National Transportation Safety Board
Aviation Accident Final Report

Location:	OAK GROVE, PA	**Accident Number:**	MIA89MA023
Date & Time:	11/02/1988, 1013 EST	**Registration:**	N44
Aircraft:	ROCKWELL 1121A	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	3 Fatal
Flight Conducted Under:	Part 91: General Aviation -		

Analysis

ACFT ENTERED AN AREA OF FCST MOD ICING. ICE DETECTION SYS HAD BEEN INTRMTLY INOP. THE ACFT ENTERED HOLDING IN ICING CONDWHILE CKG FLT INSP EQUIP. EVIDENCE INDICATED CREW NOTED ICE ACCRETION, ACTIVATED SURFACE DE-ICE SYS, ICE BROKE LOOSE ANDENTERED ENG INTAKES. BOTH ENGS FLAMED OUT. DRG EMERG DESCENT CREW INIT RE-STARTS, BUT NEITHER ENG WOULD SUSTAIN PWR. CREW RQSTD VECTORS TO MORE DISTANT AIRPORT. BOTH PLTS WERE SEEN DRINKING PREV NIGHT. C/P HAD RECENTLY LOST DRIVERS LICENSE FOR DUI. CAPT HAD DECIDED TO RETIRE THAT DAY. C/P HAD WORKED IN FLT OPS 3 DAYS IN 8 WKS AND HAD LMTD TRNG IN FLTINSPECTION. BOTH PLTS HAD PERSONAL STRESSES WHICH MAY HAVE INFLUENCED PERFORMANCE. CAPT'S CONTAMINATED THORACIC BLOOD REVEALED 0.057% ALCOHOL. PUTRIFICATION WOULD ACCT FOR PART OF ALCOHOL LEVEL. C/P HAD TRACE ALCOHOL IN URINE ONLY. BOTH ENGS SHOWED COMPRESSOR FOD CONSISTENT WITH ICE INGESTION. NO OTHER ACFT SYS OR ENG MALFUNCTION FOUND.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FAILURE OF THE PILOT IN COMMAND TO OBSERVE THE RAPID ACCRETION OF ICE ON THE AIRPLANE DUE TO HIS ATTENTION BEING DIVERTED.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: MANEUVERING - HOLDING(IFR)

Findings
1. (F) WEATHER CONDITION - ICING CONDITIONS
2. (C) ICE/FROST REMOVAL FROM AIRCRAFT - DELAYED - PILOT IN COMMAND
3. (F) INATTENTIVE - PILOT IN COMMAND
4. (F) PSYCHOLOGICAL CONDITION - PILOT IN COMMAND
5. (F) PSYCHOLOGICAL CONDITION - COPILOT/SECOND PILOT
6. (F) INADEQUATE INITIAL TRAINING - COPILOT/SECOND PILOT
7. INADEQUATE SURVEILLANCE,INSUFFICIENT STAFF - FAA(ORGANIZATION)

Occurrence #2: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: MANEUVERING - HOLDING(IFR)

Findings
8. (F) FUSELAGE - ICE
9. ICE/FROST REMOVAL FROM AIRCRAFT - PERFORMED
10. (C) COMPRESSOR ASSEMBLY,BLADE - FOREIGN OBJECT DAMAGE

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - EMERGENCY

Findings
11. OBJECT - TREE(S)

Factual Information

Pilot Information

Certificate:	Airline Transport; Commercial	**Age:**	64, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	**Last Medical Exam:**	07/18/1988
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	16957 hours (Total, all aircraft), 4428 hours (Total, this make and model), 13000 hours (Pilot In Command, all aircraft), 94 hours (Last 90 days, all aircraft), 24 hours (Last 30 days, all aircraft), 10 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	ROCKWELL	**Registration:**	N44
Model/Series:	1121A 1121A	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Transport	**Serial Number:**	130
Landing Gear Type:	Retractable - Tricycle	**Seats:**	3
Date/Type of Last Inspection:	09/26/1988, Continuous Airworthiness	**Certified Max Gross Wt.:**	18500 lbs
Time Since Last Inspection:	121 Hours	**Engines:**	2 Turbo Jet
Airframe Total Time:	10519 Hours	**Engine Manufacturer:**	GE
ELT:	Installed, not activated	**Engine Model/Series:**	CJ-610-5
Registered Owner:	FEDERAL AVIATION ADMIN.	**Rated Power:**	2950 hp
Operator:	FEDERAL AVIATION ADMIN.	**Air Carrier Operating Certificate:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	LBE, 1185 ft msl	**Observation Time:**	1012 EST
Distance from Accident Site:	7 Nautical Miles	**Direction from Accident Site:**	68°
Lowest Cloud Condition:	Unknown / 0 ft agl	**Temperature/Dew Point:**	4°C / 2°C
Lowest Ceiling:	Broken / 800 ft agl	**Visibility**	6 Miles
Wind Speed/Gusts, Direction:	10 knots, 250°	**Visibility (RVR):**	0 ft
Altimeter Setting:	29 inches Hg	**Visibility (RVV):**	0 Miles
Precipitation and Obscuration:			
Departure Point:	PITTSBURGH, PA (AGC)	**Type of Flight Plan Filed:**	IFR
Destination:	LATROBE, PA (LBE)	**Type of Clearance:**	IFR
Departure Time:	0942 EST	**Type of Airspace:**	

Airport Information

Airport:	WESTMORELAND CO. (LBE)	**Runway Surface Type:**	Asphalt
Airport Elevation:	1185 ft	**Runway Surface Condition:**	Wet
Runway Used:	23	**IFR Approach:**	ILS
Runway Length/Width:	5501 ft / 100 ft	**VFR Approach/Landing:**	

Wreckage and Impact Information

Crew Injuries:	3 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	N/A	**Aircraft Fire:**	On-Ground
Ground Injuries:	N/A	**Aircraft Explosion:**	On-Ground
Total Injuries:	3 Fatal	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	ANDREW A ALSTON	**Adopted Date:**	01/16/1990
Additional Participating Persons:			
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.ntsb.gov/pubdms/.		

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