



National Transportation Safety Board Aviation Accident Final Report

Location:	MYRTLE BEACH, SC	Accident Number:	ATL89LA156
Date & Time:	06/02/1989, 1330 EDT	Registration:	N1652G
Aircraft:	CHAMPION 7GCBC	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation -

Analysis

AFTER DROPPING A BANNER, THE PLT ELECTED TO MAKE A 3-POINT LNDG AT A SMALL PVT ARPT WITH THE WND GUSTING TO 15 KTS. HE RPRTD THAT JUST BEFORE TOUCHDOWN, THE ACFT ENCTR'D A DOWNDRAFT & HE INCREASED BACK PRESSURE ON THE CONTROL STICK TO BREAK THE DESCENT. THE ACFT CONTACTED THE RWY TAIL 1ST & BOUNCED SLIGHTLY. IT THEN SWERVED TO THE LEFT, WENT OFF THE RWY & NOSED OVER IN AN ADJACENT BEAN FIELD. AN EXAM OF THE ACFT REVEALED THE RUDDER HAD CONTACTED ONE OF THE BANNER TOW HOOKS & WAS JAMMED TO THE LEFT. THE BANNER TOW INSTALLATION HAD RECENTLY BEEN MODIFIED FROM A SINGLE HOOK TO A MULTIPLE HOOK SYS. IN A LETTER DATED 5/31/89, THE FAA NOTIFIED THE FACILITY WHICH PERFORMED THE MODIFICATION THAT THE MULTIPLE HOOK INSTALLATION COULD NOT BE APPROVED AS SUBMITTED (ON FAA FORM 337).

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE IMPROPER INSTALLATION/MODIFICATION OF THE BANNER TOW SYSTEM, WHICH JAMMED THE RUDDER DURING A LANDING. THE WIND AND TERRAIN CONDITIONS WERE RELATED FACTORS.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) WEATHER CONDITION - UNFAVORABLE WIND
2. (F) WEATHER CONDITION - GUSTS
3. (F) WEATHER CONDITION - DOWNDRAFT
4. (C) GLIDER LAUNCH/TOW EQUIPMENT - IMPROPER
5. (C) MAINTENANCE,MODIFICATION - IMPROPER - OTHER MAINTENANCE PERSONNEL
6. (C) FLIGHT CONTROL,RUDDER - JAMMED
7. DIRECTIONAL CONTROL - NOT POSSIBLE
8. GROUND LOOP/SWERVE - UNCONTROLLED

Occurrence #2: NOSE OVER
Phase of Operation: LANDING - ROLL

Findings

9. (F) TERRAIN CONDITION - CROP
10. (F) TERRAIN CONDITION - SOFT

Factual Information

Pilot Information

Certificate:	Commercial	Age:	23, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	01/21/1989
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	852 hours (Total, all aircraft), 65 hours (Total, this make and model), 788 hours (Pilot In Command, all aircraft), 142 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CHAMPION	Registration:	N1652G
Model/Series:	7GCBC 7GCBC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Aerobatic	Serial Number:	122
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	05/03/1989, Annual	Certified Max Gross Wt.:	1650 lbs
Time Since Last Inspection:	64 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2575 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed	Engine Model/Series:	O-320-A2B
Registered Owner:	BARNSTORMER FLITE SIGNS, INC	Rated Power:	150 hp
Operator:	BARNSTORMERS FLT. SIGNS, INC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MYR, 33 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	1355 EDT	Direction from Accident Site:	55°
Lowest Cloud Condition:	Scattered / 4000 ft agl	Visibility	7 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	30° C / 23° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1220 EDT	Type of Airspace:	

Airport Information

Airport:	BARNSTORMER FIELD	Runway Surface Type:	Grass/turf
Airport Elevation:	35 ft	Runway Surface Condition:	Dry
Runway Used:	23	IFR Approach:	None
Runway Length/Width:	2000 ft / 50 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	WALTER G STINER	Report Date:	05/11/1992
Additional Participating Persons:	TOM CONWAY; COLUMBIA, SC DAVE SEXTON; COLUMBIA, SC		
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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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).