

## **Aviation Investigation Final Report**

Location:	KIPTOPEKA, Virginia		Accident Number:	NYC94FA119
Date & Time:	July 11, 1994, 16:18 L	.ocal	Registration:	N6624R
Aircraft:	CESSNA	172RG	Aircraft Damage:	Destroyed
Defining Event:			Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviat	ion		

## Analysis

A CESSNA 172RG, N6624R, WAS ON A FLIGHT TO SPOT FISH FROM ABOUT 3500' MSL. IN THE SAME VICINITY, A NAVY SIKORKSY MH-53A HELICOPTER WAS ON A MAINTENANCE TEST FLIGHT. THEY COLLIDED IN MIDAIR OVER THE CHESAPEAKE BAY, NEAR KIPTOPEKA, VA. THE 172RG WENT INTO AN UNCONTROLLED DESCENT & CRASHED IN THE BAY; THE HELICOPTER WAS LANDED IN A FIELD. INVESTIGATION REVEALED THAT THE 172RG PILOT HAD CONTACTED THE DR-1 CONTROLLER AT NORFOLK DEPARTURE CONTROL (ATC) AT 1458 EDT. HE WAS ASSIGNED A TRANSPONDER CODE & WAS RECEIVING VFR FLIGHT FOLLOWING. THE HELICOPTER PILOT WAS NOT IN CONTACT WITH ATC & WAS USING A VFR TRANSPONDER CODE OF 1200. TWO CONTROLLER CHANGES OCCURRED AT THE DR-1 POSITION AFTER N6624R ESTABLISHED CONTACT. AT 1610 EDT, THE 2ND CONTROLLER GAVE A RELIEF BRIEFING TO THE 3RD CONTROLLER & REFERENCED THE 172RG. THE HELICOPTER HAD BEEN OPERATING AT ABOUT 500'; THE PILOT THEN MADE A CLIMB (MOMENTARILY) TO ABOUT 6000' TO TEST A FUEL DUMPING SYSTEM. RADAR DATA SHOWED THE HELICOPTER THEN ENTERED A DESCENT & WAS TURNING WHEN IT CONVERGED ON THE 172RG FROM ABOVE & BEHIND. AT ABOUT 1618, THE MIDAIR COLLISION OCCURRED ABOUT 3500' MSL. THERE HAD BEEN NO COMMUNICATION BETWEEN ATC & THE 172RG PILOT FOR ABOUT 33 MINUTES BEFORE THE COLLISION.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: INADEQUATE VISUAL LOOKOUT BY THE FLIGHTCREW OF THE HELICOPTER. A FACTOR RELATED TO THE ACCIDENT WAS: FAILURE OF THE DEPARTURE CONTROLLER TO ISSUE A TRAFFIC ADVISORY.

#### **Findings**

Occurrence #1: MIDAIR COLLISION Phase of Operation: MANEUVERING

Findings

1. (C) VISUAL LOOKOUT - INADEQUATE - PILOT OF OTHER AIRCRAFT 2. (F) TRAFFIC ADVISORY - NOT ISSUED - ATC PERSONNEL(DEP/APCH)

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: DESCENT - UNCONTROLLED

## **Factual Information**

On July 11, 1994, about 1618 eastern daylight time, a Cessna 172RG, N6624R (call sign "Spotter 24R), piloted by Mr. William Sklar, and a United States Navy, Sikorsky MH-53E helicopter, 162505 (call sign Vulcan 555), piloted by two Navy pilots, and two crew members, collided in midair while maneuvering over the water near Kiptopeka, Virginia.

The Cessna impacted into approximately 10 feet of water, and was destroyed. The Navy Helicopter proceeded in a northbound direction and landed without further incident in a field approximately 2 miles north of the collision site. The helicopter was substantially damaged. The pilot of Cessna was fatally injured. There was no injuries to any of the crew members on the Navy Helicopter. Visual meteorological conditions prevailed and no flight plan had been filed by the Cessna. The Cessna flight was being conducted under 14 CFR 91.

The Cessna was operating as a fish spotting aircraft, and was receiving flight following from Norfolk Departure Control Radar, number one facility (DR-1), Norfolk, Virginia, and was given an assigned transponder code of 0171. There was no radio communication between DR-1, and Cessna N6624R for approximately 33 minutes prior to the collision.

The Navy helicopter had departed Chambers Field, Naval Air Station (NAS), Norfolk, and was conducting maintenance tests. The helicopter was on a military flight plan, and was not in radio contact with DR-1, using a VFR transponder code of 1200. The helicopter had ascended to approximately 6000 feet MSL, completed a maintenance test, and started a descending left turn.

