



National Transportation Safety Board Aviation Accident Final Report

Location:	COATSVILLE, PA	Accident Number:	NYC86LA081
Date & Time:	02/27/1986, 2230 EST	Registration:	N821LG
Aircraft:	DASSAULT DA-10	Aircraft Damage:	Substantial
Defining Event:		Injuries:	5 Minor, 1 None

Flight Conducted Under: Part 91: General Aviation - Executive/Corporate

Analysis

AS THE ACFT WAS CLIMBING THRU 19,000' AT NGT, THE #2 GENERATOR (GEN) LGT CAME ON. THE FLT CREW NOTED THERE WAS NO OUTPUTFM THE #2 GEN & IT WOULD NOT RESET. THEY THEN CHECKED THE #1 GEN VOLTAGE & NOTED IT WAS 14 TO 15 VOLTS. THE CREW REDUCEDTHE ELEC LOAD; HOWEVER, ABOUT 5 MIN LATER, THE BATTERIES BCM DISCHARGED & THERE WAS A TOTAL LOSS OF ELEC PWR. USING A FLASHLIGHT, THE CREW DIVERTED TO THE CHESTER COUNTY ARPT WHICH HAD A 4600' RWY. THE GEAR WAS EXTDD WITH THE EMERG SYS. THE ELEV TRIM WAS INOP, SO BOTH PLTS APPLIED BACK PRESSURE ON THE YOKE TO OVERCOME THE NOSE DWN TENDENCY. AFTER LNDG ABOUT 1/4 OF THE WAY DWN THE RWY, THE CREW TRIED TO USE THE THRUST REVERSERS, BUT THE REVERSERS WERE INOP. SUBSEQUENTLY,THE ACFT CONTD OFF THE SIDE & BEYOND THE END OF THE RWY, HIT A WOODEN BEAM & A SNOWBANK, THEN CAME TO REST IN A DITCH. AN INV REVEALED A SHAFT FAILURE OF THE #2 GEN (STARTER/GEN) & WORN BRUSHES IN THE #1 GEN. WITH TOTAL ELEC FAILURE, THE FLWG WERE ALSO INOP: WING FLAPS, ANTI-SKID, CAPT'S AIRSPEED IND & ALTIMETER, NOSEWHEEL STEERING, COCKPIT LIGHTING.

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

Findings

1. (F) MAINTENANCE - INADEQUATE - OTHER MAINTENANCE PERSONNEL
 2. (C) ELECTRICAL SYSTEM, GENERATOR - WORN
 3. (C) ELECTRICAL SYSTEM, GENERATOR - FAILURE, TOTAL
 4. ELECTRICAL SYSTEM, BATTERY - EXHAUSTION
 5. ELECTRICAL SYSTEM - INOPERATIVE
 6. COMM/NAV EQUIPMENT - INOPERATIVE
 7. FLT CONTROL SYST, STABILATOR TRIM - INOPERATIVE
 8. FLIGHT CONTROL, FLAP - INOPERATIVE
 9. LANDING GEAR, STEERING SYSTEM - INOPERATIVE
 10. LANDING GEAR, ANTI-SKID BRAKE SYSTEM - INOPERATIVE
 11. THRUST REVERSER - INOPERATIVE
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Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

12. (F) LIGHT CONDITION - DARK NIGHT
 13. PERFORMED
 14. PRECAUTIONARY LANDING - PERFORMED
 15. (F) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
 16. GROUND LOOP/SWERVE - UNCONTROLLED
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Occurrence #3: OVERRUN
Phase of Operation: LANDING - ROLL

Findings

17. (F) POWERPLANT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND
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Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Occurrence #5: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	39, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	10/14/1985
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	8260 hours (Total, all aircraft), 963 hours (Total, this make and model), 8021 hours (Pilot In Command, all aircraft), 89 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	DASSAULT	Registration:	N821LG
Model/Series:	DA-10 DA-10	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	170
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	01/10/1986, Continuous Airworthiness	Certified Max Gross Wt.:	18300 lbs
Time Since Last Inspection:	46 Hours	Engines:	2 Turbo Fan
Airframe Total Time:	1447 Hours	Engine Manufacturer:	AIRESEARCH
ELT:	Not installed	Engine Model/Series:	TFE-731-2-1C
Registered Owner:	SENECA LIVESTOCK CO.	Rated Power:	3230 lbs
Operator:	SENECA LIVESTOCK CO.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	0 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	NEW YORK, NY (JFK)	Type of Flight Plan Filed:	IFR
Destination:	LEXINGTON, KY (LEX)	Type of Clearance:	IFR
Departure Time:	2200 EST	Type of Airspace:	Class E

Airport Information

Airport:	CHESTER COUNTY (40N)	Runway Surface Type:	Asphalt
Airport Elevation:	662 ft	Runway Surface Condition:	
Runway Used:	29	IFR Approach:	None
Runway Length/Width:	4600 ft / 100 ft	VFR Approach/Landing:	Precautionary Landing

Wreckage and Impact Information

Crew Injuries:	1 Minor, 1 None	Aircraft Damage:	Substantial
Passenger Injuries:	4 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 Minor, 1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	CHAUNCEY D TWINE	Report Date:	06/27/1989
Additional Participating Persons:			
Publish Date:			
Investigation Docket:	NTSB accident and incident docket 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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