



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Firebaugh, California	Accident Number:	WPR24LA030
Date & Time:	November 4, 2023, 12:00 Local	Registration:	N3053Q
Aircraft:	Arrow Falcon Exporters UH-1H	Aircraft Damage:	Substantial
Defining Event:	Fire/smoke (non-impact)	Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The helicopter caught fire shortly after the first start of the day; the pilot shut down the helicopter, exited, and called 911. The fire originated on the left side of the helicopter where the fuel shutoff valve is located, on the airframe side of the firewall. The helicopter sustained extensive thermal damage in the cargo area. The fuel shutoff valve and associated fuel lines were destroyed. Maintenance personnel stated that they thought one of the inlet fuel lines had come loose and sprayed fuel, which ignited and started the fire; however, no such evidence to support or disprove this theory survived the fire.

The last annual inspection was signed off about three and a half months before the accident. Maintenance personnel checked the fuel lines on the airframe side to the fuel shutoff valve with no issues noted in the maintenance log.

Probable Cause and Findings

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

An on-ground fuel fire for reasons that could not be determined due to extensive thermal damage.

Findings

Not determined	(general) - Unknown/Not determined
Aircraft	Fuel - Not specified

Factual Information

History of Flight

Prior to flight	Fire/smoke (non-impact) (Defining event)
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On November 4, 2023, at 1200 Pacific standard time, an Arrow Falcon Exporters UH-1H, N3053Q, was substantially damaged during startup near Firebaugh, California. The pilot was not injured. The helicopter was operated as a Title 14 *Code of Federal Regulations* Part 137 aerial application flight.

The pilot stated that he thought the helicopter may not have been flown for the prior 2 weeks. He performed the preflight inspection and startup with no anomalies. As he was turning on the GPS system and putting his helmet on, he began to see and smell smoke in the cockpit. He looked outside and noted smoke coming from the upper engine compartment, so he secured and shut down the helicopter and called 911. The fire department extinguished the fire.

Postaccident examination of the helicopter revealed significant thermal damage to the left side cockpit and cargo areas near the engine from the on-ground fire. The engine remained attached to the upper engine compartment. The engine side fuel filter remained in its normal position with the fuel lines attached. The area where the fuel shutoff valve was located on the airframe side was thermally destroyed and the fuel lines were thermally consumed in the fire. Maintenance personnel concluded the fire started on the airframe side at a fuel inlet line to the fuel shutoff valve.

A review of the maintenance logbooks showed an annual inspection had been completed on July 18, 2023, about three and a half months before the accident. According to the director of maintenance, the fuel line fittings would have been checked for tightness at that time.

Pilot Information

Certificate:	Commercial	Age:	43, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	May 26, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 0 hours (Total, all aircraft), 0 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Arrow Falcon Exporters	Registration:	N3053Q
Model/Series:	UH-1H	Aircraft Category:	Helicopter
Year of Manufacture:	1966	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	66-1104
Landing Gear Type:	None; Skid	Seats:	15
Date/Type of Last Inspection:	September 14, 2023 100 hour	Certified Max Gross Wt.:	
Time Since Last Inspection:	70.2 Hrs	Engines:	1
Airframe Total Time:	11495.4 Hrs at time of accident	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	WEST VALLEY AVIATION INC	Rated Power:	
Operator:	WEST VALLEY AVIATION INC	Operating Certificate(s) Held:	Agricultural aircraft (137)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KMAE, 251 ft msl	Distance from Accident Site:	19 Nautical Miles
Observation Time:	11:53 Local	Direction from Accident Site:	66°
Lowest Cloud Condition:	Clear	Visibility	9 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots / None	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.11 inches Hg	Temperature/Dew Point:	23°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Firebaugh, CA	Type of Flight Plan Filed:	
Destination:	Firebaugh, CA	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	FIREBAUGH F34	Runway Surface Type:	
Airport Elevation:	157 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:		Aircraft Fire:	On-ground
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	36.859989,-120.46446(est)

Administrative Information

Investigator In Charge (IIC):	Cornejo, Tealeye
Additional Participating Persons:	Jeremy Alexander; Federal Aviation Administration; Fresno, CA
Original Publish Date:	November 5, 2025
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=193363

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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](#).