The helicopter was in a descending left turn when the mid-air collision occurred.

According to the written statement of Navy, Lieutenant (Lt.) James Rocha, the pilot of the Navy Helicopter:

The weather was clearest near the tip of the Cape Charles peninsula. We climbed to over the water off to the west of the peninsula...we 6000' in an orbit completed the dump test after just a minute or two and I initiated a descent. I was descending in a left orbit over the water to the west of the peninsula. As we turned through the east, perpendicular to I noted civilian traffic at the 12 o'clock position, the shore. low, a few miles out. The traffic in sight and the crew chief stated that copilot stated she had the lookouts were posted. I continued the left orbit descending at approximately 1000' per minute. As I turned through a north-easterly heading on the next orbit, I heard and felt the impact.

Lt. Rocha wrote that he did not know he had impacted with an airplane, until he asked his crew and the copilot told him what happened. He then executed an emergency autorotational

descent, changed the transponder code 7700 (emergency), and landed.

According to the copilot, Lt. Shari Beeth's statement, as the helicopter turned towards land she, "...spotted a small civilian aircraft over [the] land approximately 4 miles out, much lower... and not headed in our general direction." Lt. Beeth told the pilot she saw the traffic, and according to her statement, they continued in a left descending turn "for 1 or 2 full rotations." Lt. Beeth wrote:

...then as we turned away from land again [west], I caught a glimpse of something out the corner of my eye. I jerked my head to the right and saw a civilian aircraft just prior to it impacting us on our aft starboard [right] side. The aircraft appeared to be in a climbing left turn. I did not actually see it hit us as I had snapped my head back toward the front to grab the controls in an effort to take evasive maneuvers....

According to the NTSB ATC, Group Chairman's report, N6624R was handed off from Oceana Naval Air Station to the Arrival Radar one (AR-1) controller at 1457:50. The AR-1 controller initiated an automated handoff on N6624R to the DR-1 (Departure radar-one controller)controller. N6624R contacted the DR-1 controller at 1458:06, saying "with you Cape Henry at three point five for Lynnhaven." The controller told the aircraft to "ident" and then issued an altimeter setting of 30.12.

At 1408:01, N6624R informed the controller that he would like to proceed west to the Hampton tunnel area. About 5 minutes later, the controller called traffic to Continental 1552, saying that there was traffic three miles north, orbiting, "a Cessna spotting fish at 3,500." The controller then informed N6624R about a Boeing 737 climbing to 3,000 ft. N6624R transmitted "in the blind," "Two four Romeo is watching traffic." The DR-1 controller replied, "thanks."

At 1516:16, the DR-1 controller called traffic to N6624R which was a Boeing 737 leaving 2,000 feet for 4,000 feet. Ten minutes later, at 1526:04, N6624R told the DR-1 controller that he was "going to the York River, sir."

At 1537:20, the DR-1 controller gave a relief briefing to the next controller whose operating initials were LS. N6624R was not included in the briefing. At 1545:01, N6624R transmitted that he was eastbound towards Cape Charles, and then he would be working his way south toward the "high span." The DR-1 controller then inquired what the call sign was of the fish spotter. N6624R replied, "uh two four Romeo." The DR-1 controller then transmitted, "Fish Spotter two four Romeo, Norfolk altimeter three zero one one, ident."

The DR-1 controller, at 1550:36, pointed out "Fish Spotter two four Romeo" to the Peninsula radar controller (PSR) and the East Feeder radar controller. Both of the adjacent radar sectors approved the point out.

At 1610:11, the DR-1 controller gave a relief briefing to DK, and N6624R was mentioned. He said, "...you have one fish spotter, P and E (Peninsula Radar and East Feeder Radar) are

watching at thirty five, going up and down for the high span." (The operating initials of the controller leaving the sector were LS and the initials of the controller taking over the sector were DK).

The precise time of the accident according to the NTSB RECORDED RADAR STUDY was 1618:30 (2018:30 UTC). From the time of the above relief briefing for DK to the time of the accident, there was no communication between N6624R and the DR-1 controller. By reference to the RECORDED RADAR STUDY beginning at 1610:00 (2010:00 UTC), both aircraft remained in the general vicinity of each other until the accident occurred. The helicopter, designated by a diamond symbol, climbed through the altitude of N6624R (which was 3500 ft), and leveled off for about 7 radar "hits" at 5,800 ft. The helicopter then began a continuous descent to 3500 ft, where the collision took place. The accident occurred at 1618:30. The helicopter continued descent and landed.

