



National Transportation Safety Board Aviation Accident Final Report

Location:	WEEKSVILLE, NC	Accident Number:	ATL92LA122
Date & Time:	06/01/1992, 1630 EDT	Registration:	N600LP
Aircraft:	Airship Industries AIRSHIP 600	Aircraft Damage:	Substantial
Defining Event:		Injuries:	5 None
Flight Conducted Under:	Part 91: General Aviation -		

Analysis

THE AIRSHIP WAS BEING FLOWN ON A POST MAINTENANCE INSPECTION FLIGHT FOLLOWING AN ANNUAL INSPECTION. AFTER RELEASE FROM THE MOORING TRUCK THE AIRSHIP ROSE ABOUT 150 FEET THEN PITCHED OVER. FULL AFT MOVEMENT OF THE CONTROL YOKE FOR NOSE PITCH UP WAS INEFFECTIVE. THE AIRSHIP THEN COLLIDED WITH THE VEHICLE MOUNTED MOORING MAST WHICH PUNCTURED THE AIR BAG. EXAMINATION OF THE AIRSHIP REVEALED THAT THE ELEVATOR CONTROL CABLES WERE RIGGED BACKWARDS. DURING THE ANNUAL INSPECTION THE ELEVATOR HAD BEEN REMOVED & RE-INSTALLED. THE INSPECTOR WHO SIGNED OFF THE INSPECTION PAPERS DEMONSTRATED, & STATED, THAT HIS INSPECTION PROCEDURE WAS ACCOMPLISHED ALONE. HE PUSHED ON THE ELEVATOR WITH HIS HAND TO CHECK ELEVATOR DEFLECTION. HE DID NOT HAVE A SECOND PERSON ACTIVATE THE COCKPIT CONTROL, TO ENSURE ELEVATOR MOVEMENT IN THE PROPER DIRECTION, AS REQUIRED BY THE MAINTENANCE MANUAL. THE FLIGHT CREW PRE-UNMASTING PROCEDURE REQUIRED THAT A GROUND CREW MAN BE USED TO CONFIRM CORRECT CONTROL SURFACE MOVEMENT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE IMPROPER INSTALLATION OF THE ELEVATOR CONTROL CABLES BY REPAIR FACILITY MAINTENANCE PERSONNEL, THE INSPECTOR'S INADEQUATE INSPECTION OF THE MAINTENANCE ACCOMPLISHED, AND HIS FAILURE TO FOLLOW DELINEATED PROCEDURES. AN ADDITIONAL CAUSE WAS THE INADEQUATE PREFLIGHT INSPECTION BY THE PILOT IN COMMAND, IN THAT HE FAILED TO CONFIRM CORRECT CONTROL SURFACE MOVEMENT AS REQUIRED BY THE PRE-UNMASTING CHECKLIST.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: TAKEOFF

Findings

1. FLIGHT CONTROL,ELEVATOR
2. (C) MAINTENANCE,INSTALLATION - IMPROPER - OTHER MAINTENANCE PERSONNEL
3. (C) PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	45, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Airship	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	04/03/1992
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	9500 hours (Total, all aircraft), 1800 hours (Total, this make and model), 9100 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Airship Industries	Registration:	N600LP
Model/Series:	AIRSHIP 600 AIRSHIP 60	Aircraft Category:	Blimp
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	1215-05
Landing Gear Type:		Seats:	7
Date/Type of Last Inspection:	06/01/1992, Annual	Certified Max Gross Wt.:	3195 lbs
Time Since Last Inspection:	1 Hours	Engines:	2 Reciprocating
Airframe Total Time:	5827 Hours	Engine Manufacturer:	PORSCHE
ELT:	Not installed	Engine Model/Series:	930/67
Registered Owner:	ORIX USA CORP.	Rated Power:	255 hp
Operator:	AIRSHIP INTERNATIONAL	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	ECG, 12 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1620 EDT	Direction from Accident Site:	340°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	Overcast / 25000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21 °C
Precipitation and Obscuration:			
Departure Point:	(ECG)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	1630 EDT	Type of Airspace:	Class D; Class E

Airport Information

Airport:	AIRSHIP INDUSTRIES (NONE)	Runway Surface Type:	Asphalt
Airport Elevation:	12 ft	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	PRESTON E HICKS	Report Date:	06/11/1993
Additional Participating Persons:	PHIL RANDALL; WINSTON-SALEM, NC		
Publish Date:			
Investigation Docket:	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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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