



Aviation Investigation Final Report

Location: BINGHAMTON, New York Incident Number: NYC86IA231

Date & Time: September 9, 1986, 07:11 Local Registration: N90349

Aircraft: PIPER PA-60-600 Aircraft Damage: Minor

Defining Event: 1 None

Flight Conducted Under: Part 135: Air taxi & commuter - Non-scheduled

Analysis

THE PLT STATED THAT AFTER LEVELING OFF AT 9000 FT MSL. HE HEARD A POP FOLLOWED BY AN EXPLOSION IN THE LEFT ENG. THE ENTIRE LEFT SIDE OF THE UPPER COWLING WAS PROTRUDING INTO THE AIRSTREAM WHICH CAUSED THE AIRCRAFT TO ROLL TO THE RIGHT. THE PILOT HAD TO USE FULL RIGHT RUDDER & HALF LEFT AILERON DEFLECTION TO MAINTAIN CONTROL. UNABLE TO MAINTAIN ALT AT BLUE LINE, AN EMERGENCY WAS DECLARED & RADAR VECTORS REQUESTED TO NEAREST AIRPORT. WHEN THE AIRPORT PERIMETER WAS CROSSED THE ACFT WAS LESS THAN 10 FT ABOVE THE GROUND. PILOT ELECTED TO LAND GEAR UP ON THE GRASS BETWEEN THE RUNWAY & TAXIWAY. INVESTIGATION REVEALED THAT THE EXPLOSION WAS CAUSED BY A FAILED CYLINDER.

Probable Cause and Findings

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

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF

Phase of Operation: CRUISE - NORMAL

Findings

1. (C) ENGINE ASSEMBLY - FAILURE, PARTIAL

2. (C) ENGINE ASSEMBLY, CYLINDER - SEPARATION

Occurrence #2: ALTITUDE DEVIATION, UNCONTROLLED

Phase of Operation: DESCENT - EMERGENCY

Findings

3. AIRCRAFT PERFORMANCE - ASYMMETRICAL

4. (F) AIRSPEED(VMC) - ATTEMPTED - PILOT IN COMMAND

Occurrence #3: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. WHEELS UP LANDING - INTENTIONAL - PILOT IN COMMAND

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Factual Information

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	34,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	December 3, 1985
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3718 hours (Total, all aircraft), 1497 hours (Total, this make and model), 3568 hours (Pilot In Command, all aircraft), 250 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N90349
Model/Series:	PA-60-600 PA-60-600	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	60-0202090
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	August 14, 1986 AAIP	Certified Max Gross Wt.:	5500 lbs
Time Since Last Inspection:	60 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	9604 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	10-540-K1F5
Registered Owner:	MASTERS & SUMPTER	Rated Power:	290 Horsepower
Operator:	AIR CONTINENTAL,INC.	Operating Certificate(s) Held:	Commuter air carrier (135)
Operator Does Business As:		Operator Designator Code:	11

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	BGM ,1683 ft msl	Distance from Accident Site:	
Observation Time:	11:04 Local	Direction from Accident Site:	70°
Lowest Cloud Condition:	Scattered / 25000 ft AGL	Visibility	25 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	8°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	BUFFALO , NY (BUF)	Type of Flight Plan Filed:	IFR
Destination:	TETERBORO , NJ (TEB)	Type of Clearance:	IFR
Departure Time:	06:10 Local	Type of Airspace:	Class E

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Airport Information

Airport:	EDWIN A. LINK FIELD BGM	Runway Surface Type:	Grass/turf
Airport Elevation:	1630 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Minor
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	42.109119,-75.959167(est)

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Administrative Information

Investigator In Charge (IIC):

Additional Participating
Persons:

Original Publish Date:

Last Revision Date:

Investigation Class:

Class

Note:

Investigation Docket:

https://data.ntsb.gov/Docket?ProjectID=30240

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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