At 1639:42, the DR-1 controller transmitted, "Fish spotter two four Romeo, you still out there?" There were no replies. Operation at that sector continued. N6270V, a fishspotter, called at 1652:37, and asked, "...what can you tell me about the Cessna and helicopter crash down at the bay there?" The DR-1 controller then asked N6270V what his position was. N6270V said that his position was "about forty seven north," and told the controller that he heard a Cessna and a helicopter crashed, and that 24 Romeo could not be contacted. He then asked if the DR-1 controller had been working him. The DR-1 controller replied, " Sir, I don't have any information on that right now, they're investigating it. I have no information to pass on to you. I know it's one of your comrades, I'd sure love to say something to you, but I have no information whatsoever, right now." N6270V thanked the controller, and then asked it if there would be any information available later. Thirty seconds later, N6270V transmitted that he was wondering if the controller had been working two Four Romeo." N6270V then asked, "is it possible that he's the aircraft involved?" The controller replied, "I'm sorry I can't comment on that at this time. I don't know, they're researching it right now."

According to the Recorded Radar Study, the flight tracks, beginning at 1616:30, showed that the speed of the helicopter was slightly faster than that of N6624R (fish spotter). During this time period N6624R was roughly at the helicopter's twelve o'clock position. The flight tracks showed that the fish spotter was at this relative position for several minutes immediately prior to the collision, and then during the last 15-20 seconds, both aircraft began to converge at about a 25-degree angle. At this point, the helicopter was still in a descent. The fish spotter was on the right, and the helicopter was on the left. The helicopter was on the fish spotter's left rear and at a higher altitude. The flight tracks revealed that the helicopter had a longer time period (minutes) to see and avoid the fish spotter, than the fish spotter had to avoid the helicopter (seconds). Additionally, the helicopter was transitioning through altitudes in a rapid descent (the descent rate reached 2000 feet per minute).

The flight tracks from 1615:00, until the collision occurred, shows that the helicopter is overtaking the fish spotter, not as much as in the difference between the radar hits, but in the

difference between flight paths. Both aircraft are in a general turn to the left, with the flight path of the helicopter being shorter.

The last recorded radar shows the helicopter was turning from northeast to north (left) descending from 4300 feet to 3500 feet, overtaking the Cessna, from above, and behind. The Cessna is shown by the radar maneuvering left and right, in a northwesterly direction, maintaining between 3400 and 3500 feet.

The accident occurred during the hours of daylight approximately 37 degrees, 09 minutes north, and 75 degrees, 59 minutes west.

PERSONNEL INFORMATION

Cessna N6624R

Mr. William M. Sklar held Commercial Pilot Certificate, No. 1138194, with airplane mutiengine and airplane single engine land, and instrument airplane ratings.

Mr. Sklar was issued a Second Class Airman Medical Certificate on March 18, 1994, with limitations, must have available glasses for near vision.

Mr. Sklar's records showing his total flight hours were not found. According to company records, at the time of the accident Mr. Sklar had over 40,000 total flight hours, of which 10,774 hours were in Cessna 172RG aircraft.

Navy 162505

LT. James D. Rocha held a Military Pilot Certificate, with airplane single engine land, helicopter, and instrument helicopter ratings.

LT. Rocha was issued a First Class Airman Medical Certificate on April 13, 1994, with no limitations.

LT. Rocha's Navy records showing his total flight hours indicated that at the time of the accident he had 947.9 total flight hours, of which 714 hours were in MH-53E helicopters.

LT. Shari L. Beeth held a Military Pilot Certificate, with airplane single engine land, helicopter, and instrument helicopter ratings.

LT. Beeth was issued a First Class Airman Medical Certificate on May 16, 1994, with no limitations.

LT. Beeth's Navy records showing her total flight hours indicated that at the time of the accident she had 342.2 total flight hours, of which 73.3 hours were in MH-53E helicopters.

#### METEOROLOGICAL INFORMATION

The Norfolk (ORF), 1550 weather observation was; 9000 scattered, 25000 broken, visibility 10 miles, temperature 82 degrees F, dew point 66, wind 030 degrees, 7 knots, altimeter 30.10 inches Hg.

