

# MINESEEKER FOUNDATION

AIRSHIP SPECIFICATIONS

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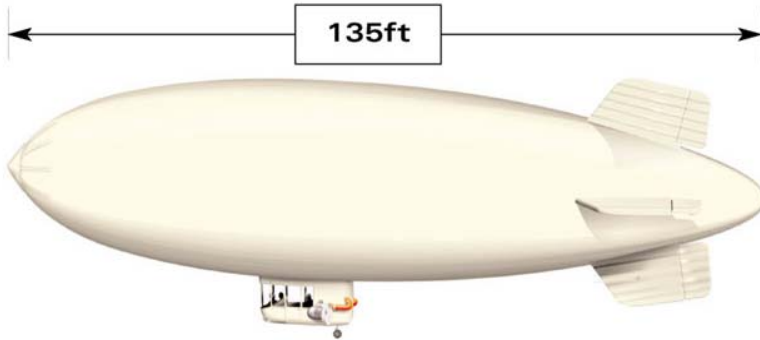
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## LIGHTSHIP COMPARISON

### Lightship A-60+

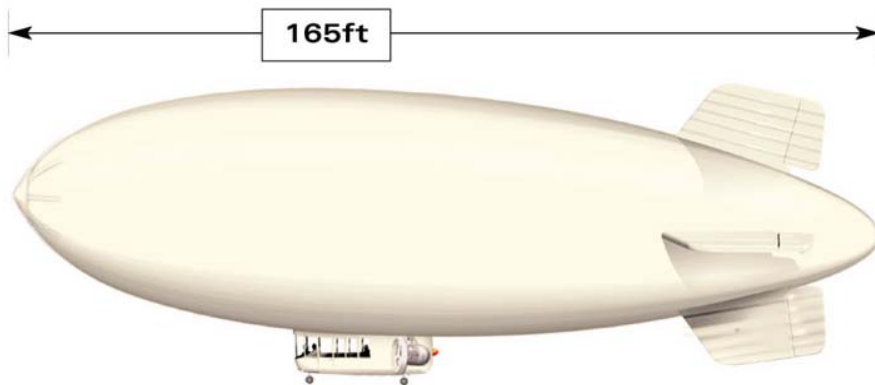


#### A-60+ Specification

Volume	68,00 cubic ft.
Length	135ft
Height	44 ft
Width	36 ft
Useful Lift	1,200 lb

Max. Airspeed	53 mph
Min. Flight Crew	1
Total Crew	13

### Lightship A-150



#### A-150 Specification

Volume	150,000 cubic ft.
Length	165 ft
Height	55 ft
Width	46 ft
Useful Lift	3,600 lb

Max. Airspeed	65 mph
Min. Flight Crew	1
Total Crew	17

## A60+ LIGHTSHIP TECHNICAL SPECIFICATIONS

### Hull

Volume	68,000cu. feet (inert helium gas)	1,900cu. metres
Length	135 feet	40 metres
Height	44 feet	13 metres
Width	36 feet	11 metres

### Gondola

Length	13 feet	4 metres
Width	5 feet	1.5 metres
Seating	Pilot + 4 (maximum)	

### Engines

Type	Limbach L-2000 x 2	
Power	68hp x 2	
Fuel Capacity	69 US gallons	235 litres

### Performance

Speed	53 mph (45 knots) max.	85 kph
Airborne duration	13 hours (on station)	

<b>Weight</b>	4,400 lbs	2,000 kg
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**Navigation Lights** standard aircraft navigation lights (w hite/red/green) plus strobe lights

**Internal Lights** 2 x 1000 watt mercury vapour lights located inside the envelope w hich light up the airship

### Flight Instruments & Avionics for VFR/IFR

#### Avionics

2 x Nav/Com (King 155)  
Transponder Mode C (King KT 76A)  
VOR/ILS (KI 204)  
GPS (Apollo 820)  
ADF

#### Flight Instruments

ASI (United 8000 B510)  
AH  
DG  
Turn Rate Indication  
Variometer  
Altimeter (United 5934 PAD-1)



## TECHNICAL INFORMATION ON THE LIGHTSHIP A-60+

### Description

The American Blimp Corporation Lightship A-60+ is a **twin engine** non-rigid airship of conventional design. The A-60+ is 68,000 cubic feet (1,900 cubic metres) in volume and 135 feet long (40 metres). The Airship has a hull fineness ratio of 3.8. The **structural envelope** (skin) provides both **high strength fabric** and **gas tight integrity**.

