



Aviation Investigation Final Report

Location:	SARASOTA, Florida	Accident Number:	MIA93LA125
Date & Time:	May 20, 1993, 16:18 Local	Registration:	N46937
Aircraft:	HILLER UH-12C	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE COMMERCIAL PILOT WAS IN CRUISE FLIGHT AT ABOUT 400 FEET AGL WHEN HE OBSERVED A SUDDEN DROP IN ENGINE RPM FOLLOWED BY AN INCREASE IN RPM. THE PILOT INITIATED A FORCED LANDING BY ENTERING AN AUTOROTATION. DURING THE DECELERATION THE HELICOPTER COLLIDED WITH POWER LINES AND CRASHED. REVIEW OF THE HELICOPTER LOGBOOKS REVEALED THE CARBURETOR FLOAT ASSEMBLY HAD NOT BEEN CHANGED, AND NUMEROUS SERVICE BULLETIN PROCEDURES PERTAINING TO THE MA 4-5 CARBURETOR HAD NOT BEEN PERFORMED. DISASSEMBLY INSPECTION OF THE CARBURETOR REVEALED THE CARBURETOR WAS CONTAMINATED. SAND WAS PRESENT IN THE CARBURETOR BOWL, THE FUEL INLET ASSEMBLY WAS DIRTY AND THE PUMP PLUNGER ASSEMBLY WAS RUSTY.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT-IN-COMMAND'S IMPROPER APPLICATION OF THE FLIGHT CONTROLS DURING AN AUTOROTATIVE LANDING, RESULTING IN AN IN-FLIGHT COLLISION WITH WIRES AND TERRAIN. CONTRIBUTING TO THE ACCIDENT WAS THE IMPROPER INSPECTION OF THE ENGINE FUEL SYSTEM (CARBURETOR) BY MAINTENANCE PERSONNEL, RESULTING IN A CONTAMINATED CARBURETOR AND A PARTIAL LOSS OF ENGINE POWER WHILE IN CRUISE FLIGHT.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL

Phase of Operation: CRUISE - NORMAL

Findings

1. (F) FUEL SYSTEM,CARBURETOR - CONTAMINATION
2. (F) MAINTENANCE,SERVICE BULLETIN/LETTER - NOT PERFORMED - OTHER MAINTENANCE PERSONNEL
3. (F) MAINTENANCE,INSPECTION - NOT PERFORMED - OTHER MAINTENANCE PERSONNEL

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - EMERGENCY

Findings

4. OBJECT - WIRE,STATIC
5. (C) FLIGHT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Commercial	Age:	46, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	March 8, 1993
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	2068 hours (Total, all aircraft), 158 hours (Total, this make and model), 1099 hours (Pilot In Command, all aircraft), 61 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	HILLER	Registration:	N46937
Model/Series:	UH-12C UH-12C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	862
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	May 10, 1993 100 hour	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:	12 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4308 Hrs	Engine Manufacturer:	FRANKLIN
ELT:	Not installed	Engine Model/Series:	6V335
Registered Owner:	JOCHER, ARTHUR H.	Rated Power:	210 Horsepower
Operator:	JOCHER, ARTHUR H.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SRQ ,28 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	15:47 Local	Direction from Accident Site:	270°
Lowest Cloud Condition:	Scattered / 2000 ft AGL	Visibility	
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	28°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(NONE)	Type of Flight Plan Filed:	None
Destination:	(NONE)	Type of Clearance:	None
Departure Time:	16:00 Local	Type of Airspace:	Class D;Class E

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	27.250808,-82.380973(est)

Administrative Information

Investigator In Charge (IIC):	Smith, Carrol
Additional Participating Persons:	DEBORA CATRON; ORLANDO , FL
Original Publish Date:	December 3, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=33271

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](#).