



# **Aviation Investigation Final Report**

Location: PANAMA CITY BCH, Florida Accident Number: MIA96LA093

Date & Time: March 5, 1996, 15:10 Local Registration: N86928

Aircraft: Bellanca 8GCBC Aircraft Damage: Substantial

**Defining Event:** 2 None

Flight Conducted Under: Part 91: General aviation

### **Analysis**

The pilot-in-command (PIC), who occupied the rear seat, was training the front seat pilot regarding banner towing operations. When the flight returned from tow-training, the banner was dropped, and the pilots entered the traffic pattern to land. The front seat pilot was manipulating the controls on final approach with the flaps fully extended, when the flight encountered gusty wind conditions. After touchdown, the flight encountered a gust of wind, and the airplane became airborne again. The front seat pilot stated that he applied only partial power, and the airplane landed hard, causing the right main landing gear wheel/axle assembly to separate. The airplane then nosed over and came to rest inverted. Examination of the threads of all 4 of the axle attach nuts revealed that they were stripped.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: improper compensation for wind conditions by the second pilot, his inadequate remedial action after the airplane lifted off during a wind gust, and inadequate supervision by the first pilot (PIC). A factor relating to the accident was: the gusty wind condition.

### **Findings**

Occurrence #1: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

**Findings** 

- 1. (F) WEATHER CONDITION GUSTS
- 2. (C) COMPENSATION FOR WIND CONDITIONS IMPROPER COPILOT/SECOND PILOT
- 3. LIFT-OFF INADVERTENT
- 4. (C) REMEDIAL ACTION INADEQUATE COPILOT/SECOND PILOT
- 5. (C) SUPERVISION INADEQUATE PILOT IN COMMAND

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Occurrence #2: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: LANDING

#### **Findings**

6. MISCELLANEOUS, BOLT/NUT/FASTENER/CLAMP/SPRING - STRIPPED THREAD

7. LANDING GEAR, AXLE - SEPARATION

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Occurrence #3: NOSE OVER Phase of Operation: LANDING

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### **Factual Information**

On March 5, 1996, about 1510 central standard time, a Bellanca 8GCBC, N86928, registered to and operated by Aerial Ads, Inc., of the Southeast, landed hard then nosed over at a private airstrip called the Buchanan STOLPORT, Panama City Beach, Florida. Visual meteorological conditions prevailed at the time and no flight plan was filed for the 14 CFR Part 91 banner towing flight. The airplane was substantially damaged and the commercial-rated pilot-incommand (PIC) and commercial-rated trainee were not injured. The flight originated about 1405, from the Buchanan STOL PORT.

The PIC was in the rear seat and was training the front seat pilot regarding banner towing operations. The front seat pilot who was flying the airplane reported that gusty wind conditions existed and after dropping the banner, he turned base to final with the flaps fully extended. After a three point landing during the landing roll, a gust of wind occurred and the airplane then became airborne. He applied only partial power and the airplane landed hard causing the right main landing gear wheel/axle assembly to separate. The airplane then nosed over and came to rest inverted. The PIC stated that there was no preimpact failure or malfunction of the engine or flight controls.

Postaccident inspection of the right main landing gear axle attach hardware by an FAA inspector revealed that the threads of all four of the AN365-524 nuts were stripped. The nuts attach to bolts that secure the axle to the gear leg.

#### **Pilot Information**

Certificate:	Commercial	Age:	26,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	March 17, 1995
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2450 hours (Total, all aircraft), 2000 hours (Total, this make and model), 2360 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

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## **Aircraft and Owner/Operator Information**

Aircraft Make:	Bellanca	Registration:	N86928
Model/Series:	8GCBC 8GCBC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	32-74
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 30, 1995 Annual	Certified Max Gross Wt.:	2150 lbs
Time Since Last Inspection:	316 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5145 Hrs	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	0-360
Registered Owner:	AERIAL ADS, INC., OF THE SOUTH	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PFN ,21 ft msl	Distance from Accident Site:	
Observation Time:	14:47 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 2700 ft AGL	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	18 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(FA07)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	14:05 Local	Type of Airspace:	Class G

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## **Airport Information**

Airport:	BUCHANAN STOLPORT FA07	Runway Surface Type:	Grass/turf
Airport Elevation:	20 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	1000 ft / 50 ft	VFR Approach/Landing:	Traffic pattern

## Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	30.200691,-85.790725(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Monville, Timothy	
Additional Participating Persons:	THOMAS L MILLER; BIRMINGHAM , AL	
Original Publish Date:	October 4, 1996	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=37990	

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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