#### WRECKAGE AND IMPACT INFORMATION

The wreckage of Cessna N6624R was recovered from the water and examined on July 20, 1994. Navy Helicopter 162505 landed in an open field, and was examined on July 12, 1994. The accident site was approximately one mile west of the Cape Charles Peninsular, and approximately 15 miles northeast of Norfolk International Airport.

#### Cessna N6624R

N6624R was recovered from the water with the engine attached to the airframe by control cables, and one engine mount. The left wing was detached from the root. The right wing was attached by aileron cables, and the forward main spar was attached to the fuselage attachment. The landing gear was up and locked.

Examination of the wreckage revealed that the left main wing spar was bent aft at the strut attachment. Leading edge skin, found in the same area as the bent spar, was crushed, and displayed black paint transfer along the spar cap and leading edge. The left wing lift strut was separated about mid-span with each end still attached to its assigned mounting location. Examination of the strut fracture revealed the surface of the outboard section was pushed in at the break, and just outboard was an abraded area with the scratches trailing outboard about 35 degrees. The left aileron quadrant and attaching wing skin were rolled up into a ball, but still attached by control cables.

The left aft door post was buckled and bowed at the striker. The upper section of the door post was bent at the top consistent, with drag overloads that were found on the left wing. The door and fuselage skin aft of the door post exhibited scratches up and aft. The scratches exhibited discontinuity as they made the transition from the door to the fuselage with the door held in the closed position, indicating the door was not latched closed when they were imposed. The door also exhibited black paint transfer. The left side cabin door exhibited fore to aft buckling along the lower third of the door, and the center of the door panel was pushed outboard.

The engine was examined and no discrepancies were observed. The propeller had separated from the engine, and was not recovered.

Navy 162505

Most of the damage to the helicopter was confined to the right aft section of the fuselage, aft of the sponson, and forward of the vertical stabilizer. The right sponson was damaged at the outboard trailing edge. Slash type marks were observed in the severed edge of the sponson. Coinciding with the slash marks was a deeper cut that had penetrated the sponson primary structure, but did not penetrate the main landing gear trunnion support fitting. White paint transfer was observed on the sponson, trailing up and aft. Additional white paint transfer streaks, going up and aft, were observed approximately 6 inches forward, and vertically of the right aft emergency escape opening. The escape hatch was destroyed, and most of the plexiglas was broken out.

A narrow swath of skin was torn loose from the fuselage at the upper hatch frame, angling upwards and aft approximately 35 degrees. There was a hole from the top of the cabin almost to the floor. White paint transfer was noted on the skin surrounding the hole. Impact damage was noted to the rotor control and idler crank. Some of the hydraulic line were damage, and several lines were fractured. There was some damage noted on the main rotor blades.

Several parts of the Cessna were found near the helicopter and inside the cargo/main cabin area. The Cessna's left outboard section of wing was found lying about 65 feet behind the helicopter after it had landed. One of the helicopter crew members saw it fall off the helicopter just before the helicopter touched down. Fragments of the Cessna's left wing were also found inside the torque box structure.

Three fragments of the red navigation light (left) were found in the cargo/main cabin area near the impact hole. Also found in this same area was fragments of landing light lens, a spring and washer from the propeller governor, pieces of engine baffling, and a pool of engine oil.

#### MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on Mr. William Sklar, on July 12, 1994, at the Tidewater District Medical Examiner's Office, Norfolk, Virginia, by Dr. John Snyder.

The toxicological tests were conducted at the Armed Forces Institute of Pathology, Washington, DC, and revealed, "... no drugs or alcohol where found."

#### ADDITIONAL INFORMATION

The Atlantic Spotters Association, and the FAA Air Traffic Controllers, from Norfolk Approach Control (ATC), met prior to the 1994 fishing season to coordinated between them procedures for flight in Norfolk's area. It was agreed that all fish spotting aircraft would make radio contact with Norfolk Approach when; a plane was at 4000 feet or above, south of a line between Cape Charles VOR and New Point Light; south of line between New Point and Cape Charles; or west of line between the Virginia Capes; and any time a fish spotter aircraft wanted to enter restricted areas. In addition, all fish spotter aircraft would contact Norfolk Tower within 5 miles, below 2500 feet; and approach control 2500 feet, and above. ATC in turn would provide the fish spotter aircraft with advisories.

At the time of the accident, the Navy had no requirement for their VFR aircraft to make radio contact with Norfolk Approach Control.

