



Aviation Investigation Final Report

Location:	Terrell, North Carolina	Accident Number:	ERA21LA114
Date & Time:	January 23, 2021, 14:30 Local	Registration:	N480F
Aircraft:	Aviat A1	Aircraft Damage:	Substantial
Defining Event:	Nose over/nose down	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was performing a repositioning flight following the completion of an annual inspection. After departing from a runway in his amphibious airplane, he observed a large, open area on a nearby lake and decided to perform a touch-and-go landing. Upon touchdown, the airplane flipped over and came to rest inverted, resulting in substantial damage to the fuselage and wings. Due to his injuries, the pilot had no recollection of the accident. An inspector with the Federal Aviation Administration reported that, during wreckage recovery from the lake, all four landing gear wheels were in the extended positions, and the landing gear handle was in the “Down Land” position. He also noted that the pilot tube was covered in black electrical tape, blocking airflow through the tube. A pitot/static discrepancy was found during the annual inspection and the repair was deferred. The airplane was equipped with a backup landing gear position advisory system that would provide an audible message confirming the position of the gear prior to landing; however, the audible component would not work properly if the pilot tube was obstructed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot’s failure to retract the landing gear on the amphibious airplane prior to a water landing, resulting in a nose over and structural damage to the airframe. The mechanic’s failure to remove electrical tape from the pitot tube, the pilot’s inadequate preflight inspection, and the pilot’s failure to visually confirm the landing gear position prior to touchdown were all factors in the accident.

Findings

Aircraft	Landing gear selector - Incorrect use/operation
Personnel issues	Scheduled/routine maintenance - Maintenance personnel
Personnel issues	Preflight inspection - Pilot
Personnel issues	Use of checklist - Pilot

Factual Information

History of Flight

Prior to flight	Aircraft maintenance event
Landing-flare/touchdown	Abnormal runway contact
Landing-flare/touchdown	Nose over/nose down (Defining event)

Pilot Information

Certificate:	Airline transport	Age:	68, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	May 22, 2019
Occupational Pilot:	No	Last Flight Review or Equivalent:	December 28, 2019
Flight Time:	25000 hours (Total, all aircraft), 75 hours (Total, this make and model), 20000 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Aviat	Registration:	N480F
Model/Series:	A1 B	Aircraft Category:	Airplane
Year of Manufacture:	2007	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2357
Landing Gear Type:	Amphibian	Seats:	2
Date/Type of Last Inspection:	January 22, 2021 Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	420 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-360-A1P
Registered Owner:	On file	Rated Power:	180
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SVH,965 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	15:35 Local	Direction from Accident Site:	350°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.18 inches Hg	Temperature/Dew Point:	9°C / -15°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Mooreville, NC (14A)	Type of Flight Plan Filed:	None
Destination:	Terrell, NC	Type of Clearance:	VFR flight following
Departure Time:	14:25 Local	Type of Airspace:	Class G

Airport Information

Airport:	Lake NONE	Runway Surface Type:	
Airport Elevation:	760 ft msl	Runway Surface Condition:	Water-calm
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Touch and go

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	35.6238,-80.9305(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Ralph
Additional Participating Persons:	Eric Newsome; FAA/FSDO; Charlotte, NC
Original Publish Date:	August 20, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=102560

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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](#).