

NATIONAL TRANSPORTATION SAFETY BOARD PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

This form to be used for reporting civil and public aircraft accidents and incidents

BASIC INFORMATION

Accident/Incident Location

Nearest City/Place: Homer State: AK
 ZIP: 99603 Country: USA
 Latitude: N59° 24' 24" Longitude: W153° 31' 35"
(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/Time

Date: 16 July 20 Local Time: 15:14
mm/dd/yyyy
 Time Zone: ADT

Collision with Other Aircraft: ☐ Midair ☐ On-ground ☒ None

AIRCRAFT INFORMATION

Registration Number: N1432D

Manufacturer: Bell Helicopter

Model: 206L1

Serial Number: 45741

Year of Manufacture: 1982

Amateur-Built: ☐ Yes ☒ No *If Yes:* ☐ Kit/Plans ☐ Original Design Make: _____

- ☐ IFR-Equipped and Certified
☐ Commercial Space Flight
☐ Unmanned Aircraft

Maximum Gross Weight: 4150 lbs

Weight at Time of Accident/Incident: 3299 lbs

Number of Seats: 7 Flight Crew Seats: 1

Cabin Crew Seats: _____ Passenger Seats: 6

Number of Engines: 1

Category of Aircraft

- ☐ Airplane
☐ Balloon
☐ Blimp/Dirigible
☐ Glider
☐ Gyroplane
☒ Helicopter
☐ Powered Lift
☐ Rocket
☐ Ultralight
☐ Unknown

Type of Airworthiness Certificate

(Check all that apply)

Standard

- ☒ Normal
☐ Aerobatic
☐ Balloon
☐ Commuter
☐ Transport
☐ Utility

Special

- ☐ Restricted
☐ Limited
☐ Provisional
☐ Special Flight
☐ Experimental
☐ Special Light-Sport
☐ Experimental Light-Sport

- ☐ Certificate of Authorization or Waiver (COA)
☐ None ☐ Unknown

Landing Gear

(Check all that apply)

☐ Retractable

- ☐ Tricycle ☐ Tailwheel
☐ Amphibian ☒ High Skid
☐ Emergency Float ☐ Skid
☒ Float ☐ Ski
☐ Hull ☐ Ski/Wheel
☐ Other Launch/Recovery System
☐ None ☐ Unknown

Engine Type *(Select one)*

- ☐ Reciprocating ☐ Liquid Rocket
☒ Turbo Shaft ☐ Solid Rocket
☐ Turbo Prop ☐ Hybrid Rocket
☐ Turbo Jet ☐ None
☐ Turbo Fan ☐ Unknown
☐ Electric

Fuel System Type *(Reciprocating)*

- ☐ Carburetor ☐ Fuel-Injected

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. <i>mm/dd/yyyy</i>	Rated Power ☒ Horsepower or ☐ lbs of Thrust	Total Time (hours)	Time Since: Inspection (hours)	Overhaul (hours)
Eng. 1	Rolls Royce Allison	250-C30P	CAE890355P	29 Aug 80	650	17946.2	22.5	451.5
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type

- ☒ 100-Hour ☐ Continuous Airworthiness
☐ AAIP ☐ Conditional Inspection
☐ Annual ☐ Unknown

Date Last Inspection: 1 May 2020
mm/dd/yyyy

Airframe Total Time: 21432.5 hrs
 hours measured at *(Select one)*
☐ Last Inspection ☒ Time of Accident/Incident

Type of Maintenance Program *(Select one)*

- ☒ Annual
☐ Conditional (Amateur-built only)
☐ Manufacturer's Inspection Program
☐ Other Approved Inspection Program (AAIP)
☐ Continuous Airworthiness
☐ Other, specify: _____

Description of Fire Extinguishing System

- ☐ None
☒ Specify: Handheld fire extinguisher bottle

Propeller 1

- ☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____

Model: _____

Propeller 2

- ☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____

Model: _____

ELT Installed: ☒ Yes ☐ No

If Yes:

ELT Manufacturer: Artex

Model or Part No.: ME406HM

TSO No.: ☐ C91 (121.5 MHz) ☐ C91a (121.5 MHz)
☒ C126 (406 MHz)

Was ELT still mounted in aircraft? ☒ Yes ☐ No

Was ELT still connected to antenna? ☒ Yes ☐ No

Did ELT Activate? ☐ Yes ☒ No

If activated:

Did ELT Aid in Locating Aircraft? ☐ Yes ☒ No

If not activated:

- Indicate Reason: ☐ Impact Damage
☐ Fire Damage
☐ Battery Expired/Damaged
☐ Unknown

Additional Equipment *(Check all that apply)*

- ☒ ADS-B
☐ Airframe Parachute
☐ Angle of Attack Indicator
☐ Autopilot
☐ Data Recorder
☐ Electronic Flight Bag or Handheld Device
☒ Electronic Multifunction Display
☐ Electronic Primary Flight Display
☐ Handheld GPS
☐ Heads Up Display
☐ Onboard Weather
☒ Satellite Tracking Device
☐ Stall Warning System
☐ Video Recording Device
☐ Other, Specify: _____

OWNER/OPERATOR INFORMATION			
Registered Aircraft Owner Name: <u>Heliotrope Corp</u> Fractional Ownership Aircraft: ☐ Yes ☒ No		City: <u>Anchorage</u> State: <u>AK</u> ZIP: <u>99516-3391</u> Country: <u>USA</u>	
Operator of Aircraft ☐ Same As Registered Owner Name: <u>Egli Air Haul inc.</u> Doing Business As: _____ Air Carrier/Operator Designator (4 Character Code): <u>HRPL803E</u>		☐ Same Address as Registered Owner City: <u>King Salmon</u> State: <u>AK</u> ZIP: <u>99613</u> Country: <u>USA</u>	
Operating Certificates Held <i>(Check all that apply)</i> ☐ None ☐ Flag Carrier Operating Certificate (FAR 121) ☐ Supplemental ☐ Air Cargo ☐ Foreign Air Carriers (FAR 129) ☒ Rotorcraft External Load (FAR 133) ☐ Commuter Air Carrier (FAR 135) ☒ On-Demand Air Taxi (FAR 135) ☒ Commercial Air Tour (FAR 136) ☒ Agricultural Aircraft (FAR 137) ☐ Pilot School (FAR 141) ☐ Certificate of Authorization or Waiver (COA) ☐ Commercial Space Transportation Experimental Permit ☐ Commercial Space Transportation License ☐ Other Operator of Large Aircraft	Regulation Flight Conducted Under ☐ FAR 91 ☐ FAR 129 ☐ FAR 415 ☐ FAR 103 ☒ FAR 133 ☐ FAR 431 ☐ FAR 121 ☐ FAR 135 ☐ FAR 435 ☐ FAR 125 ☐ FAR 137 ☐ FAR 437 ☐ FAR 91 Special Flight ☐ Non-US. Commercial ☐ Non-US. Non-commercial ☐ Public Aircraft <i>(Select one)</i> ☐ Armed Forces ☐ Federal ☐ State ☐ Local ☐ Unknown	Revenue Operation for FAR 121, 125, 129, 135 <i>(Select one for each group)</i> ☐ Scheduled or Commuter ☐ Non-Scheduled or Air Taxi ☐ Domestic ☐ International ☐ Passenger ☐ Cargo ☐ Mail Contract Only	
