

Aviation Investigation Final Report

Location: TITUSVILLE, Florida Accident Number: MIA93LA042

Date & Time: January 1, 1993, 18:50 Local Registration: N82542

Aircraft: PIPER PA-32R-301 Aircraft Damage: Substantial

Defining Event: 1 Minor, 1 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

AFTER TAKEOFF FOLLOWING THE THIRD TOUCH & GO LANDING ON RWY 36, DURING THE DOWNWIND LEG WHERE THE FLT WAS ABOUT 1 MILE WEST OF THE DEPARTURE RWY, THE STUDENT ADVISED THE CFI THAT HE SMELLED SOMETHING BURNING & THAT THE ENG WASN'T PRODUCING POWER. THE CFI ADVANCED & RETARDED THE THROTTLE & OBSERVED THAT THE MANIFOLD PRESSURE NEEDLE MOVEMENT FOLLOWED THE THROTTLE MOVEMENT, THEN GAVE CONTROL OF THE ACFT BACK TO THE STUDENT. THE STUDENT AGAIN STATED THAT THE ENG WASN'T PRODUCING POWER & THE CFI TOOK CONTROL, TURNED TO THE EAST TO LAND ON A TAXIWAY, & LANDED HARD SHORT OF THE TAXIWAY. FUEL QUANTITY WAS SUFFICIENT TO SUSTAIN ENG OPERATION & THE FUEL SUPPLY DID NOT CONTAIN CONTAMINANTS. THE ENG WAS STARTED AFTER THE ACCIDENT & OPERATED ONLY TO 1,500 RPM DUE TO DAMAGE TO THE PROPELLER ASSY. THE ENG WAS THEN SENT TO THE MANUFACTURER'S FACILITY OPERATED WITH THE ONLY DISCREPANCY NOTED THAT THE FUEL FLOW AT 80 PPH WAS 9 PPH LEANER THAN SPECIFICATION. NO DETERMINATION COULD BE MADE AS TO THE REASON FOR THE LOSS OF ENG POWER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: LOSS OF ENGINE POWER DURING THE DOWNWIND LEG FOR UNDETERMINED REASONS, POOR IN-FLIGHT PLANNING/DECISION BY THE DUAL STUDENT, AND INADEQUATE SUPERVISION BY THE PILOT-IN-COMMAND (CFI).

Findings

Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: APPROACH - VFR PATTERN - DOWNWIND

Findings

1. (C) IN-FLIGHT PLANNING/DECISION - POOR - DUAL STUDENT 2. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)

3. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Page 2 of 6 MIA93LA042

Factual Information

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	44,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	January 22, 1992
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	2950 hours (Total, all aircraft), 47 hours (Total, this make and model), 960 hours (Pilot In Command, all aircraft), 41 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Page 3 of 6 MIA93LA042

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N82542
Model/Series:	PA-32R-301 PA-32R-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	32R-8213059
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	December 15, 1992 100 hour	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	20 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4323 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-540-K1G5D
Registered Owner:	PATRICK AFB AERO CLUB	Rated Power:	300 Horsepower
Operator:	PATRICK AFB AERO CLUB	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:	Night/dark
Observation Facility, Elevation:	TIX ,35 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	18:50 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Scattered / 20000 ft AGL	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(TIX)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	18:35 Local	Type of Airspace:	Class D

Page 4 of 6 MIA93LA042

Airport Information

Airport:	SPACE CENTER EXECUTIVE TIX	Runway Surface Type:	Asphalt
Airport Elevation:	35 ft msl	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	
Runway Length/Width:	6001 ft / 150 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor, 1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	28.579528,-80.820526(est)

Page 5 of 6 MIA93LA042

Administrative Information

Investigator In Charge (IIC):	Monville, Timothy	
Additional Participating Persons:	DUANE KINCAID; ORLANDO , FL	
Original Publish Date:	February 10, 1994	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=33211	

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.

Page 6 of 6 MIA93LA042