

Aviation Investigation Final Report

Location: Oakland, California Accident Number: WPR14CA391

Date & Time: September 23, 2014, 20:10 Local Registration: N774MF

Aircraft: Piper PA 31T - II Aircraft Damage: Substantial

Defining Event: Landing gear not configured **Injuries:** 4 None

Flight Conducted Under: Part 135: Air taxi & commuter - Non-scheduled - Air Medical (Unspecified)

Analysis

The pilot stated that while on an instrument landing system (ILS) approach for the medical life-flight, he was struggling to keep the airplane on the localizer and glide path. As the airplane descended through 800 to 900 feet above the ground, he broke out of the cloud layer but had difficulty locating the runway in the dark night conditions. During the landing flare he reduced the throttle and as the airplane touched down on the runway surface, he realized the landing gear were retracted; he did not hear any horns. The pilot recalled that when he selected the landing gear, he may have put the handle in neutral rather than keeping his hand on the lever and waiting for the three green lights to illuminate confirming the extended position. He did not follow his normal checklists because of the demands of the ILS approach. He also cited a few stressors in his life that may have contributed to a distraction including a change of airplanes and few ILS approaches performed in the recent six months. The pilot further added that there were no pre impact mechanical malfunctions or failures that would have precluded normal operation. The airplane incurred substantial damage to the lower fuselage and engine mounts.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to extend the landing gear which resulted in a gear-up landing. Contributing to the accident was the pilot's failure to use the checklist and reported stress.

Findings

Personnel issues Stress - Pilot

Personnel issues Use of checklist - Pilot

Aircraft Gear extension and retract sys - Not used/operated

Personnel issues Forgotten action/omission - Pilot

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Factual Information

History of Flight

Landing	Landing gear not configured (Defining event)

Pilot Information

Certificate:	Airline transport	Age:	67
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	July 30, 2014
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	17718 hours (Total, all aircraft), 239 hours (Total, this make and model), 9614 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Piper	Registration:	N774MF
PA 31T - II	Aircraft Category:	Airplane
1979	Amateur Built:	
Normal	Serial Number:	31T-7920035
Tricycle	Seats:	4
100 hour	Certified Max Gross Wt.:	9000 lbs
	Engines:	2 Turbo prop
	Engine Manufacturer:	P&W CANADA
	Engine Model/Series:	PT6A-60A
AMERICAN MEDFLIGHT INC	Rated Power:	1127 Horsepower
AMERICAN MEDFLIGHT INC	Operating Certificate(s) Held:	On-demand air taxi (135)
	PA 31T - II 1979 Normal Tricycle 100 hour AMERICAN MEDFLIGHT INC	PA 31T - II Aircraft Category: 1979 Amateur Built: Serial Number: Tricycle Seats: 100 hour Certified Max Gross Wt.: Engines: Engine Manufacturer: Engine Model/Series: AMERICAN MEDFLIGHT INC AMERICAN MEDFLIGHT INC Operating Certificate(s)

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:	Broken / 1000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Reno, NV (KRNO)	Type of Flight Plan Filed:	IFR
Destination:	Oakland, CA (OAK)	Type of Clearance:	IFR
Departure Time:	18:55 Local	Type of Airspace:	

Airport Information

Airport:	METROPOLITAN OAKLAND INTL OAK	Runway Surface Type:	Asphalt
Airport Elevation:	9 ft msl	Runway Surface Condition:	Dry
Runway Used:	28R	IFR Approach:	ILS
Runway Length/Width:	5458 ft / 150 ft	VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	3 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	37.721389,-122.221107(est)

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Administrative Information

Investigator In Charge (IIC):	Keliher, Zoe
Additional Participating Persons:	Justin Louw; Federal Aviation Administration; Oakland, CA
Original Publish Date:	December 15, 2014
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=90159

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.

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