



Aviation Investigation Final Report

Location:	McAllen, Texas	Accident Number:	GAA16CA328
Date & Time:	June 17, 2016, 18:45 Local	Registration:	N4035W
Aircraft:	Airbus AS350	Aircraft Damage:	Substantial
Defining Event:	Tailstrike	Injuries:	2 None
Flight Conducted Under:	Public aircraft		

Analysis

The helicopter pilot reported that during the engine run-up sequence while on a movable helicopter pad attached to a tug, he noticed that the right rear door was not secure. The pilot unhooked his shoulder harness to reach back to secure the door. While attempting to reach the door, the pilot reported that he inadvertently applied right tail rotor pedal, which caused the helicopter to spin to the right multiple times. During the rotation the helicopter departed the movable pad, impacted the tug, and came to rest in an upright position on the ground. The helicopter sustained substantial damage to the vertical stabilizer.

The pilot reported there were no preimpact mechanical failures or malfunctions with the airframe or engine that would have precluded normal operation.

Probable Cause and Findings

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

The pilot's inadvertent input of the right tail rotor pedal, which resulted in a loss of directional control and an impact with service equipment.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Directional control - Not attained/maintained
Personnel issues	Preflight inspection - Pilot
Environmental issues	Ground vehicle - Contributed to outcome

Factual Information

History of Flight

Takeoff	Miscellaneous/other
Takeoff	Loss of control on ground
Takeoff	Tailstrike (Defining event)

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	34, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	3-point
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Instrument airplane; Instrument helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	December 3, 2015
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 7134 hours (Total, all aircraft), 478 hours (Total, this make and model), 4973 hours (Pilot In Command, all aircraft), 218 hours (Last 90 days, all aircraft), 87 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:		Age:	
Airplane Rating(s):		Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	Unknown
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Airbus	Registration:	N4035W
Model/Series:	AS350 B2	Aircraft Category:	Helicopter
Year of Manufacture:	1996	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2912
Landing Gear Type:	Skid	Seats:	6
Date/Type of Last Inspection:	April 13, 2016 Continuous airworthiness	Certified Max Gross Wt.:	4961 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:	10465.6 Hrs at time of accident	Engine Manufacturer:	TURBOMECA
ELT:	C126 installed, not activated	Engine Model/Series:	ARRIEL 1D1
Registered Owner:	US DEPARTMENT OF HOMELAND SECURITY	Rated Power:	712 Horsepower
Operator:	US DEPARTMENT OF HOMELAND SECURITY	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KMFE, 100 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	23:53 Local	Direction from Accident Site:	301°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.82 inches Hg	Temperature/Dew Point:	36°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	McAllen, TX (MFE)	Type of Flight Plan Filed:	None
Destination:	McAllen, TX (MFE)	Type of Clearance:	VFR
Departure Time:	17:46 Local	Type of Airspace:	Class D

Airport Information

Airport:	MC ALLEN MILLER INTL MFE	Runway Surface Type:	Metal/wood
Airport Elevation:	107 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

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:	26.176944,-98.241111(est)

Administrative Information

Investigator In Charge (IIC):	Swenson, Eric
Additional Participating Persons:	Paul Quinn; US Customs and Border Protection; McAllen, TX Thierry Loo; Bureau d'Enquêtes et d'Analyses Seth Buttner; Airbus Helicopters (Advisor) ; Grand Prairie , TX
Original Publish Date:	July 25, 2016
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=93444

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