



Aviation Investigation Preliminary Report

Location:	Cabazon, CA	Accident Number:	WPR23FA302
Date & Time:	August 6, 2023, 18:44 Local	Registration:	N555AS (A1); N4037S (A2)
Aircraft:	Bell 407 (A1); Sikorsky S-64E (A2)	Injuries:	3 Fatal (A1); 2 None (A2)
Flight Conducted Under:	Public aircraft (A1); Public aircraft (A2)		

On August 6, 2023, about 1844 Pacific daylight time, a Bell 407, N555AS, and a Sikorsky S-64, N4037S, collided midair near Cabazon, California. The Bell was destroyed, and the pilot and two qualified non-crewmembers were fatally injured. The Sikorsky sustained minor damage and the pilot and copilot were not injured. Both helicopters were operated as public-use firefighting aircraft.

Preliminary Automatic Dependent Surveillance – Broadcast (ADS-B) data (figure 1), revealed that the Bell departed Hemet-Ryan Airport (HMT) in Hemet, California, about 1834 and traveled about 9 nm to the north-northeast. The Bell then completed a left 360° turn and maneuvered northeast towards Cabazon. The Sikorsky departed HMT about 3 minutes after the Bell and travelled northeast through mountainous terrain and continued northeast following descending terrain towards Cabazon. ADS-B data showed both helicopters on a converging flight path, until the time of collision, located about 2 nm west of the Broadway Fire, at an altitude between 2,375 to 2,400 ft mean sea level (msl).

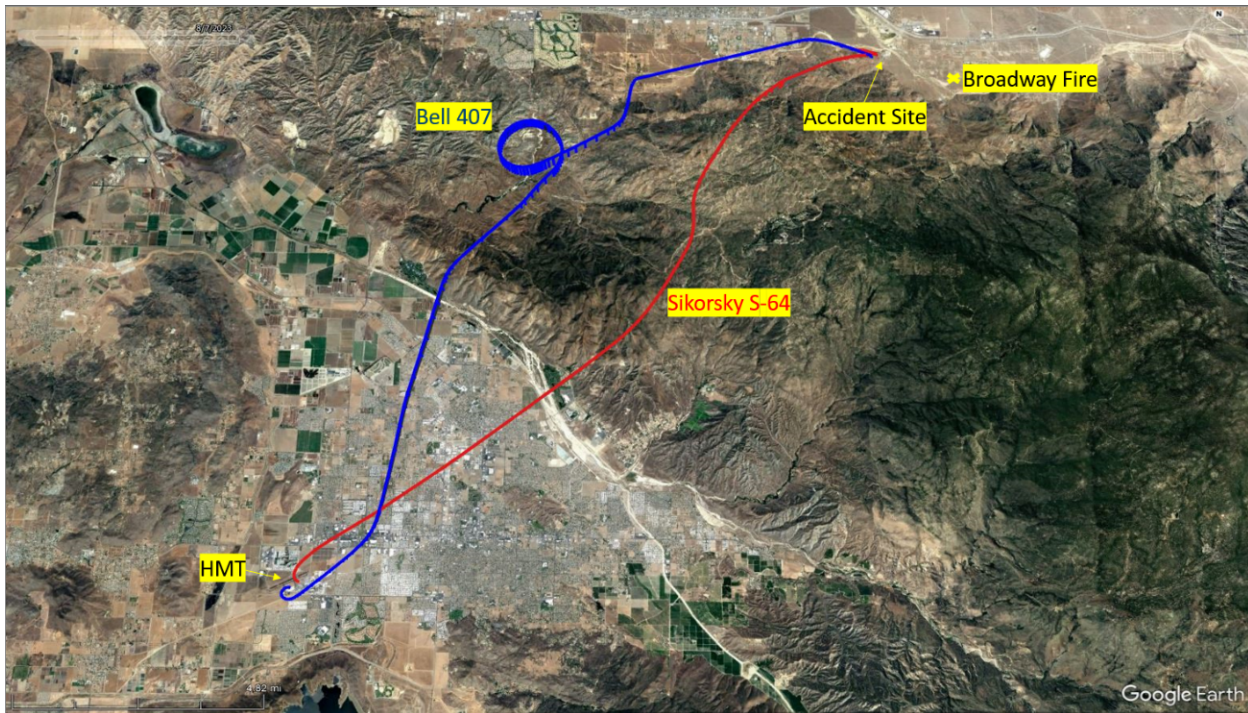


Figure 1. Overlay of Bell and Sikorsky ADS-B Flight Path on Google Earth terrain map

The wreckage of the Bell came to rest on a steep and rocky hillside about 1050 ft off the last recorded ADS-B data point (figure 2). A post-crash fire ensued and consumed the fuselage. The debris path was about 950 ft by 550 ft, in which all major components of the helicopter were located. The beginning of the debris path was identified by a piece of delaminated main rotor blade, which was about 560 feet east of the approximate collision area. Subsequent fragments of the main rotor blade were identified within a 100 ft span to the east. A displaced skid and crosstube came to rest about 195 east of the main wreckage and was the eastern most piece of debris.

About 830 feet southeast of the first delaminated blade component, a ground scar was determined to be the fuselage's initial impact point (IIP). It was followed by a 20-foot-long ground scar, oriented on a 098° heading, that extended to the engine, which was displaced and located adjacent to rock boulders. The main wreckage was found about 45 ft east of the engine. The main rotor blades, mast, and transmission came to rest around 285 ft northwest of the main wreckage, upslope from the IIP. The tail cone and tail rotor blade assembly came to rest about 470 ft west of the main wreckage.

