



# Aviation Investigation Final Report

<b>Location:</b>	HARTFORD, Connecticut	<b>Accident Number:</b>	NYC85LA177
<b>Date &amp; Time:</b>	July 14, 1985, 16:50 Local	<b>Registration:</b>	N3124L
<b>Aircraft:</b>	SIKORSKY S-76A	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Executive/Corporate		

## Analysis

THE APCH TO THE PVT HELIPAD WAS UNEVENTFUL UP TO THE LAST 100 FT WHERE THE PLTS NOTICED A HIGH SINK RATE. THE PLT INCREASED COLLECTIVE TO CORRECT FOR THE SITUATION. AT ABOUT 20 FT FROM TOUCHDOWN POINT THE PLT NOTICED A DECREASE IN RPM AND REALIZED THAT THEY WERE LOSING PWR. DURING THE TOUCHDOWN, THE TAIL CONE CONTACTED THE EDGE OF THE HELIPAD DAMAGING THE TAIL ROTOR DRIVE SHAFT. THE PLT SHUT THE ACFT DOWN ACCORDING TO NORMAL PROCEDURES. THE DROOP COMPENSATORS WERE BEING EXAMINED BY THE CORPORATION.

## Probable Cause and Findings

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

### Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

#### Findings

1. (C) ENGINE ASSEMBLY - UNDETERMINED

-----

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

#### Findings

2. (F) MISC ROTORCRAFT, TAIL CONE - DISTORTED
3. (C) CLEARANCE - MISJUDGED - PILOT IN COMMAND
4. (F) ROTOR DRIVE SYSTEM, TAIL ROTOR DRIVE SHAFT - BENT
5. (C) FLARE - IMPROPER - PILOT IN COMMAND

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline transport; Flight instructor	<b>Age:</b>	40, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Helicopter	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	9100 hours (Total, all aircraft), 1900 hours (Total, this make and model), 7700 hours (Pilot In Command, all aircraft), 95 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	SIKORSKY	<b>Registration:</b>	N3124L
<b>Model/Series:</b>	S-76A S-76A	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>		<b>Serial Number:</b>	760-228
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	14
<b>Date/Type of Last Inspection:</b>	Annual	<b>Certified Max Gross Wt.:</b>	10000 lbs
<b>Time Since Last Inspection:</b>	52 Hrs	<b>Engines:</b>	2 Turbo shaft
<b>Airframe Total Time:</b>	836 Hrs	<b>Engine Manufacturer:</b>	ALLISON
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	250-C30
<b>Registered Owner:</b>	UNITED TECHNOLOGY CORP.	<b>Rated Power:</b>	650 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	HFD	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	18:45 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Scattered / 5000 ft AGL	<b>Visibility</b>	25 miles
<b>Lowest Ceiling:</b>	Broken / 25000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	10 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	30°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	27°C / 14°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	E. HARTFORD , CT (EHT )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:45 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	

## Administrative Information

**Investigator In Charge (IIC):** Taylor, Vernon

**Additional Participating Persons:**

**Original Publish Date:**

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=35915>

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](#).