



# Aviation Investigation Final Report

<b>Location:</b>	Deer Valley, Arizona	<b>Accident Number:</b>	WPR22LA154
<b>Date &amp; Time:</b>	April 16, 2022, 22:26 Local	<b>Registration:</b>	N808LF
<b>Aircraft:</b>	Eurocopter AS 350 B3	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Aircraft servicing event	<b>Injuries:</b>	1 Serious, 1 None
<b>Flight Conducted Under:</b>	Part 135: Air taxi & commuter - Non-scheduled		

## Analysis

The pilot of the helicopter reported that, he was on the ramp with the engine running to accomplish a rapid refuel. The fueler was attempting to attach the grounding cable to the helicopter and due to the cable not locking, he maneuvered the cable up and down, which then contacted the main rotor blades. The pilot reported he felt a “violent jolt” and immediately shut the engine down. The fueler’s hands were seriously injured. The main rotor blades were substantially damaged. The pilot reported that there were no preaccident mechanical failures or malfunctions with the helicopter 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 fuelers improper action during the refueling process.

## Findings

<b>Personnel issues</b>	Use of equip/system - Ground crew
-------------------------	-----------------------------------

## Factual Information

### History of Flight

<b>Prior to flight</b>	Aircraft servicing event (Defining event)
------------------------	---

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	33, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	Helicopter	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Helicopter	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 2 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	August 13, 2021
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	7172.4 hours (Total, all aircraft), 445.1 hours (Total, this make and model), 7114 hours (Pilot In Command, all aircraft), 31.1 hours (Last 90 days, all aircraft), 10.8 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Eurocopter	<b>Registration:</b>	N808LF
<b>Model/Series:</b>	AS 350 B3	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>	2010	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	4983
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	5
<b>Date/Type of Last Inspection:</b>	April 14, 2022 Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	5225 lbs
<b>Time Since Last Inspection:</b>	14 Hrs	<b>Engines:</b>	1 Turbo shaft
<b>Airframe Total Time:</b>	3931 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Turbomeca
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	Arriel 2B1
<b>Registered Owner:</b>	AIR METHODS CORP	<b>Rated Power:</b>	747 Horsepower
<b>Operator:</b>	AIR METHODS CORP	<b>Operating Certificate(s) Held:</b>	On-demand air taxi (135)
<b>Operator Does Business As:</b>	Medical Evacuation Air Taxi	<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night
<b>Observation Facility, Elevation:</b>	KDVT METAR,1478 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	04:53 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	9 knots / None	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	240°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.94 inches Hg	<b>Temperature/Dew Point:</b>	23°C / 0°C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Deer Valley, AZ	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Deer Valley, AZ	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	Deer Valley DVT	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	1478 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	1 Serious	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious, 1 None	<b>Latitude, Longitude:</b>	33.411331,-112.04447

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Bledsoe, James
<b>Additional Participating Persons:</b>	Daniel Griedein; FAA FSDO; Scottsdale, AZ
<b>Original Publish Date:</b>	October 6, 2022
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=104956">https://data.nts.gov/Docket?ProjectID=104956</a>

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](#).