Revenue Sightseeing Flight ☐ Yes ☒ No	Air Medical Flight ☐ Yes ☒ No	Purpose of Flight for FAR 91, 103, 133, 137 <i>(Select one)</i> ☐ Aerial Application ☐ Aerial Observation ☐ Air Drop ☐ Air Race/Show ☐ Banner Tow ☐ Business ☐ Executive/Corporate ☒ External Load ☐ Ferry ☐ Firefighting ☐ Flight Test ☐ Glider Tow ☐ Instructional ☐ Other Work Use ☐ Personal ☐ Positioning ☐ Skydiving ☐ Unknown	
AIRPORT INFORMATION <i>(Fill in if accident/incident occurred on approach, landing, takeoff, departure, or within 3 miles of an airport)</i>			
Airport Name: <u>research vessel STEADFAST located offshore</u> Airport Identifier: _____ Proximity to Airport: ☐ Off Airport/Airstrip ☐ On Airport/Airstrip ☐ N/A		Distance From Airport Center: <u>landed approx 1/8th</u> sm Direction From Airport: <u>landed approx 045°</u> degrees true Airport Elevation: <u>15</u> ft. msl	
Runway Information Runway ID: <u>helideck</u> (L/R/C) Length: <u>approx 37</u> ft Width: <u>approx 22</u> ft		Condition of Runway/Landing Surface <i>(Check all that apply)</i> ☒ Dry ☐ Holes ☐ Ice Covered ☐ Rough ☐ Rubber Deposits ☐ Slush-Covered ☐ Snow-Compacted ☐ Snow-Crusted ☐ Snow-Dry ☐ Snow-Wet ☐ Soft ☐ Vegetation ☒ Water-Calm ☐ Water-Choppy ☐ Water-Glassy ☐ Wet ☐ Unknown	
Runway/Landing Surface <i>(Check all that apply)</i> ☐ Asphalt ☐ Concrete ☐ Dirt ☐ Grass/Turf ☐ Gravel ☐ Ice ☐ Macadam ☒ Metal/Wood ☐ Snow ☒ Water ☐ Unknown			
Approach/Departure Segment <i>(Select one)</i> ☐ Taxi ☐ Takeoff ☐ Initial Climb ☐ VFR Departure ☐ IFR Departure Procedure/Clearance ☐ On Instrument Approach ☐ Landing ☐ Downwind ☐ Base ☐ Final ☐ Crosswind ☒ Low Approach ☐ Go Around ☐ Aborted Landing (after touchdown) ☐ Unknown			
IFR Approach <i>(Check all that apply)</i> ☒ None ☐ ADF/NDB ☐ SDF ☐ VOR/TVOR ☐ VOR/DME ☐ TACAN ☐ PAR ☐ Sidestep ☐ ILS ☐ Localizer Only ☐ LOC-back course ☐ RNAV ☐ MLS ☐ LDA ☐ ASR ☐ Visual ☐ Contact ☐ Circling ☐ Practice ☐ GPS ☐ Unknown		VFR Approach <i>(Check all that apply)</i> ☐ None ☐ Traffic Pattern ☒ Straight-In ☐ Valley/Terrain Following ☐ Go Around ☐ Full Stop ☐ Stop and Go ☐ Touch and Go ☐ Simulated Forced Landing ☐ Forced Landing ☐ Precautionary Landing ☐ Unknown	