The Sikorsky landed nearby without further incident. The right main landing gear tire was damaged, with an approximate 12-inch portion not located.

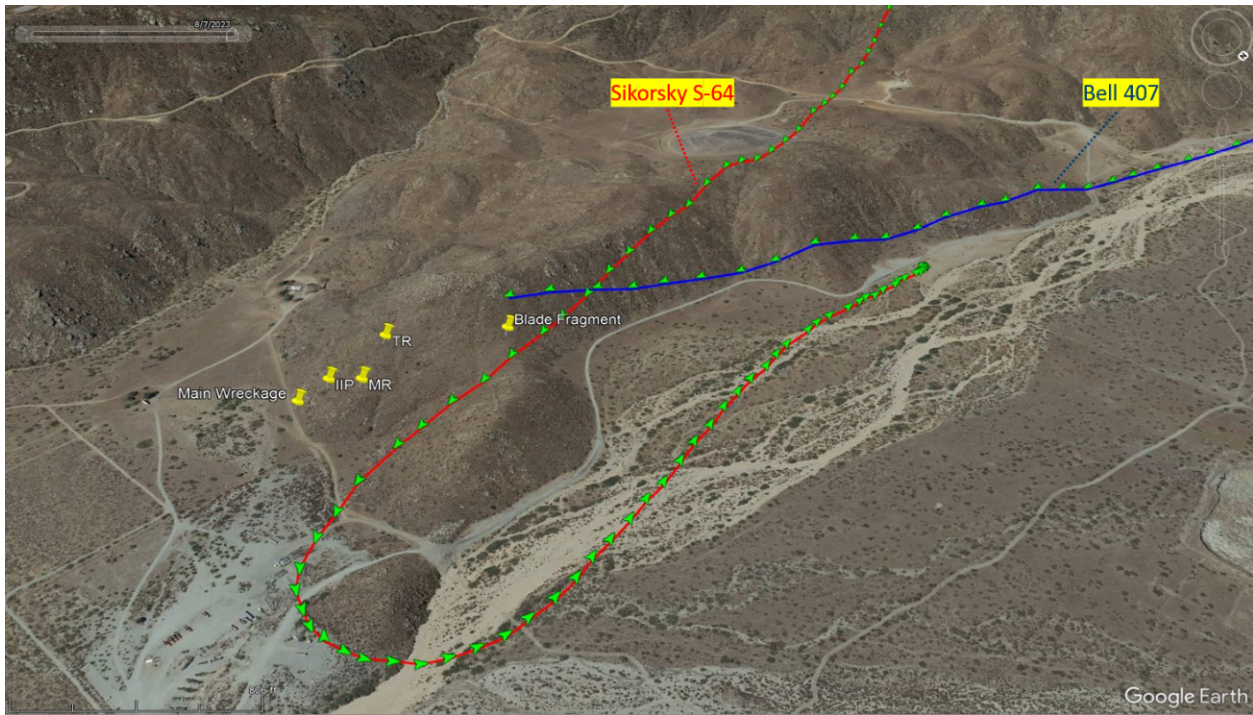


Figure 2. Zoomed in overlay of Bell and Sikorsky ADS-B flight path on Google Earth terrain map near the accident site.

The wreckage of the Bell was recovered to a secure location for further examination. The damaged right tire and wheel assembly of the Sikorsky was retained for further examination.

Aircraft and Owner/Operator Information (A1)

Aircraft Make:	Bell	Registration:	N555AS
Model/Series:	407	Aircraft Category:	Helicopter
Amateur Built:			
Operator:		Operating Certificate(s) Held:	Rotorcraft external load (133), Commuter air carrier (135), Agricultural aircraft (137)
Operator Designator Code:	801U		

Aircraft and Owner/Operator Information (A2)

Aircraft Make:	Sikorsky	Registration:	N4037S
Model/Series:	S-64E	Aircraft Category:	Helicopter
Amateur Built:			
Operator:		Operating Certificate(s) Held:	Rotorcraft external load (133), Agricultural aircraft (137), Certificate of authorization or waiver (COA)
Operator Designator Code:			

Meteorological Information and Flight Plan

Conditions at Accident Site:	VMC	Condition of Light:	
Observation Facility, Elevation:	KBMT,32 ft msl	Observation Time:	17:53 Local
Distance from Accident Site:	1.8 Nautical Miles	Temperature/Dew Point:	36°C /22°C
Lowest Cloud Condition:	Clear	Wind Speed/Gusts, Direction:	9 knots / , 190°
Lowest Ceiling:	None	Visibility:	10 miles
Altimeter Setting:	29.94 inches Hg	Type of Flight Plan Filed:	
Departure Point:		Destination:	

Wreckage and Impact Information (A1)

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	2 Fatal	Aircraft Fire:	On-ground
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	3 Fatal	Latitude, Longitude:	33.9143,-116.8067 (est)

Wreckage and Impact Information (A2)

Crew Injuries:	2 None	Aircraft Damage:	Minor
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	33.9143,-116.8067 (est)

Administrative Information

Investigator In Charge (IIC): Nepomuceno, Eleazar

Additional Participating Persons: Beverley Harvey; TSB-Canada
Matt McLuckie; Bell ; Fort Worth, TX
Jennifer McDuffie; Honeywell; Phoenix, AZ
Benjamin Berman; CAL FIRE
Jake Marks; CAL FIRE
Joshua Nettles; CAL FIRE
Stuart Sprung; CAL FIRE
Rod Glassford; Siller
Casey Ross; Air Shasta
Nelson Sanchez; FAA; Riverside, CA

Note: