



Aviation Investigation Final Report

Location:	CLEVELAND, Ohio	Accident Number:	NYC91LA062
Date & Time:	January 23, 1991, 09:00 Local	Registration:	N4626F
Aircraft:	CESSNA P206	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

AT APRX 1200' MSL, WHILE ON FINAL APCH TO RWY 23R, THE PLT & PSGR NOTED A 'DIFFERENT' SOUND FM THE PROP/ENG. THERE WAS A LOSS OF THRUST FM THE ENG. ALSO, A ROUGH OR OUT-OF-BALANCE COND WAS NOTED. THE PLT STATED HE WAS UNABLE TO MAINT ALT & WAS FORCED TO MAKE AN EMERG LNDG ABOUT 3/4 MI SHORT OF THE RWY. DRG THE LNDG, THE ACFT ENCTR'D SOFT/UNEVEN TRRN & NOSED DOWN. NO PREIMPACT MECHANICAL PROBLEM WAS FND WITH THE ENG. A POST-ACDNT EXAM REVEALED THAT ALL 3 PROP BLADES WERE FREE TO ROTATE 360 DEG IN THEIR HUBS. FATIGUE FRACTURES WERE FND ON 2 OF THE 3 PROP BLADE ACTUATING PINS; FATIGUE STRIATIONS WERE FND ON 90 TO 95 PERCENT OF THE #2 PROP ACTUATING PIN & ABOUT 60 PERCENT ON THE #1 PROP PIN (B-3491 PINS). NEITHER OF THESE PINS HAD BEEN REWORKED TO SHORTEN THE THREADED END IAW AD 77-13-17, WHICH REFERENCED MCCAULEY SERVICE BULLETIN #99. DRG INSTLN, THE PINS HAD 'BOTTOMED OUT' IN THEIR RESPECTIVE TAPPED HOLES, WHICH PREVENTED PROPER SEATING. THE #3 PROP BLADE ACTUATING PIN WAS A CORRECT PIN (B-4460) & IT HAD NO PREIMPACT CRACK OR FAILURE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FATIGUE FAILURE OF THE NUMBER TWO PROPELLER BLADE ACTUATING PIN, DUE TO IMPROPER INSTALLATION OF THE PINS AND NON-COMPLIANCE WITH AN AIRWORTHINESS DIRECTIVE (AD 77-13-77).

Findings

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

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) PROPELLER SYSTEM/ACCESSORIES,PITCH CHANGE MECH - FATIGUE
2. (C) MAINTENANCE,COMPLIANCE WITH AD - NOT FOLLOWED - OTHER MAINTENANCE PERSONNEL

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: NOSE DOWN

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. TERRAIN CONDITION - ROUGH/UNEVEN
4. TERRAIN CONDITION - SOFT

Factual Information

Pilot Information

Certificate:	Private	Age:	65, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	January 25, 1990
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	700 hours (Total, all aircraft), 200 hours (Total, this make and model), 700 hours (Pilot In Command, all aircraft), 33 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N4626F
Model/Series:	P206 P206	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	P206-0226
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-520-A
Registered Owner:	MAX KRUMPE	Rated Power:	285 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	SEL

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	10 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	-9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	HAGERSTOWN , MD (HGR)	Type of Flight Plan Filed:	None
Destination:	(CLE)	Type of Clearance:	VFR
Departure Time:	09:10 Local	Type of Airspace:	Class E

Airport Information

Airport:	CLEVELAND-HOPKINS INTL	Runway Surface Type:	Asphalt
Airport Elevation:		Runway Surface Condition:	Snow
Runway Used:	23R	IFR Approach:	None
Runway Length/Width:	7095 ft / 150 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	2 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Minor	Latitude, Longitude:	41.490219,-81.66938(est)

Administrative Information

Investigator In Charge (IIC): Twine jr., Chauncey

Additional Participating Persons:

Original Publish Date: June 2, 1992

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=36868>

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