"FLIGHT CREWMEMBER 1" INFORMATION																																																																																																				
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"Flight Crewmember 1" was pilot flying ☒ Yes ☐ No																																																																																																				
"Flight Crewmember 1" Identification First Name: <u>Harold</u> Middle Initial: <u>S</u> Last Name: <u>Egli</u> City of Residence: <u>King Salmon</u> State: <u>AK</u> ZIP: <u>99613</u> Country: <u>USA</u> Age at time of Accident/Incident: <u>68</u> Date of Birth: <u> </u>1952 mm/dd/yyyy Certificate Number: <u> </u>																																																																																																				
Degree of Injury ☒ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious		Seat Occupied ☐ Left ☐ Front ☐ Unknown ☒ Right ☐ Rear ☐ Center ☐ Single		Restraint Type Available ☐ None ☐ Lap only ☐ 3-point ☒ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap only ☐ 3-point ☒ 4-point ☐ 5-point ☐ Unknown			Inflatable Restraints ☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown																																																																																													
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Principal Occupation ☒ Pilot ☐ Other ☐ Unknown		Medical Certificate ☐ None ☐ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☒ Class 2 ☐ Unknown			Date of Last Medical <u>30 Mar 2020</u> mm/dd/yyyy																																																																																															
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Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: <u>20 Aug 2019</u> mm/dd/yyyy				Flight Review Aircraft Make: <u>Bell Helicopter</u> Model: <u>206BIII</u>																																																																																																
Airplane Rating(s) <i>(Check all that apply)</i> ☐ None ☒ Single-Engine Land ☒ Single-Engine Sea ☐ Multiengine Land ☐ Multiengine Sea		Other Aircraft Rating(s) <i>(Check all that apply)</i> ☐ None ☐ Airship ☐ Balloon ☐ Glider ☐ Gyroplane ☒ Helicopter ☐ Powered Lift		Instrument Rating(s) <i>(Check all that apply)</i> ☐ None ☒ Airplane ☒ Helicopter ☐ Powered Lift		Instructor Rating(s) <i>(Check all that apply)</i> ☐ None ☒ Airplane Single-Engine ☐ Airplane Multi-Engine ☐ Gyroplane ☐ Powered Lift ☒ Instrument Airplane ☐ Instrument Helicopter ☒ Helicopter ☐ Glider ☐ Sport																																																																																														
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"Flight Crewmember 2" was pilot flying ☐ Yes ☐ No																																																																																																				
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ADDITIONAL FLIGHT CREWMEMBERS (Exclusive of cabin crew, complete the following information)						
Crew Name and Address			Seat Occupied		Injury	
First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown		☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer			Restraint Type: Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown		Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No			Total Flight Time at the Time of this Accident/Incident: _____ hrs			
Crew Name and Address			Seat Occupied		Injury	
First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown		☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer			Restraint Type: Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown		Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No			Total Flight Time at the Time of this Accident/Incident: _____ hrs			
PASSENGER(S) / OTHER PERSONNEL (include cabin crew; continue on separate sheet if necessary)						
Name and Address		Seat	Injury	Restraint Type		Inflatable Restraints
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other		☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown		☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other		☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown		☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other		☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown		☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other		☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown		☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown

FLIGHT ITINERARY INFORMATION				
Last Departure Point Airport ID: <u>beach</u> City: <u>on Augustine Island</u> State: <u>Alaska</u> Country: <u>USA</u>	Time of Departure Time: <u>1513</u> Time Zone: <u>ADT</u>	Destination Airport ID: <u>r/v Steadfast</u> City: <u>near Augustine Island</u> State: <u>Alaska</u> Country: <u>USA</u>	Type Flight Plan Filed ☐ None ☒ Company VFR ☐ Military VFR ☐ VFR ☐ VFR/IFR ☐ IFR ☐ Unknown Activated? ☒ Yes ☐ No ☐ Unknown	
Type of ATC Clearance/Service (Check all that apply) ☒ None ☐ Special VFR ☐ Special IFR ☐ VFR Flight Following ☐ Cruise ☐ VFR ☐ IFR ☐ VFR On Top ☐ Traffic Advisory ☐ Unknown / NA				
Airspace where the accident/incident occurred (Check all that apply) ☐ Class A ☒ Class G ☐ Military Operations Area (MOA) ☐ Special ☐ Class B ☐ Demo Area ☐ Airport Advisory Area ☐ Air Traffic Control Area ☐ Class C ☐ Warning Area ☐ Jet Training Area ☐ Unknown ☐ Class D ☐ Prohibited Area ☐ TRSA ☐ FAR 93 ☐ Class E ☐ Restricted Area				Altitude of In-Flight Occurrence: <u>60</u> ft msl
WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE				
Source of Pilot Weather Information (Check all that apply) ☐ National Weather Service ☐ Company ☐ Flight Service Station ☐ Military ☐ TV/Radio ☐ Internet ☐ Automated Report ☐ None ☐ Commercial Weather Service (DUATS) ☐ Unknown ☒ On-Board Weather		Weather Observation Facility Facility ID: _____ Observation Time: _____ Time Zone: _____ Distance from Accident Site: _____ nm Direction from Accident Site: _____ degrees true		
Basic Conditions ☒ VMC ☐ IMC ☐ Unknown	Light Condition ☐ Dawn ☒ Day ☐ Dusk ☐ Night ☐ Dark Night ☐ Bright Night ☐ Unknown			
Sky/Lowest Cloud Condition ☐ Clear ☒ Thin Broken ☐ Few ☐ Thin Overcast ☐ Partial Obscuration ☐ Unknown ☐ Scattered	Ceiling ☐ None (Clear) ☐ Obscured ☒ Broken ☐ Indefinite ☐ Overcast ☐ Unknown	Temperature: _____ (C) or <u>65</u> (F) Dew Point: _____ (C) or _____ (F) Altimeter Setting: _____ in. Hg or _____ MB		
Lowest Cloud Condition Height <u>20000</u> ft agl		Ceiling Height <u>20000</u> ft agl		
Wind Direction ☐ Variable -or- Direction: <u>NE</u> degrees true	Wind Speed ☐ Calm ☐ Light and Variable -or- Speed: <u>10</u> kts	Wind Gusts ☒ Not Gusting -or- Speed: _____ kts	Visibility <u>unlimited</u> miles RVR: _____ feet RVV: _____ miles Density Altitude: _____ ft	
Intensity of Precipitation ☐ Light ☐ Moderate ☐ Heavy ☒ N/A ☐ Unknown	Type of Precipitation (Check all that apply) ☒ None ☐ Drizzle ☐ Freezing Rain ☐ Rain ☐ Ice Pellets ☐ Snow Shower ☐ Snow ☐ Ice Pellets Shower ☐ Hail ☐ Snow Grains ☐ Freezing Drizzle ☐ Rain Showers ☐ Ice Crystals		Restriction to Visibility (Check all that apply) ☒ None ☐ Fog ☐ Blowing Dust ☐ Ground Fog ☐ Blowing Sand ☐ Haze ☐ Blowing Snow ☐ Ice Fog ☐ Blowing Spray ☐ Smoke ☐ Dust ☐ Unknown	
Icing Forecast Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☐ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown	Icing Actual Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☐ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown		Turbulence Type (Check all that apply) ☒ None ☐ Clear Air ☐ Terrain-Induced ☐ Convective Turbulence Severity ☐ Light ☐ Moderate ☐ Severe ☐ Extreme	
NOTAMs (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident: 				

DAMAGE TO AIRCRAFT AND OTHER PROPERTY					
Aircraft Damage ☐ None ☐ Substantial ☒ Minor ☐ Destroyed ☐ Unknown		Aircraft Fire ☒ None ☐ Both Ground and In-Flight ☐ In-Flight ☐ Fire at Unknown Time ☐ On-Ground ☐ Unknown		Aircraft Explosion ☒ None ☐ Both Ground and In-Flight ☐ In-Flight ☐ Explosion at Unknown Time ☐ On-Ground ☐ Unknown	
Description of Damage to Aircraft and Other Property <i>(Use additional sheet if necessary)</i> Aircraft Damage: One Main Rotor Blade damaged from tip inboard about about 14 inches. Other Main Rotor Blade damaged from tip inboard about 9 inches. Boat Damage: GPS Compass Sensor Unit destroyed, Mast Light Fixture broken.					
NARRATIVE HISTORY OF FLIGHT <i>(Please type or print in ink)</i>					
Describe what occurred in chronological order, including circumstances leading to and nature of accident/incident. Describe terrain and include wreckage distribution sketch if pertinent. Attach extra sheets if needed. State departure time and and location, services obtained, and intended destination. Provide as much detail as possible.					
Pre-Occurrence: On July 15th, 2020, after my arrival on the r/v Steadfast boat helideck, I conducted a thorough helicopter safety briefing with all the personnel on board the boat. We discussed tail rotor and main rotor precautions and safety, location and operation of emergency equipment, seat belt and door operation and use. We discussed procedures for securing the helicopter to the deck using ratchet straps. We also briefed regarding sling load procedures and safety. During the sling load safety briefing, the Boat Engineer asked me how long my helicopter longline was. I told him "50 feet". He asked me if it was long enough. I asked him how tall the boat mast was. He said he did not know. Nobody else on the boat knew how high it was, either. I looked up at the top of the mast from where I was standing on the helideck, judged that it was less than 50 feet, and said to the group that I thought the 50-foot line would be long enough. We completed the sling load safety briefing, covered aircraft refueling procedures, and began preparing for the work that lay ahead for all of us. Then after dinner, I flew a couple of personnel loads (all internal loads only) and we did some work on Augustine Island and Mount St. Augustine Volcano. We ended our day without incident. On July 16th, I flew one work crew off the boat out to a volcano seismic monitoring site named AC59 to work for the day. Then at AC59 I took off with the longline attached to the helicopter belly hook and flew to the boat. As the boat crew was accomplishing the hovering hookup, I was observing the highest point of the boat mast was below the helicopter, so I felt that the longline would in fact be long enough. I flew the first load off the helideck to AC59, where the ground crew unhooked the load. Then I flew a second crew from the boat to Lagoon Camp (LGCP) on Augustine Island where they would spend the day receiving and handling construction materials I would be sling loading off the boat to them throughout the day. I anticipated it would require around 20 sling loads to move all the lumber and materials coming off the boat. At LGCP I shut down the helicopter. After getting familiarized with where I was to place the various sling loads, and getting our refueling drums and pumping system situated, and lunch out of the way, I flew back out to the boat empty and picked up one more person and an internal load of gear and flew him from the boat to LGCP to join the rest of that crew. At around 13:30 I commenced sling load operations to LGCP. I hooked up the longline to the helicopter belly hook on the ground at LGCP and flew the empty longline hook out to the boat for a load. I flew the empty longline back to the boat for another load, where the boat crew hooked me up to it and I flew it to LGCP for the ground crew to unhook. I repeated this for a total of 8 sling loads, including a backhaul 3 times with empty cargo nets attached to the cargo hook back to the boat. After moving those sling loads, I was at the top of my reserve fuel. The Steadfast informed me on the radio that one load was ready for me but the next load after that would take them a while to get rigged and ready. I told the boat crew I would stop for fuel at that point. I landed at 14:36 at LGCP in the fuel drum area, keeping the longline attached to the helicopter belly hook, and took on more fuel. At 14:57 I took off again with the longline hook empty and returned to the boat for the load they had ready and waiting. Again hovering over the helideck, the ground crew hooked the load up and I flew it to LGCP. When the LGCP ground crew unhooked this load, they hooked up two empty cargo nets to send back to the boat. As I was headed back to the boat for another load, I asked the boat crew if they had the next load ready for me, and they said it would be another 10 minutes. So I landed the longline with 2 empty nets on the beach and landed the helicopter to wait. (continued in Additional Information section)					

RECOMMENDATION (How could this accident/incident have been prevented?)

Operator/Owner Safety Recommendation

First of all, I should have insisted on an actual tape measurement of the boat mast height, instead of estimating it from standing on the boat deck.

Secondly, with a 100-foot long-line, I would have been able to reach the cargo hook to the boat deck with all points of the boat in my vertical reference view hovering over the load, with no part of the boat in my "blind spot". I needed more margin for load control and maneuvering than was possible with the 50-foot long-line I was using at the time.

Thirdly, it would have been valuable input for the boat crew to have noticed how closely I was actually hovering to the top of the boat mast during the prior loads I had slung on and off the boat already, and to have said something to me about it. I do not say this to try and shift any blame their way. I should have asked for this during our safety briefing, or during sling operations.

MECHANICAL MALFUNCTION/FAILURE (If more space is needed, continue on separate sheet)Was there Mechanical Malfunction/Failure? ☐ Yes ☒ No

(If yes, list the name of the part, manufacturer, part no., serial no., and describe the failure.)

Total Time/Cycles
On Part

_____ Hours

_____ Cycles

Time Since This Part
Inspected/Overhauled

_____ Hours

FUEL & SERVICES INFORMATION

Fuel on Board at Last Takeoff

(Convert from pounds, as necessary)

38 Gallons

Fuel Type

☐ 80/87☐ 115/145☐ Jet B☐ Other, specify _____☐ 100 Low Lead☒ Jet A☐ JP8☐ 100/130☐ Jet A-1☐ Automotive

Other Services, if Any, Prior to Departure

None

EVACUATION OF AIRCRAFTWas an emergency evacuation of the aircraft performed? ☒ Yes ☐ No

Method of Exit – Describe how the occupants exited and how many occupants evacuated each location

As the only occupant of the aircraft, I made sure the aircraft switches were off, and the rotor brake was set, and climbed out onto the submerged flight step. I closed the pilot door, climbed onto the inflated float bags, and into the zodiac at about 15:16, completing the rescue.

OTHER AIRCRAFT – COLLISION (If air or ground collision occurred, complete this section for other aircraft)

Aircraft Registration Number

Manufacturer: _____

Model: _____

Damage to Other Aircraft

☐ Destroyed☐ Minor☐ Substantial☐ None

Registered Owner of Other Aircraft

Name: _____

City: _____

State: _____ ZIP: _____

Country: _____

Pilot of Other Aircraft

Name: _____

City: _____

State: _____ ZIP: _____

Country: _____

ADDITIONAL INFORMATION (Please type or print in ink)

Use this space if additional space is needed for any answers.

(Narrative History of the Flight, continued)

Occurrence: After I received the radio call that they on the boat were ready with the load, I took off again at 15:13, with the longline and 2 empty nets, headed for the boat. On my arrival over the helideck, as I was working to set the empty cargo nets on deck, the helicopter suddenly began shaking violently. I immediately realized I must have had a rotor strike with the boat.

I punched off the longline and pulled the float inflation trigger to inflate the floats. I flew the helicopter under power into the wind forward a safe distance away from the boat. As the float inflation sequence finished, well clear of the boat, with the aircraft shaking more violently than before, I landed the helicopter under power and full control in the water, splashing down at 15:15.

As I rolled the throttle to idle, I heard someone on the radio talking about what to do, or whether to transmit MAYDAY. I responded that I was completely OK, and to just get me out of the water. Then I shut off the electrical systems and radios and completed an immediate shutdown.

As I was shutting the engine down, I saw the zodiac skiff headed for me at full speed. About the time I got the rotor stopped, ending the flight, rescue commenced with the zodiac pulling up to my door.

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Date of this Report <u>31 July 20</u> mm/dd/yyyy	Name of Pilot/Operator: <u>Sam Egli / Egli Air Haul inc.</u> Signature: _____ -- or -- ☐ Check here to electronically sign this document
--	---

If a Person Other than Pilot/Operator is Filing Report

Name: _____	Title: _____
Signature: _____	
-- or -- ☐ Check here to electronically sign this document	

FOR NTSB USE ONLY

NTSB Accident/Incident No. ANC20CA070	Reviewed by NTSB Regional Office ANC	Name of Investigator Eric Swenson	Date Report Received 07/31/2020
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