



Aviation Investigation Final Report

Location: BERWICK, Louisiana Accident Number: FTW90LA143

Date & Time: July 21, 1990, 07:40 Local Registration: N3598F

Aircraft: AEROSPATIALE AS-350D Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 91: General aviation - Positioning

Analysis

DURING POSITIONING WITHIN A LANDING ZONE THE AIRCRAFT STRUCK TELEPHONE LINES WHILE HOVERING AT ABOUT THREE FEET. THE PILOT SAW THE LINES IMMEDIATELY BEFORE IMPACT, BUT WAS UNABLE TO AVOID THEM. THE MAIN ROTOR BLADES STRUCK AND SEVERED THE LINES WHICH THEN BECAME ENTANGLED WITH ONE TAIL ROTOR BLADE. THE BLADE SUBSEQUENTLY SEPARATED AND THE TAIL ROTOR GEARBOX AND A PORTION OF THE TAIL BOOM CAME OFF THE AIRCRAFT SHORTLY THEREAFTER. THE AIRCRAFT THEN LANDED HARD. THE LANDING ZONE WAS NOT ONE NORMALLY SERVICED BY THE OPERATOR AND THE PILOT HAD NEVER LANDED THERE BEFORE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: PILOT IN COMMAND'S FAILURE TO SEE AND AVOID OBSTACLES IN THE LANDING ZONE. CONTRIBUTING TO THE ACCIDENT WAS THE PILOT'S LACK OF FAMILIARITY WITH THE LANDING ZONE.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: TAXI - AERIAL

Findings

1. OBJECT - WIRE, TRANSMISSION

2. (C) VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND

3. (F) LACK OF FAMILIARITY WITH GEOGRAPHIC AREA - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT Phase of Operation: DESCENT - UNCONTROLLED

Findings

4. ROTOR SYSTEM, TAIL ROTOR BLADE - SEPARATION

Occurrence #3: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Page 2 of 5 FTW90LA143

Factual Information

Pilot Information

Certificate:	Commercial	Age:	31.Male
Certificate.	Commercial	Age.	3 I,IVIdIE
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	September 18, 1989
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1598 hours (Total, all aircraft), 300 hours (Total, this make and model), 1359 hours (Pilot In Command, all aircraft), 59 hours (Last 90 days, all aircraft), 16 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	AEROSPATIALE	Registration:	N3598F
Model/Series:	AS-350D AS-350D	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1132
Landing Gear Type:	Emergency float; High skid	Seats:	6
Date/Type of Last Inspection:	July 15, 1990 AAIP	Certified Max Gross Wt.:	4300 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:	8488 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	LTS101-600A
Registered Owner:	SWIG, BENJAMINE H.	Rated Power:	590 Horsepower
Operator:	PETROLEUM HELICOPTERS, INC.	Operating Certificate(s) Held:	Large helicopter (127), Ondemand air taxi (135)
Operator Does Business As:		Operator Designator Code:	PHM

Page 3 of 5 FTW90LA143

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 2000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	110°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	29°C / 24°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	(NONE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	07:40 Local	Type of Airspace:	Class G

Airport Information

Airport:	PRIVATE NONE	Runway Surface Type:	Dirt
Airport Elevation:	15 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	29.700176,-91.230659(est)

Page 4 of 5 FTW90LA143

Administrative Information

Investigator In Charge (IIC): Wandel, Warren

Additional Participating Persons:

Original Publish Date: September 28, 1992

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=23159

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.

Page 5 of 5 FTW90LA143