### Envelope

The envelope consists of an outer translucent white **multi-layer laminate**, a fabric base, and a clear inner laminate. The envelope is heat sealed together as gores (see maintenance manual for gore and station identification). The outer laminate, and the translucent white heat seal tape covering the seams, **protect the fabric** and seam tapes respectively **from structurally damaging UV radiation** from the sun.

### Ballonet

The ballonet is manufactured from **translucent gas tight film**. The ballonet is an air compartment that serves as a diaphragm between the outside air and the helium. It is used to pressurise the hull and to compensate for pressure/volume changes as the airship altitude or temperature changes.

### 4. Pressure

The internal pressure of the envelope is 40mm (1.6") w.g. – a **very low pressure** and the lifting gas is **helium – an inert gas**.

### 5. History

The Lightship is the most widely used airship currently operating in the world and has been operating since 1991. During this period of 9 years, **approximately 100,000 hours have been flown with no major failure of the envelope or failure of the fabric of the envelope**.

### 6. Permissions To Operate

The Lightship has received permission to operate **over major sporting events and cities in Europe and USA**, including the **Olympic games in Barcelona and flights over Amsterdam, Berlin, Paris and London**. All of these flights have been conducted safely at a height of 500m.



## A150 LIGHTSHIP TECHNICAL SPECIFICATIONS

### Hull

Volume	150,000cu. feet (inert helium gas)	4,245cu. metres
Length	165 feet	50 metres
Height	55 feet	16.75 metres
Width	46 feet	14 metres

### Gondola

Length	26.5 feet	8 metres
Width	5.4 feet	1.65 metres
Seating	Pilot + 9 (maximum)	

### Engines

Type	Lycoming 10-360 BLG6 x 2	
Power	180hp x 2	
Fuel Capacity	150 US gallons	560 litres

### Performance

Speed	65 mph max.	104 kph
Useful Lift	3,600 lb	1,630 kg

<b>Weight</b>	10,863 lbs	4,927 kg
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**Navigation Lights** standard aircraft navigation lights (w hite/red/green) plus strobe lights

**Internal Lights** 2 x 1000 watt mercury vapour lights located inside the envelope w hich light up the airship

### Flight Instruments & Avionics for VFR/IFR

#### Avionics

2 x Nav/Com	(King 196A)
Transponder Mode C	(King KT 76A)
VOR/ILS	(KI 204)
GPS	(Apollo 820)

#### Flight Instruments

ASI (United 8000 B510)  
AH  
DG  
Turn Rate Indication  
Variometer  
Altimeter (United 5934 PA D-1)



## TECHNICAL INFORMATION ON THE LIGHTSHIP A150

### 1. Description

The American Blimp Corporation Lightship A150 is a **twin engine** non-rigid airship of conventional design. The A150 is 150,000 cubic feet (4,245 cubic metres) in volume and 165 feet long (50 metres). The Airship has a hull fineness ratio of 3.8. The **structural envelope** (skin) provides both **high strength fabric** and **gas tight integrity**.

### 2. Envelope

The envelope consists of an outer translucent white **multi-layer laminate**, a fabric base, and a clear inner laminate. The envelope is heat sealed together as gores (see maintenance manual for gore and station identification). The outer laminate, and the translucent white heat seal tape covering the seams, **protect the fabric** and seam tapes respectively **from structurally damaging UV radiation** from the sun.

### 3. Ballonet

The ballonet is manufactured from **translucent gas tight film**. The ballonet is an air compartment that serves as a diaphragm between the outside air and the helium. It is used to pressurise the hull and to compensate for pressure/volume changes as the airship altitude or temperature changes.

### 4. Pressure

The internal pressure of the envelope is 40mm (1.6") w.g. – **a very low pressure** and the lifting gas is **helium – an inert gas**.

### 5. History

The Lightship is the most widely used airship currently operating in the world and has been operating since 1991. During this period of 9 years, **approximately 100,000 hours have been flown with no major failure of the envelope or failure of the fabric of the envelope**.

### 6. Permissions To Operate

The Lightship has received permission to operate **over major sporting events and cities in Europe and USA**, including the **Olympic games in Barcelona and flights over Amsterdam, Berlin, Paris and London**. **All of these flights have been conducted safely at a height of 500m**.

