



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	CARROLLTON, TX	<b>Accident Number:</b>	FTW87FA177
<b>Date &amp; Time:</b>	07/27/1987, 1101 CDT	<b>Registration:</b>	N4164B
<b>Aircraft:</b>	AERO COMMANDER 520	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

ACFT WAS DESTROYED WHEN IT STRUCK PWR LINES AND THE GRND DURING A SINGLE ENG GO-AROUND. FOLLOWING A LEFT ENG SHUT DOWN DUE TO SEVERE VIBRATIONS, THE PLT OVERFLEW ONE ARPT TO RETURN TO HIS HOME BASE. EN ROUTE, HE ELECTED NOT TO GO TO FULL PWR DUE TO A 3 MIN LIMITATION HE DID NOT WANT TO EXCEED. THE PLT OVERSHOT THE RWY WHILE MANUALLY EXTENDING THE NOSE GEAR AND ELECTED TO ATTEMPT A RT 270 DEG TURN TO RETURN TO FINAL WHILE AT 100-150' AGL. NLG DID NOT EXTEND DUE TO HYD PUMP BEING ON LEFT ENG AND NO PRESSURE. DURING THE TURN, THE PLT LOST CONTROL AND THE ACFT STRUCK THE WIRES. INVESTIGATION REVEALED THAT ONE OF THE BLADE PITCH CHANGE LINKS ON THE LEFT PROP HAD DISCONNECTED, ALLOWING ONE BLADE TO FREE FLOAT. THE LINK PIN ASSEMBLY HAD BACKED OUT AS A RESULT OF THE SAFETY SCREW BACKING OUT DUE TO DAMAGED AND STRIPPED THREADS AND AN IMPROPER LENGTH SCREW BEING INSTALLED. PROPS HAD 1/4' SAFETY SCREWS INSTALLED INSTEAD OF 3/8'.

## Probable Cause and Findings

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

## Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: CRUISE - NORMAL

### Findings

1. (C) PROPELLER SYSTEM/ACCESSORIES,PITCH CHANGE MECH - DISCONNECTED
2. PROPELLER FEATHERING - NOT POSSIBLE
3. (C) PROPELLER SYSTEM/ACCESSORIES,PITCH CHANGE MECH - STRIPPED THREAD
4. (C) MAINTENANCE,OVERHAUL - INADEQUATE - OTHER MAINTENANCE PERSONNEL
5. (C) PROPELLER SYSTEM/ACCESSORIES,PITCH CHANGE MECH - INCORRECT
6. (C) MAINTENANCE,INSTALLATION - IMPROPER - PILOT IN COMMAND
7. EMERGENCY PROCEDURE - IMPROPER - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: GO-AROUND (VFR)

### Findings

8. (F) GO-AROUND - ATTEMPTED - PILOT IN COMMAND
9. (C) AIRSPEED(VMC) - NOT MAINTAINED - PILOT IN COMMAND
10. (C) DIVERTED ATTENTION - PILOT IN COMMAND

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Occurrence #4: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - UNCONTROLLED

### Findings

11. OBJECT - WIRE,TRANSMISSION

## Factual Information

### Pilot Information

Certificate:	Private	Age:	58, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	03/27/1987
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	1176 hours (Total, all aircraft), 206 hours (Total, this make and model), 1066 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	AERO COMMANDER	Registration:	N4164B
Model/Series:	520 520	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	520-69
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	06/27/1987, Annual	Certified Max Gross Wt.:	5500 lbs
Time Since Last Inspection:	10 Hours	Engines:	2 Reciprocating
Airframe Total Time:	1920 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	GO-435-C2B2
Registered Owner:	JAMES L. LEVERENZ	Rated Power:	260 hp
Operator:	JAMES L. LEVERENZ	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	ADS, 643 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1101 CDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	6 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	30° C / 26° C
Precipitation and Obscuration:			
Departure Point:	ADDISON, TX (ADS)	Type of Flight Plan Filed:	None
Destination:	DALLAS, TX (RDB)	Type of Clearance:	VFR
Departure Time:	1042 CDT	Type of Airspace:	TRSA

## Airport Information

Airport:	ADDISON (AD5)	Runway Surface Type:	Asphalt
Airport Elevation:	643 ft	Runway Surface Condition:	Dry
Runway Used:	15	IFR Approach:	None
Runway Length/Width:	7199 ft / 100 ft	VFR Approach/Landing:	Forced Landing

## Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	WARREN V WANDEL	Report Date:	06/16/1989
Additional Participating Persons:	DAVY CROCKER; DALLAS, TX		
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 <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> .		

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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](#).