



National Transportation Safety Board Aviation Accident Final Report

Location:	ABERDEEN, MD	Accident Number:	BFO86LA040
Date & Time:	07/16/1986, 0130 EDT	Registration:	N3933Q
Aircraft:	CESSNA 172L	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Public Aircraft

Analysis

THE PLT STATED THAT THE ENG BEGAN TO RUN ROUGH DURING FLT, THEN ALL AT ONCE, IT STARTED VIBRATING EXCESSIVELY. HE ATTEMPTED TO LAND AT THE PHILLIPS AAF, BUT THE ARPT WAS CLOSED & THE RWY LIGHTS WERE NOT ILLUMINATED. BY THE TIME HE SAW THE RWY, THE ACFT WAS NOT IN A POSITION TO LAND, SO HE TRIED MANEUVERING TOWARD AN OPEN AREA ON THE ARPT. HOWEVER, THE ACFT COLLIDED WITH TREES & CRASHED. AN EXAM OF THE ENG REVEALED THAT THE #3 EXHAUST VALVE PUSHROD WAS BENT & THE #1 INTAKE VALVE WAS BROKEN. AFTER THIS ACCIDENT, THE OWNER/OPERATOR (CAP) STOPPED USING PHILLIPS XC2 ENG OIL DUE TO POSSIBLE PROBLEMS ASSOCIATED WITH ITS USE WHICH INCLUDED STICKING VALVES.

Probable Cause and Findings

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

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) ENGINE ASSEMBLY,PUSH ROD - BENT
2. (C) ENGINE ASSEMBLY,VALVE,INTAKE - FAILURE,TOTAL

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

3. (F) LIGHT CONDITION - DARK NIGHT
4. AIRPORT/FACILITIES - NOT OPERATING
5. (F) OBJECT - TREE(S)

Factual Information

Pilot Information

Certificate:	Commercial	Age:	48, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	11/26/1985
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	95 hours (Total, this make and model), 129 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N3933Q
Model/Series:	172L 172L	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	60033
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:	11/15/1985, Annual	Certified Max Gross Wt.:	2150 lbs
Time Since Last Inspection:	151 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3464 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-360-A1A
Registered Owner:	CIVIL AIR PATROL	Rated Power:	180 hp
Operator:	CIVIL AIR PATROL-MARYLAND WING	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	BAL, 146 ft msl	Distance from Accident Site:	29 Nautical Miles
Observation Time:	0100 EDT	Direction from Accident Site:	245°
Lowest Cloud Condition:	Scattered / 10000 ft agl	Visibility	12 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	22° C / 19° C
Precipitation and Obscuration:			
Departure Point:	FT MEADE, MD (FME)	Type of Flight Plan Filed:	VFR
Destination:		Type of Clearance:	VFR
Departure Time:	0045 EDT	Type of Airspace:	Class E

Airport Information

Airport:	PHILLIPS AAF (APG)	Runway Surface Type:	Asphalt
Airport Elevation:	57 ft	Runway Surface Condition:	
Runway Used:	22	IFR Approach:	None
Runway Length/Width:	8000 ft / 200 ft	VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	AL DICKINSON	Report Date:	
Additional Participating Persons:	SCOTT STRICKLAND		
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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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](#).