



# **Aviation Investigation Final Report**

Location:	BERMUDA DUNES, Cali	ifornia	Accident Number:	LAX82FUG14
Date & Time:	July 15, 1982, 05:35 Lo	cal	<b>Registration:</b>	N7115L
Aircraft:	GRUMMAN	AA-5	Aircraft Damage:	Substantial
Defining Event:			Injuries:	2 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal			

# Analysis

IMMEDIATELY AFTER TAKEOFF THE ENG LOST POWER & THE ACFT WAS UNABLE TO MAINTAIN LEVEL FLT. THE ACFT LANDED IN SAND DUNES AND FLIPPED OVER. DURING A SUBSEQUENT ENG RUN IT WAS NOTED THAT THE ENG RAN NORMALLY AT LOW POWER SETTINGS BUT AT TAKEOFF POWER SETTINGS IT DEVELOPED AN APPARENT IGNITION PROBLEM IN THAT THE ENG MISFIRED & SURGED. INSPECTION REVEALED THAT THE RIGHT MAGNETO WAS NOT DEVELOPING SUFFICIENT VOLTAGE OUTPUT. THE RECOMMENDED SERVICE LIFE OF THE MAGNETO IS 900 HOURS & IT APPEARED THIS MAGNETO WAS IN SERVICE FOR 1897 HOURS.

## **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. (C) IGNITION SYSTEM, MAGNETO ERRATIC
- 2. (C) IGNITION SYSTEM, MAGNETO FAILURE, PARTIAL
- 3. (C) IGNITION SYSTEM, MAGNETO OUTPUT LOW
- 4. (F) MAINTENANCE, REPLACEMENT NOT PERFORMED COMPANY MAINTENANCE PERSONNEL

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Occurrence #2: FORCED LANDING Phase of Operation: LANDING - FLARE/TOUCHDOWN

Occurrence #3: COMPLETE GEAR COLLAPSED Phase of Operation: LANDING - FLARE/TOUCHDOWN

#### Findings

5. (F) TERRAIN CONDITION - LOOSE GRAVEL/SANDY
6. (F) TERRAIN CONDITION - SOFT
7. LANDING GEAR, MAIN GEAR - OVERLOAD
8. LANDING GEAR, MAIN GEAR - FAILURE, TOTAL
9. LANDING GEAR, NOSE GEAR - OVERLOAD
10. LANDING GEAR, NOSE GEAR - FAILURE, TOTAL

Occurrence #4: NOSE OVER Phase of Operation: LANDING - FLARE/TOUCHDOWN

# **Factual Information**

### **Pilot Information**

T not information			
Certificate:	Private	Age:	46,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	June 28, 1982
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:		urs (Total, this make and model), 376 ast 90 days, all aircraft), 2 hours (Last	

## Aircraft and Owner/Operator Information

Aircraft Make:	GRUMMAN	Registration:	N7115L
Model/Series:	AA-5 AA-5	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	L3459327A
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1898 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed	Engine Model/Series:	0-320-E2G
Registered Owner:	J. L. DAVENPORT	Rated Power:	160 Horsepower
Operator:	J. L. DAVENPORT	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dawn
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	20 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	71°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BERMUDA DUNES, CA	Type of Flight Plan Filed:	None
Destination:	SHERIDAN , WY	Type of Clearance:	None
Departure Time:	05:33 Local	Type of Airspace:	

# **Airport Information**

Airport:	BERMUDA DUNES	Runway Surface Type:	Asphalt
Airport Elevation:	0 ft msl	Runway Surface Condition:	Dry
Runway Used:	29	IFR Approach:	None
Runway Length/Width:	4030 ft / 150 ft	VFR Approach/Landing:	None

# Wreckage and Impact Information

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

#### Administrative Information

Investigator In Charge (IIC):	
Additional Participating Persons:	
Original Publish Date:	July 15, 1983
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=69932

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available here.