits: Rated maximum continuous horsepower 180 @ 2700 r.p.m. Maximum cylinder head temperature: 500 degrees F.
* see note 4

Propeller and Propeller Limits: Two (2) MT five bladed, laminated wood composite structure, epoxy-fiber glass cover, with metal tipping, Model No. MTV-25-(). Maximum allowable r.p.m.: 2700.
* see note 5

Airspeed Limits: Maximum Level Flight Speed 52 m.p.h. IAS
Maximum Operating Limit Speed 52 m.p.h. IAS
Design Speed for Maximum Gust Intensity 46 m.p.h. IAS

C.G.Range: See FAA approved Airship Flight Manual, Document 301030

Datum: Theoretical bow of the envelope. The theoretical bow is 26 inches aft of the nose mooring probe. All station measurements are shown in inches. Gondola datum is airship gore station 804.

Maximum Weights: See FAA approved Airship Flight Manual, Document 301030

Minimum Crew: 1 Pilot

No. of Seats: 9 (1 on right front seat, 5 on seat track seats and 3 on rear bench seat)

Fuel Capacity: 150.8 gallons (148 gallons usable)
227.8 gallons (220 gallons usable) with American Blimp Corporation Service Bulletin 145. See Note 8.

Maximum Operating Altitude: 10,000 feet

Type Operations Allowed: Day, Night, Visual Flight Rules (VFR), and Instrument Flight Rules (IFR). Flight into known or forecast icing conditions is prohibited.

Serial Numbers Eligible: 101 through 106, 108 and on

II - Model A-1-70G Airship (Approved April 7, 2006)

Envelope: Volume 170,000 cu. ft.

	Maximum Pressure	2.0 in. H ₂ O
	Minimum Pressure	1.3 in. H ₂ O
Lifting Gas:	Use of helium gas only as a lifting gas.	
Engine:	Two (2) Lycoming Model IO-360-B1G6, Engine Type Certificate Data Sheet 1E10.	
Fuel:	100LL minimum grade aviation fuel.	
Oil:	See Engine Type Certificate Data Sheet 1E10.	
Engine Limits:	Rated maximum continuous horsepower 180 @ 2700 r.p.m. Maximum cylinder head temperature: 500 degrees F. * see note 4	
Propeller and Propeller Limits:	Two (2) MT five bladed, laminated wood composite structure, epoxy-fiber glass cover, with metal tipping, Model No. MTV-25-(). Maximum allowable r.p.m.: 2700. * see note 5	
Airspeed Limits:	Maximum Level Flight Speed	52 m.p.h. IAS
	Maximum Operating Limit Speed	52 m.p.h. IAS
	Design Speed for Maximum Gust Intensity	46 m.p.h. IAS
C.G.Range:	See FAA approved Airship Flight Manual, Document 301030	
Datum:	Theoretical bow of the envelope. The theoretical bow is 26 inches aft of the nose mooring probe. All station measurements are shown in inches. Gondola datum is airship gore station 804.	
Maximum Weights:	See FAA approved Airship Flight Manual, Document 301030	
Minimum Crew:	1 Pilot	
No. of Seats:	9 (1 on right front seat, 5 on seat track seats and 3 on rear bench seat)	
Fuel Capacity:	150.8 gallons (148 gallons usable) 227.8 gallons (220 gallons usable) with American Blimp Corporation Service Bulletin 145. See Note 8.	
Maximum Operating Altitude:	10,000 feet	
Type Operations Allowed:	Day, Night, Visual Flight Rules (VFR), and Instrument Flight Rules (IFR). Flight into known or forecast icing conditions is prohibited.	
Serial Numbers Eligible:	107	

Additional Pertinent Data

Certification Basis: FAR 21.17(b) effective September 9, 1992

Compliance with FAR 21.17(b) has been shown utilizing the provisions of Advisory Circular 21.17-1A, dated September 25, 1992. The airworthiness requirements met under this provision are the Airship Design Criteria (ADC), FAA P-8110-2, dated November 2, 1987, as amended by Change 1, dated July 24, 1992 and Change 2, dated February 6, 1995.

Application for Type Certificate dated June 29, 1995.

Type Certificate No. S00002SE issued October 3, 1997.

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 to the above required equipment, the following equipment is also required:

Latest FAA-approved Airship Flight Manual, Document 301030

American Blimp Corporation Ground Handling Manual, 301001, Revision E, dated March 24, 2005, or later FAA-approved revisions is to be made available to the operator's flight and ground crews.

Maintenance and Inspection

Maintenance and Inspection of this airship must be carried out in accordance with American Blimp Corporation Instructions for Continued Airworthiness, Document 301032, Revision 7, dated March 14, 2005, or later FAA-approved revisions.

- NOTE 1 All placards required in the FAA approved Airship Flight Manual 301030 must be installed in the appropriate locations.
- NOTE 2 The Auxiliary Power Unit (Generator System) is limited to non-flight safety electrical services whose failure or malfunction will pose no safety hazard (e.g. advertising lighting, etc.)
- NOTE 3 Current Weight and Balance Report together with 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. The certificated empty weight must include unusable fuel of 16.8 lbs. at gondola station 237.5.
- NOTE 4 Lycoming Engine Data Sheet No. 1E10, provides information on the engine maximum oil temperatures and oil fuel pressure limitations.
- NOTE 5 MT propeller Data Sheet No. P14BO, provides information on the propeller diameter and rotational speed limitations.
- NOTE 6 Option: Installation of Model A-1-70 Lightsign per American Blimp Corporation (ABC) Drawing "Lightsign Installation" Drawing Number 137000, Rev. B, dated January 13, 2006 or later FAA approved revision. Operational Limitations: Operate per ABC Flight Manual Supplement AFMS-18, dated March 7, 2006, or later FAA-approved revision. This modification is installed on an airship per ABC Service Bulletin 130, Rev. IR, "Lightsign Installation," dated 1/30/7 or later FAA approved revision.
- NOTE 7 Option: Installation of Model A-1-70 Fixed Rudder Tab per American Blimp Corporation (ABC) Drawing "Rudder Tab Installation", Drawing Number 126200-01, Rev. IR, dated August 22, 2007, or later FAA approved revision. This modification is installed on an airship per ABC Service Bulletin (SB) 143, Rev. IR, "Rudder Tab Installation," dated 10/12/7 or later FAA approved revision. This option may only be installed in conjunction with the ABC Lightsign installation per ABC Drawing Number 137000 (or ABC SB 130).
- NOTE 8 Option: Installation of Model A-1 Dual Fuel Tank per American Blimp Corporation (ABC) Service Bulletin 145, Rev. IR, dated February 14, 2008, or later FAA approved revision. This modification incorporated a larger fuel tank and requires adding structure to the gondola. This change limits the amount of ballast that can be carried in the main ballast compartment. Operation per ABC Airship Flight Manual 301030, Revision 11, is required for this modification and prescribes the limitations for gondola loading, required placards and changed fuel dump rates.

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