During the interview with the DR-1, ATC Controller, conducted by the NTSB, ATC Group Chairman, reference the helicopter squawking a 7700 code after the collision the controller said, he may have seen a 7700 code, but he didn't know. Seventy seven hundred (7700) targets were described as a constant thing, not unusual in that area, which is over water. When asked if he heard an ELT, he said that his position does not monitor guard. They see code 7700 every day.

Since this accident several procedural changes have taken place in the Norfolk area.

The Navy Safety Center personnel reported the following:

1. Course Rules for Naval Air Station Norfolk now contains remarks about Fish Spotter Activity.

2. A change containing remarks about Fish Spotter Activity 1500 ft and above, from May to November will be included in the AP-1 (Area Planning) publication, distributed throughout DOD (Department of Defense).

3. Squadron Operating Procedures now encourage pilots operating in local areas to contact Air Traffic Control for VFR advisories.

4. The Tenant Squadron of NAS Norfolk is now on a distribution list for FAA Letters to Airmen.

Norfolk International Tower personnel reported the following:

1. At the end of August a letter went to FAA headquarters to expand the Class C airspace. Each airport then would have its own "core." (This includes Navy Chambers, where the helicopter had departed.)

2. Navy Chambers has requested the installation of D-Brite in its tower and GCA facility.

3. Norfolk Tower has initiated an Increased Awareness program for fish spotters.

4. On the 21st of January, Norfolk is moving to a new Tower with an ASR-9, 306 program that will yield a "conflict alert" for non-tracked Mode-C intruders versus normal, tracked targets.

5. Norfolk Tower has established a local Order that certain positions shall monitor "guard" on speakers.

6. The Area Manager of training has included the subject of 7700 Codes in semi-annual

training packages. A local patch which gives an oral alarm for 7700 codes was developed at Norfolk. It has been reported to be working well, and has been submitted to FAA's Eastern Region.

7. The FAA's Letter to Airmen will contain more specifics, both where the fish spotting activities are taking place as well as the altitudes in use.

8. Remarks about Fish Spotting activity will continue to be carried on the ATIS giving the geographic area as well as the altitudes of the fish spotting activity.

9. Proper responses to receiving an ELT or 7700 Code are being incorporated into Recurrent Training at Norfolk Tower.

The Cessna's airframe was released to the owner's insurance adjuster Mr. Walter Lionia on July 20, 1994. The helicopter was released to Mr. Robert Vallaster, US Navy Safety Center, on July 13, 1994.

#### **Pilot Information**

Certificate:	Commercial	Age:	62,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	March 18, 1994
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	40000 hours (Total, all aircraft), 10774 hours (Total, this make and model), 38774 hours (Pilot In Command, all aircraft), 474 hours (Last 90 days, all aircraft), 72 hours (Last 30 days, all aircraft), 10 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N6624R
Model/Series:	172RG 172RG	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	172RG0219
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	July 16, 1994 Annual	Certified Max Gross Wt.:	2650 lbs
Time Since Last Inspection:	10 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2650 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	0-360-F1A6
Registered Owner:	WILLIAM SKLAR	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None
<b>Operator Does Business As:</b>		Operator Designator Code:	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
<b>Observation Facility, Elevation:</b>	ORF ,27 ft msl	Distance from Accident Site:	18 Nautical Miles
Observation Time:	15:50 Local	Direction from Accident Site:	230°
Lowest Cloud Condition:	Scattered / 9000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	28°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitat	tion	
Departure Point:	PORTSMOUTH (PVG)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	
Departure Time:	00:00 Local	Type of Airspace:	Class D

## **Airport Information**

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	37.259098,-76.490554(est)

#### **Administrative Information**

Investigator In Charge (IIC):	YURMAN, ALAN
Additional Participating Persons:	RAT SCOTT; SANDSTON , VA JOHN HUY; WICHITA , KS ROBERT VALLASTER; NORFALK , VA
Original Publish Date:	August 1, 1995
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=38676

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:	KIPTOPEKA, Virginia	1	Accident Number:	NYC94FA119
Date & Time:	July 11, 1994, 16:18	Local	Registration:	N62505
Aircraft:	Sikorsky	MH-53E	Aircraft Damage:	Substantial
Defining Event:			Injuries:	4 None
Flight Conducted Under:	Public aircraft			

