



# Aviation Investigation Final Report

<b>Location:</b>	Oakland, Florida	<b>Accident Number:</b>	ERA22LA209
<b>Date &amp; Time:</b>	April 26, 2022, 19:00 Local	<b>Registration:</b>	N281SP
<b>Aircraft:</b>	GARLICK HELICOPTERS INC OH-58A+	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Collision with terr/obj (non-CFIT)	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

## Analysis

The pilot of the helicopter was performing aerial application operations and had sprayed one load early that morning, then returned for his second load. While on the ground, operations were halted because another company helicopter had crashed into the water they were conducting operations over. Following that accident, a safety briefing was held with the pilots, and they were instructed to maintain constant communications with the loader truck. They resumed spray operations and later that afternoon the pilot noted that it was difficult to judge his height above the water and advised another company pilot via radio of that fact. He further described that the water was “like a mirror,” which hampered his depth perception. Later that evening, during a final application pass while he was looking down at the GPS, the helicopter impacted the water. The helicopter’s fuselage, main, and tail rotor blades were substantially damaged during the impact. Following the accident the pilot indicated that there were no mechanical deficiencies of 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 pilot’s decision to continue the low-altitude aerial application flight over water conditions that degraded his depth perception, which resulted in an inadvertent collision with the water.

## Findings

---

<b>Personnel issues</b>	Decision making/judgment - Pilot
<b>Aircraft</b>	Altitude - Not attained/maintained
<b>Environmental issues</b>	Water - Effect on personnel
<b>Personnel issues</b>	Visual illusion/disorientation - Pilot

## Factual Information

### History of Flight

<b>Maneuvering-low-alt flying</b>	Collision with terr/obj (non-CFIT) (Defining event)
-----------------------------------	---

### Pilot Information

<b>Certificate:</b>	Commercial; Private	<b>Age:</b>	54, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	September 4, 2021
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	September 3, 2021
<b>Flight Time:</b>	16835 hours (Total, all aircraft), 16835 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	GARLICK HELICOPTERS INC	<b>Registration:</b>	N281SP
<b>Model/Series:</b>	OH-58A+ NO SERIES	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>	1973	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Restricted (Special)	<b>Serial Number:</b>	73-21912
<b>Landing Gear Type:</b>	High skid	<b>Seats:</b>	3
<b>Date/Type of Last Inspection:</b>	April 22, 2022 100 hour	<b>Certified Max Gross Wt.:</b>	3200 lbs
<b>Time Since Last Inspection:</b>	7 Hrs	<b>Engines:</b>	1 Turbo shaft
<b>Airframe Total Time:</b>	9041 Hrs at time of accident	<b>Engine Manufacturer:</b>	Rolls-Royce
<b>ELT:</b>	C126 installed, not activated	<b>Engine Model/Series:</b>	T63-A-720
<b>Registered Owner:</b>	COASTAL AIR SERVICE INC	<b>Rated Power:</b>	420 Horsepower
<b>Operator:</b>	COASTAL AIR SERVICE INC	<b>Operating Certificate(s) Held:</b>	Agricultural aircraft (137)

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KORL,112 ft msl	<b>Distance from Accident Site:</b>	16 Nautical Miles
<b>Observation Time:</b>	18:53 Local	<b>Direction from Accident Site:</b>	95°
<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>	11 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	100°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.07 inches Hg	<b>Temperature/Dew Point:</b>	28°C / 17°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Oakland, FL	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Oakland, FL	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor	<b>Latitude, Longitude:</b>	28.56966,-81.64492

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Monville, Timothy
<b>Additional Participating Persons:</b>	Michael Loehlein; FAA/FSDO; Orlando, FL
<b>Original Publish Date:</b>	October 13, 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.ntsb.gov/Docket?ProjectID=105009">https://data.ntsb.gov/Docket?ProjectID=105009</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](#).