

National Transportation Safety Board Aviation Accident Final Report

Location:	BULVERDE, TX	Accident Number:	FTW87FA208
Date & Time:	09/04/1987, 2245 CDT	Registration:	N807LA
Aircraft:	CESSNA 208	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

AFTER LEVELING AT 5500', THE STANDBY POWER ANNUNCIATOR LIGHT ILLUMINATED, FOLLOWED BY LOSS OF OIL PRESSURE. THE PLT TURNED BACK TOWARD THE ARPT, BUT THERE WAS A PROGRESSIVE LOSS OF ENG POWER & THE PROP WENT TO A FEATHERED PSN. DRG AN EMERG LANDING AT NIGHT, THE ACFT HIT A POWER LINE & TREES, THEN CRASHED. DRG AN ENG TEARDOWN, DISASSEMBLY OF THE REDUCTION GEARBOX SCAVENGE PUMP REVEALED THAT A RETAINING NUT & TANG WASHER (W/I THE SCAVENGE PUMP) HAD BACKED OFF & LODGED BTN THE SPUR GEARS, WHICH RESULTED IN A SHEARED SCAVENGE PUMP DRIVE SHAFT. IN TURN, THIS RESULTED IN THE LOSS OF OIL PRESSURE & ALLOWED THE PROP TO FEATHER.

Probable Cause and Findings

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

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION Phase of Operation: CRUISE - NORMAL

Findings

1. (C) LUBRICATING SYSTEM, OIL SCAVENGE PUMP - LOOSE

2. (C) LUBRICATING SYSTEM, OIL SCAVENGE PUMP - JAMMED

3. (C) LUBRICATING SYSTEM, OIL SCAVENGE PUMP - FAILURE, TOTAL

4. INITIATED

Occurrence #2: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF Phase of Operation: CRUISE

Findings 5. (C) FLUID,OIL - STARVATION

Occurrence #3: FORCED LANDING Phase of Operation: DESCENT - EMERGENCY

Occurrence #4: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: LANDING

Findings 6. (F) LIGHT CONDITION - NIGHT 7. (F) OBJECT - WIRE,TRANSMISSION 8. (F) OBJECT - TREE(S)

Occurrence #5: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	, 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:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim.	Last Medical Exam:	06/29/1987
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	3100 hours (Total, all aircraft), 750 hours (Total, this make and model), 2850 hours (Pilot In Command, all aircraft), 250 hours (Last 90 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N807LA
Model/Series:	208 208	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	208A20800026
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	08/17/1987, AAIP	Certified Max Gross Wt.:	8000 lbs
Time Since Last Inspection:	47 Hours	Engines:	1 Turbo Prop
Airframe Total Time:	222 Hours	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	PT6A-114
Registered Owner:	MARTINAIR INC.	Rated Power:	632 hp
Operator:	MARTINAIR	Air Carrier Operating Certificate:	On-demand Air Taxi (135)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Bright
Observation Facility, Elevation:	SAT, 809 ft msl	Observation Time:	2155
Distance from Accident Site:	15 Nautical Miles	Direction from Accident Site:	170°
Lowest Cloud Condition:	Clear / 0 ft agl	Temperature/Dew Point:	28°C / 15°C
Lowest Ceiling:	None / 0 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	5 knots, 130 $^{\circ}$	Visibility (RVR):	0 ft
Altimeter Setting:	29 inches Hg	Visibility (RVV):	0 Miles
Precipitation and Obscuration:			
Departure Point:	SAN ANTONIO, TX (SAT)	Type of Flight Plan Filed:	None
Destination:	DALLAS, TX (DAL)	Type of Clearance:	None
Departure Time:	2230 CDT	Type of Airspace:	TRSA

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	BOB DICKENS	Adopted Date: 01/25/1989
Additional Participating Persons:	DESIDERIO AGUILAR; SAN ANTONIO, TX DAVID C TOWNSEND; DALLAS, TX BOB JOURNAGAN; 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 <u>pubing@ntsb.gov</u> , or at 800-877-6799. Dockets released after this date are available at <u>http://dms.ntsb.gov/pubdms/</u> .	

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