



National Transportation Safety Board Aviation Accident Final Report

Location:	HYANNIS, MA	Accident Number:	NYC87FA121
Date & Time:	04/12/1987, 1115 EDT	Registration:	N87PB
Aircraft:	CESSNA 402C	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	9 Minor

Flight Conducted Under: Part 135: Air Taxi & Commuter - Scheduled

Analysis

SHORTLY AFTER THE INITIAL PWR REDUCTION DRG TKOF, THE PLT NOTED A PARTIAL LOSS OF PWR IN THE RGT ENG. HE SAID HE 'WENT TO FULL POWER ON BOTH ENGINES' & NOTED AN 'EXTREMELY HIGH' FUEL FLOW INDCN TO THE RGT ENG. HE SAID, 'THINKING THAT THE ENGINE WAS FLOODING, I PLACED THE BOOST PUMP SWITCH FROM HIGH TO OFF TO POSSIBLY ELIMINATE THE PROBLEM WITH NO RESULT. I THEN PLACED THE PUMP BACK TO HIGH AND TRIED TO DECREASE THE FUEL FLOW BY LEANING THE MIXTURE. THIS ALSO DID NOT SEEM TO ELIMINATE THE PROBLEM.' WHILE TROUBLESHOOTING THE PRBLM, HE TURNED TO A DOWNWIND & STAYED IN THE TRAFFIC PATTERN, BUT COULD NOT MAINT ALT. SUBSEQUENTLY, A WHEELS-UP LNDG WAS MADE IN AN AREA OF SMALL TREES APRX 1/2 MI BFR REACHING RWY 24. AN EXAM OF THE RGT ENG REVEALED THE SPARK PLUGS WERE WET WITH FUEL & BLACK WITH SOOT. ALSO, ITS #5 FUEL NOZZLE HAD BEEN CROSS-THREADED & WAS KNOCKED OUT OF ITS HOLE DRG IMPACT. DRG AN INITIAL TEST, THE RGT FUEL PRESSURE SENSING SW DID NOT SENSE OPERG PRESSURE (OVR 6 PSI); THIS WOULD HAVE RESULTED IN A HI BOOST/FUEL FLOW COND. LATER, THE SW TESTED OK.

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: TAKEOFF - INITIAL CLIMB

Findings

1. (F) FUEL SYSTEM - PRESSURE EXCESSIVE
2. (F) POWERPLANT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND

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

Findings

3. (C) EMERGENCY PROCEDURE - IMPROPER - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

4. (F) TERRAIN CONDITION - HIGH VEGETATION

Factual Information

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	33, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	02/20/1987
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	2629 hours (Total, all aircraft), 550 hours (Total, this make and model), 54 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N87PB
Model/Series:	402C 402C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	402C0639
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	04/08/1987, Continuous Airworthiness	Certified Max Gross Wt.:	6850 lbs
Time Since Last Inspection:	22 Hours	Engines:	2 Reciprocating
Airframe Total Time:	6032 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TSIO-520-VB
Registered Owner:	PROVINCETOWN BOSTON AIR	Rated Power:	325 hp
Operator:	PROVINCETOWN BOSTON AIR	Operating Certificate(s) Held:	Commuter Air Carrier (135); On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	PBAA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	HYA, 45 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1100 EDT	Direction from Accident Site:	240°
Lowest Cloud Condition:	Scattered / 12000 ft agl	Visibility	11 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	12 knots / 17 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	19° C / 8° C
Precipitation and Obscuration:			
Departure Point:	(HYA)	Type of Flight Plan Filed:	Company VFR
Destination:	NANTUCKET, MA (ACK)	Type of Clearance:	
Departure Time:	1110 EDT	Type of Airspace:	Class D

Airport Information

Airport:	BARNSTABLE MUNI (HYA)	Runway Surface Type:	Asphalt
Airport Elevation:	52 ft	Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	None
Runway Length/Width:	5430 ft / 150 ft	VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:	8 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	9 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	CLIFFORD DANHAUER	Report Date:	06/07/1989
Additional Participating Persons:	JOHN MAHONEY; BOSTON, MA KEVIN MCLAUGHLIN; BEDFORD, MA ALAN J YURMAN; CLIFTON, NJ TERRY SPATH; WICHITA, KS		
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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