



# National Transportation Safety Board Aviation Accident Factual Report

---

<b>Location:</b>	LOCK HAVEN, PA	<b>Accident Number:</b>	IAD98LA074
<b>Date &amp; Time:</b>	07/01/1998, 1105 EDT	<b>Registration:</b>	N760AB
<b>Aircraft:</b>	American Blimp Corp. ABC-A-60	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None

**Flight Conducted Under:** Part 91: General Aviation - Positioning

---

On July 1, 1998, at 1105 eastern daylight time, an American Blimp Corporation ABC-A-60, an airship, N760AB, was substantially damaged during collision with trees following an uncontrolled descent near Lock Haven, Pennsylvania. The certificated commercial pilots were not injured. Visual meteorological conditions prevailed for the positioning flight that originated at Williamsport, Pennsylvania (IPT), at 0900, and destined for Youngstown, Ohio (YNG). A visual flight rules flight plan was filed for the flight conducted under 14 CFR Part 91.

In a written statement, the pilot reported he obtained a weather briefing in person at the IPT Flight Service Station, at 0800. The airship departed, at 0900, and the pilot reported "normal" operations in cruise flight until 1050. He said:

"About 1050 am in level flight at about five to six hundred feet above the highest obstacles, aprox. 3,000 ft MSL (mean sea level), over a tree covered plateau, the ship experienced a severe sustained downdraft. The engines were at full power and elevators were placed in a full up position.

"Shortly thereafter the ship made its initial impact with the treetops. The gondola descended below the treetops and both engines were stopped. The location was approx. 8 miles NW of Piper Memorial (LHV).

"The ships maneuvering and pressure relief valves were opened to induce further descent.

"The ship bounced from treetop to treetop for about 10 minutes before settling in a tree with the gondola about 40 feet in the air. The helium rip cord was pulled but apparently unsuccessfully. The air-to-helium rip was successfully pulled."

After he contacted the IPT Flight Service Station by cellular telephone, the pilot stopped the engines, turned off all switches and circuit breakers, and jettisoned equipment. Both pilots then egressed the airship by climbing down the tree. The pilot further stated:

"In about 15 minutes the ship blew away, later to be found approximately 300 yards away."

In a telephone interview, the pilot stated the predicted winds at IPT were 15 knots gusting to 25 knots, and 10 knots gusting to 20 knots at their destination. Winds at IPT at takeoff were 9 knots gusting to 16 knots. The pilot said the headwind encountered during the flight resulted in the airship achieving a 15 knot ground speed as indicated by the ship's global positioning system receiver. He said a "...consistent, strong, huge downdraft ..." could not be overcome by full elevator and full engine power application.

When questioned, the pilot stated the airship had no wind limitations imposed by the manufacturer for flight operation. He added, "Practically speaking, around 35 knots. It's situational, it's the type of wind that's important. Change in direction of gusting conditions are a critical component. It's not wind speed change as much as directional change that's important."

An Airman's Meteorological Advisory (AIRMET) released by the National Weather Service, at 0945, called for occasional moderate turbulence below 10,000 feet due to strong northwesterly low level winds over rough terrain. An update to the same AIRMET released, at 1215, called for occasional moderate and isolated severe turbulence below 10,000 feet due to strong northwesterly low level winds over rough terrain.

The pilot reported there were no mechanical deficiencies with the airship. He added, "Control, engine response, everything was perfect. There was no degradation at all."

## Pilot Information

<b>Certificate:</b>	Airline Transport; Commercial	<b>Age:</b>	35, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Airship; Helicopter	<b>Restraint Used:</b>	Seatbelt
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	10/21/1997
<b>Occupational Pilot:</b>	<b>Last Flight Review or Equivalent:</b>		
<b>Flight Time:</b>	5022 hours (Total, all aircraft), 2000 hours (Total, this make and model), 4000 hours (Pilot In Command, all aircraft), 168 hours (Last 90 days, all aircraft), 45 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	American Blimp Corp.	<b>Registration:</b>	N760AB
<b>Model/Series:</b>	ABC-A-60 ABC-A-60	<b>Aircraft Category:</b>	Blimp
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	007
<b>Landing Gear Type:</b>		<b>Seats:</b>	5
<b>Date/Type of Last Inspection:</b>	06/23/1998, Annual	<b>Certified Max Gross Wt.:</b>	4394 lbs
<b>Time Since Last Inspection:</b>	30 Hours	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	6631 Hours	<b>Engine Manufacturer:</b>	Limbach
<b>ELT:</b>	Installed, activated, aided in locating accident	<b>Engine Model/Series:</b>	L 2000 ECI
<b>Registered Owner:</b>	ICARUS AIRCRAFT INC	<b>Rated Power:</b>	80 hp
<b>Operator:</b>	ICARUS AIRCRAFT INC	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>	HIGH DEGREE OPERATIONS CORP	<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	IPT, 529 ft msl	<b>Distance from Accident Site:</b>	30 Nautical Miles
<b>Observation Time:</b>	1054 EDT	<b>Direction from Accident Site:</b>	90°
<b>Lowest Cloud Condition:</b>	Scattered / 5500 ft agl	<b>Visibility</b>	10 Miles
<b>Lowest Ceiling:</b>	Broken / 7000 ft agl	<b>Visibility (RVR):</b>	0 ft
<b>Wind Speed/Gusts:</b>	16 knots / 19 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	270°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	23° C / 12° C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	WILLIAMSPORT, PA (IPT)	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	YOUNGSTOWN, OH (YNG)	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	0900 EDT	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	

## Administrative Information

<b>Investigator In Charge (IIC):</b>	BRIAN C RAYNER
<b>Additional Participating Persons:</b>	RAY STEICH; HARRISBURG, PA
<b>Investigation Docket:</b>	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .