



Aviation Investigation Final Report

Location:	MANHATTAN, New York	Accident Number:	NYC89FA106
Date & Time:	March 27, 1989, 15:55 Local	Registration:	N760P
Aircraft:	SIKORSKY S-76A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Executive/Corporate		

Analysis

THE MAIN ROTOR BLADES OF 2 SIKORSKY S-76A HELICOPTERS MADE CTC AT THE WALL STREET HELIPORT/PARKING BARGE, AS ONE (N586C) WAS PARKED IN SPOT 11 WITH THE ROTORS TURNING & THE OTHER (N760P) LNDD IN SPOT 12. THE PLTS OF N586C HAD LNDD 7 MINEARLIER & WERE WAITING FOR PAX. THE UNICOM OPERATOR SAID THAT AS N760P WAS ARRIVING, HE TOLD THE PLTS THERE WAS ANOTHER HELICOPTER 'TURNING ON SPOT 11 & TO PARK ALONG SIDE THEM AT THEIR DISCRETION.' AN INV REVEALED THE BARGE HAD 12 PARKING SPOTS. THE PADS AT SPOTS 4, 5 & 6 WERE DESIGNATED FOR S-76 HELICOPTERS & MEASURED 57'. THE OTHER PARKING SPOTS WERE FORBELL 222'S & WERE 45' APART. THE MAIN ROTOR SPAN OF AN S-76 WAS 44'. N586C WAS PARKED APT 4' LEFT OF SPOT 11'S CENTER-LINE. AS N760P LNDD IN THE CENTER OF SPOT 12 (LEFT OF SPOT 11), THE ROTOR BLADES INTERMESHED. NEITHER CREW WAS ADZD THAT SPOTS 4, 5 & 6 WERE FOR LARGER (S-76) HELICOPTERS. EXISTING FAA ADVISORIES FOR HELIPORTS DID NOT PROVIDE FOR MARKING TO INDICATE THE MAXIMUM ROTOR DIAMETER ACCEPTABLE FOR DESIGNATED PARKING AREAS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT MISJUDGED CLEARANCE BETWEEN HIS AND THE OTHER HELICOPTER. FACTORS RELATED TO THE ACCIDENT WERE: INADEQUATE LAYOUT (MARKINGS) OF THE HELIPORT PARKING AREA, INSUFFICIENT STANDARD/REQUIREMENT FOR NUMERICAL INDICATION OF MAXIMUM ROTOR DIAMETER ACCOMMODATIONS AT HELICOPTER PARKING FACILITIES, FAILURE OF THE UNICOM OPERATOR TO ADVISE THE PILOTS OF PARKING SPOTS THAT WERE DESIGNATED FOR LARGER (S-76) HELICOPTERS, AND PROXIMITY OF THE OTHER HELICOPTER.

Findings

Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) AIRPORT FACILITIES, HELIPORT - INADEQUATE
2. (F) INSUFFICIENT STANDARDS/REQUIREMENTS - FAA(ORGANIZATION)
3. (F) INFORMATION - NOT ISSUED - GROUND PERSONNEL
4. (C) CLEARANCE - MISJUDGED - PILOT IN COMMAND
5. (F) OBJECT - AIRCRAFT PARKED/STANDING

Factual Information

Pilot Information

Certificate:	Airline transport	Age:	57, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	March 21, 1989
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	13500 hours (Total, all aircraft), 1950 hours (Total, this make and model), 11000 hours (Pilot In Command, all aircraft), 75 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	SIKORSKY	Registration:	N760P
Model/Series:	S-76A S-76A	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	760235
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	March 11, 1989 100 hour	Certified Max Gross Wt.:	10300 lbs
Time Since Last Inspection:	12 Hrs	Engines:	2 Turbo shaft
Airframe Total Time:	2438 Hrs	Engine Manufacturer:	ALLISON
ELT:	Installed, not activated	Engine Model/Series:	250-C30S
Registered Owner:	INTERNATIONAL BUSINESS MACHINE	Rated Power:	650 Horsepower
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LGA ,22 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	16:00 Local	Direction from Accident Site:	67°
Lowest Cloud Condition:	25000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	14 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	13°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ARMONK , NY	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:35 Local	Type of Airspace:	Class G

Airport Information

Airport:	WALL ST HELIPORT JRB	Runway Surface Type:	Metal/wood
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	40.690872,-74.020935(est)

Administrative Information

Investigator In Charge (IIC): Hancock, Robert

Additional Participating Persons: ; FARMINGDALE , NY

Original Publish Date: August 13, 1991

Last Revision Date:

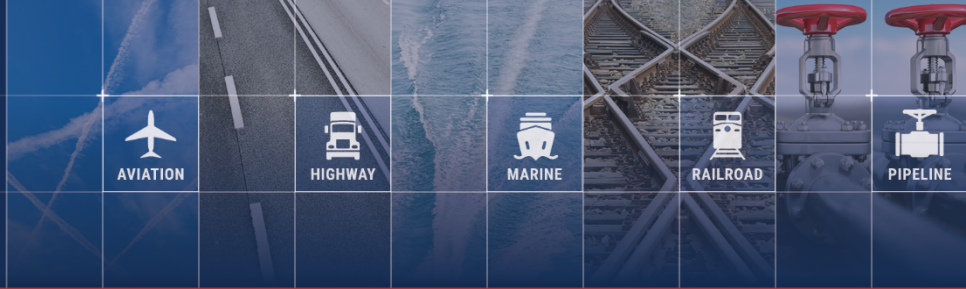
Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=36279>

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](#).



Aviation Investigation Final Report

Location:	MANHATTAN, New York	Accident Number:	NYC89FA106
Date & Time:	March 27, 1989, 15:55 Local	Registration:	N586C
Aircraft:	SIKORSKY S-76A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Executive/Corporate		

Analysis

THE MAIN ROTOR BLADES OF 2 SIKORSKY S-76A HELICOPTERS MADE CTC AT THE WALL STREET HELIPORT/PARKING BARGE, AS ONE (N586C) WAS PARKED IN SPOT 11 WITH THE ROTORS TURNING & THE OTHER (N760P) LNDD IN SPOT 12. THE PLTS OF N586C HAD LNDD 7 MINEARLIER & WERE WAITING FOR PAX. THE UNICOM OPERATOR SAID THAT AS N760P WAS ARRIVING, HE TOLD THE PLTS THERE WAS ANOTHER HELICOPTER 'TURNING ON SPOT 11 & TO PARK ALONG SIDE THEM AT THEIR DISCRETION.' AN INV REVEALED THE BARGE HAD 12 PARKING SPOTS. THE PADS AT SPOTS 4, 5 & 6 WERE DESIGNATED FOR S-76 HELICOPTERS & MEASURED 57'. THE OTHER PARKING SPOTS WERE FORBELL 222'S & WERE 45' APART. THE MAIN ROTOR SPAN OF AN S-76 WAS 44'. N586C WAS PARKED APT 4' LEFT OF SPOT 11'S CENTER-LINE. AS N760P LNDD IN THE CENTER OF SPOT 12 (LEFT OF SPOT 11), THE ROTOR BLADES INTERMESHED, NEITHER CREW WAS ADZD THAT SPOTS 4, 5 & 6 WERE FOR LARGER (S-76) HELICOPTERS. EXISTING FAA ADVISORIES FOR HELIPORTS DID NOT PROVIDE FOR MARKING TO INDICATE THE MAXIMUM ROTOR DIAMETER ACCEPTABLE FOR DESIGNATED PARKING AREAS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT OF THE OTHER HELICOPTER MISJUDGED CLEARANCE BETWEEN HIS AND THE OTHER HELICOPTER. FACTORS RELATED TO THE ACCIDENT WERE: INADEQUATE LAYOUT (MARKINGS) OF THE HELIPORT PARKING AREA, INSUFFICIENT STANDARD/REQUIREMENT FOR NUMERICAL INDICATION OF MAXIMUM ROTOR DIAMETER ACCOMMODATIONS AT THE HELICOPTER PARKING FACILITIES. FAILURE OF THE UNICOM OPERATOR TO ADVISE THE PILOTS OF PARKING SPOTS THAT WERE DESIGNATED FOR LARGER (S-76) HELICOPTERS, AND THE PROXIMITY OF THE OTHER HELICOPTER.

Findings

Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: STANDING - IDLING ROTORS

Findings

1. (F) AIRPORT FACILITIES, HELIPORT - INADEQUATE
2. (F) INSUFFICIENT STANDARDS/REQUIREMENTS - FAA(ORGANIZATION)
3. (F) INFORMATION - NOT ISSUED - GROUND PERSONNEL
4. (C) CLEARANCE - MISJUDGED - PILOT OF OTHER AIRCRAFT
5. (F) OBJECT - AIRCRAFT PARKED/STANDING

Factual Information

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	37,Female
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	February 10, 1989
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	5900 hours (Total, all aircraft), 3000 hours (Total, this make and model), 5000 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	SIKORSKY	Registration:	N586C
Model/Series:	S-76A S-76A	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	760074
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	March 6, 1989 100 hour	Certified Max Gross Wt.:	10300 lbs
Time Since Last Inspection:	13 Hrs	Engines:	2 Turbo shaft
Airframe Total Time:	2287 Hrs	Engine Manufacturer:	ALLISON
ELT:	Installed, not activated	Engine Model/Series:	250-C305
Registered Owner:	SQUIBB CORPORATION	Rated Power:	650 Horsepower
Operator:	EXECUTIVE AIR FLEET	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	IMKA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LGA ,22 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	16:00 Local	Direction from Accident Site:	67°
Lowest Cloud Condition:	25000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	14 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	13°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	TETERBORO , NJ (TEB)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:40 Local	Type of Airspace:	Class G

Airport Information

Airport:	WALL ST HELIPORT JRB	Runway Surface Type:	Metal/wood
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	40.690872,-74.020935(est)

Administrative Information

Investigator In Charge (IIC): Hancock, Robert

Additional Participating Persons: ; FARMINGDALE , NY

Original Publish Date: August 13, 1991

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=36279>

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