



Aviation Investigation Final Report

Location:	LANSING, Michigan	Accident Number:	CHI88FA005
Date & Time:	October 14, 1987, 20:00 Local	Registration:	N9359Z
Aircraft:	CESSNA TU-206G	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

IMMEDIATELY AFTER TAKEOFF THE PLT NOTED STRONG PRESSURE ON THE RIGHT RUDDER. HE TRIMMED OUT THE RUDDER PRESSURE AND CONTINUED TO FLY IN THE LOCAL AREA. APPROACH FLARE AND TOUCHDOWN WERE NORMAL. WHEN THE NOSE WHEEL CONTACTED THE RUNWAY THE AIRPLANE VEERED SHARPLY TO THE LEFT, TIPPED TO THE RIGHT, AND DRAGGED THE RIGHT WING TIP RESULTING IN SUBSTANTIAL DAMAGE TO THE RIGHT WING. THE BOLT (AN3H3A) THAT HOLDS THE COLLAR (PN1243617-1) TO THE STRUT WAS FOUND BROKEN ALLOWING THE COLLAR TO BECOME LOOSE PREVENTING THE NOSEWHEEL FROM CENTERING WHEN AIRPLANE BECAME AIRBORNE. THE COCKED NOSEWHEEL RESULTED IN THE UNUSUAL RUDDER PRESSURE. EXAM OF THE FRACTURED SURFACE OF THE BOLT SHOWED THAT OXIDATION HAD REMOVED THE FRACTURE PATTERN. THE CAUSE OF THE BOLT FAILURE COULD NOT BE DETERMINED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

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

Findings

1. (C) LANDING GEAR,NOSE GEAR ASSEMBLY - FAILURE,PARTIAL
2. (C) LANDING GEAR,NOSE GEAR ASSEMBLY - LOOSE
3. (C) NOSEWHEEL STEERING - NOT POSSIBLE
4. (F) GROUND LOOP/SWERVE - UNCONTROLLED

Occurrence #2: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID
Phase of Operation: LANDING - ROLL

Factual Information

Pilot Information

Certificate:	Private	Age:	51, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
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:	October 15, 1987
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	318 hours (Total, all aircraft), 234 hours (Total, this make and model), 233 hours (Pilot In Command, all aircraft), 36 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N9359Z
Model/Series:	TU-206G TU-206G	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	U20606425
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	February 26, 1987 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	26 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	719 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	TSIO-520-M
Registered Owner:	AMERICAN SYSTEMS INC.	Rated Power:	250 Horsepower
Operator:	KENNETH L. THOMPSON	Operating Certificate(s) Held:	None
Operator Does Business As:	AMERICAN SYSTEMS, INC.	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/bright
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown / 6000 ft AGL	Visibility	15 miles
Lowest Ceiling:	Overcast / 6000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	10°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LANSING , MI (LAN)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	19:15 Local	Type of Airspace:	Class E

Airport Information

Airport:	LANSING LAN	Runway Surface Type:	Concrete
Airport Elevation:	862 ft msl	Runway Surface Condition:	Dry
Runway Used:	27L	IFR Approach:	ILS
Runway Length/Width:	7250 ft / 150 ft	VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	42.789249,-84.590087(est)

Administrative Information

Investigator In Charge (IIC):	Seidlein, George
Additional Participating Persons:	DAN CARIS; GRAND RAPIDS , MI
Original Publish Date:	January 11, 1989
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=13921

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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](#).