## Analysis

A CESSNA 172RG, N6624R, WAS ON A FLIGHT TO SPOT FISH FROM ABOUT 3500' MSL. IN THE SAME VICINITY, A NAVY SIKORKSY MH-53A HELICOPTER WAS ON A MAINTENANCE TEST FLIGHT. THEY COLLIDED IN MIDAIR OVER THE CHESAPEAKE BAY, NEAR KIPTOPEKA, VA. THE 172RG WENT INTO AN UNCONTROLLED DESCENT & CRASHED IN THE BAY; THE HELICOPTER WAS LANDED IN A FIELD. INVESTIGATION REVEALED THAT THE 172RG PILOT HAD CONTACTED THE DR-1 CONTROLLER AT NORFOLK DEPARTURE CONTROL (ATC) AT 1458 EDT. HE WAS ASSIGNED A TRANSPONDER CODE & WAS RECEIVING VFR FLIGHT FOLLOWING. THE HELICOPTER PILOT WAS NOT IN CONTACT WITH ATC & WAS USING A VFR TRANSPONDER CODE OF 1200. TWO CONTROLLER CHANGES OCCURRED AT THE DR-1 POSITION AFTER N6624R ESTABLISHED CONTACT. AT 1610 EDT, THE 2ND CONTROLLER GAVE A RELIEF BRIEFING TO THE 3RD CONTROLLER & REFERENCED THE 172RG. THE HELICOPTER HAD BEEN OPERATING AT ABOUT 500'; THE PILOT THEN MADE A CLIMB (MOMENTARILY) TO ABOUT 6000' TO TEST A FUEL DUMPING SYSTEM. RADAR DATA SHOWED THE HELICOPTER THEN ENTERED A DESCENT & WAS TURNING WHEN IT CONVERGED ON THE 172RG FROM ABOVE & BEHIND. AT ABOUT 1618, THE MIDAIR COLLISION OCCURRED ABOUT 3500' MSL. THERE HAD BEEN NO COMMUNICATION BETWEEN ATC & THE 172RG PILOT FOR ABOUT 33 MINUTES BEFORE THE COLLISION.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: INADEQUATE VISUAL LOOKOUT BY THE FLIGHTCREW OF THE HELICOPTER. A FACTOR RELATED TO THE ACCIDENT WAS: FAILURE OF THE DEPARTURE CONTROLLER TO ISSUE A TRAFFIC ADVISORY.

#### **Findings**

Occurrence #1: MIDAIR COLLISION Phase of Operation: MANEUVERING - TURN TO REVERSE DIRECTION

Findings

1. (C) VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND 2. (F) TRAFFIC ADVISORY - NOT ISSUED - ATC PERSONNEL(DEP/APCH)

## **Factual Information**

#### SEE NARRATIVE FOR FILE NYC94FA119A.

#### **Pilot Information**

Certificate:	Military	Age:	29,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	April 30, 1993
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	948 hours (Total, all aircraft), 714 hours (Total, this make and model), 285 hours (Pilot In Command, all aircraft), 57 hours (Last 90 days, all aircraft), 29 hours (Last 30 days, all aircraft)		

#### Aircraft and Owner/Operator Information

Aircraft Make:	Sikorsky	Registration:	N62505
Model/Series:	MH-53E MH-53E	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	162505
Landing Gear Type:	Retractable - Tricycle	Seats:	11
Date/Type of Last Inspection:	July 7, 1994 Continuous airworthiness	Certified Max Gross Wt.:	69750 lbs
Time Since Last Inspection:		Engines:	3 Turbo shaft
Airframe Total Time:	2055 Hrs	Engine Manufacturer:	GE
ELT:	Not installed	Engine Model/Series:	T64-GE-416
Registered Owner:	DEPARTMENT OF THE NAVY	Rated Power:	4380 Horsepower
Operator:	US NAVY	Operating Certificate(s) Held:	None
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:	ORF ,27 ft msl	Distance from Accident Site:	18 Nautical Miles
Observation Time:	15:50 Local	Direction from Accident Site:	230°
Lowest Cloud Condition:	Scattered / 9000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	28°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipita	tion	
Departure Point:	NAS NORFOLK (NGU )	Type of Flight Plan Filed:	Military VFR
Destination:		Type of Clearance:	VFR
Departure Time:	15:59 Local	Type of Airspace:	Military operation area

## **Airport Information**

Airport:		Runway Surface Type:	
Airport Elevation: Runway Surface Con		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	4 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	37.259098,-76.490554(est)

#### **Administrative Information**

Investigator In Charge (IIC):	YURMAN, ALAN
Additional Participating Persons:	RAT SCOTT; SANDSTON , VA JOHN HUY; WICHITA , KS ROBERT VALLASTER; NORFALK , VA
Original Publish Date:	August 1, 1995
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=38676

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.