# Aviation Investigation Final Report

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| **Location:** | FARMINGDALE, New York | **Accident Number:** | NYC99LA044 |
| **Date & Time:** | January 2, 1999, 09:30 Local | **Registration:** | N1857G |
| **Aircraft:** | Beech C-24R | **Aircraft Damage:** | Substantial |
| **Defining Event:** | | **Injuries:** | 2 Minor |
| **Flight Conducted Under:** | Part 91: General aviation - Personal | | |

## Analysis

After departure, on a right downwind leg, the passenger noticed that the engine 'began to stall.' The engine lost all power and the pilot was unable to restart it. The pilot established a glide for Runway 32, but the aircraft impacted the ground in a cemetery, approximately 1,800 feet short of Runway 32. According to the pilot's written statement, '[the] engine quit due to ice and water in [the] fuel.' During the preflight, the passenger did not observe the pilot drain fuel from either of the fuel tanks or the main airplane sump drain. A Federal Aviation Administration inspector found that the main fuel bowl of the fuel strainer was contaminated with water, dirt, rust, paint, and sand.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate preflight examination of the airplane, which resulted in a power loss due to fuel contamination.

### Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (C) FLUID,FUEL - CONTAMINATION
2. (C) AIRCRAFT PREFLIGHT - IMPROPER - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: EMERGENCY DESCENT/LANDING

## Factual Information

On January 2, 1999, about 0930 Eastern Standard Time, a Beech C24R, N1857G, was substantially damaged during a forced landing in Farmingdale, New York. The certificated private pilot and passenger sustained minor injuries. Visual meteorological conditions prevailed for the flight that originated from Republic Airport (FRG), Farmingdale, New York. No flight plan was filed for the personal flight conducted under 14 CFR Part 91.

According to the pilot's written statement, he had a complete memory loss of the entire day of the accident. He wrote "[The] engine quit due to ice and water in [the] fuel."

The passenger reported that he observed the pilot perform a preflight examination of the airplane, which included removing the fuel caps and looking into the tanks. He did not observe the pilot drain fuel from either the fuel tanks or the main airplane sump drain. After engine start, the pilot taxied to the run-up area, and reported that the engine was running rough. He also reported that he was going to taxi back to the ramp and speak with the owner of the airplane about the engine condition. Upon reaching the ramp, the pilot and passenger remained in the airplane with the engine running, while they visually scanned the area for the owner. Unable to see the owner, the pilot stated the engine was running normal now, and initiated taxi to the run-up area again. Upon completion of a successful run-up, the pilot radioed the tower and requested permission to takeoff. The airplane departed on Runway 32.

After departure, on a right downwind, the passenger noticed that the engine, "began to stall." The passenger further reported that the engine lost all power, but the pilot was able to restart it. The pilot advised the tower of the power loss. The engine lost power again, and the pilot was unable to restart the engine. The pilot established a glide for Runway 32. The aircraft impacted the ground in a cemetery, approximately 1,800 feet short of Runway 32. The right aileron and nose gear were separated from the airplane. Both wings were partially separated from the airplane.

The pilot was interviewed by an inspector from the Federal Aviation Administration (FAA). The Inspector reported that the pilot had struck his head during the forced landing and had no recollection of the flight. The Inspector's examination of the airplane revealed the main fuel bowl of the fuel strainer was contaminated with water, dirt, rust, paint, and sand. In addition, rust was found on the inlet screen to the fuel injection unit and on the fittings to the fuel injection manifold. The Inspector stated that there were no reports of fuel contamination to the other airplanes based at Republic Airport.

## Pilot Information

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| **Certificate:** | Private | **Age:** | 42,Male |
| **Airplane Rating(s):** | Single-engine land | **Seat Occupied:** | Left |
| **Other Aircraft Rating(s):** | None | **Restraint Used:** | |
| **Instrument Rating(s):** | None | **Second Pilot Present:** | No |
| **Instructor Rating(s):** | None | **Toxicology Performed:** | No |
| **Medical Certification:** | Class 3 Valid Medical--no waivers/lim. | **Last FAA Medical Exam:** | February 4, 1998 |
| **Occupational Pilot:** | No | **Last Flight Review or Equivalent:** | |
| **Flight Time:** | 165 hours (Total, all aircraft), 33 hours (Total, this make and model), 105 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft) | | |

## Aircraft and Owner/Operator Information

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| **Aircraft Make:** | Beech | **Registration:** | N1857G |
| **Model/Series:** | C-24R C-24R | **Aircraft Category:** | Airplane |
| **Year of Manufacture:** | | **Amateur Built:** | |
| **Airworthiness Certificate:** | Normal | **Serial Number:** | MC-767 |
| **Landing Gear Type:** | Retractable - Tricycle | **Seats:** | 6 |
| **Date/Type of Last Inspection:** | October 2, 1998 Annual | **Certified Max Gross Wt.:** | 2750 lbs |
| **Time Since Last Inspection:** | 50 Hrs | **Engines:** | 1 Reciprocating |
| **Airframe Total Time:** | 1298 Hrs | **Engine Manufacturer:** | Lycoming |
| **ELT:** | Installed, activated, did not aid in locating accident | **Engine Model/Series:** | IO360 |
| **Registered Owner:** | AIR TRANSPORT CORP. | **Rated Power:** | 200 Horsepower |
| **Operator:** | | **Operating Certificate(s) Held:** | None |
| **Operator Does Business As:** | | **Operator Designator Code:** | |

## Meteorological Information and Flight Plan

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| **Conditions at Accident Site:** | Visual (VMC) | **Condition of Light:** | Day |
| **Observation Facility, Elevation:** | FRG ,82 ft msl | **Distance from Accident Site:** | |
| **Observation Time:** | | **Direction from Accident Site:** | |
| **Lowest Cloud Condition:** | Scattered / 14000 ft AGL | **Visibility** | 15 miles |
| **Lowest Ceiling:** | None | **Visibility (RVR):** | |
| **Wind Speed/Gusts:** | 6 knots / | **Turbulence Type Forecast/Actual:** | / |
| **Wind Direction:** | 310° | **Turbulence Severity Forecast/Actual:** | / |
| **Altimeter Setting:** | 30 inches Hg | **Temperature/Dew Point:** | -7°C / -11°C |
| **Precipitation and Obscuration:** | No Obscuration; No Precipitation | | |
| **Departure Point:** | (FRG ) | **Type of Flight Plan Filed:** | None |
| **Destination:** | | **Type of Clearance:** | None |
| **Departure Time:** | 09:30 Local | **Type of Airspace:** | Class D |

## Airport Information

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| **Airport:** | FARMINGDALE FRG | **Runway Surface Type:** | Asphalt |
| **Airport Elevation:** | 82 ft msl | **Runway Surface Condition:** | Dry |
| **Runway Used:** | 32 | **IFR Approach:** | None |
| **Runway Length/Width:** | 6827 ft / 150 ft | **VFR Approach/Landing:** | Forced landing |

## Wreckage and Impact Information

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| **Crew Injuries:** | 1 Minor | **Aircraft Damage:** | Substantial |
| **Passenger Injuries:** | 1 Minor | **Aircraft Fire:** | None |
| **Ground Injuries:** | N/A | **Aircraft Explosion:** | None |
| **Total Injuries:** | 2 Minor | **Latitude, Longitude:** | 40.730796,-73.439056(est) |

## Administrative Information

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| **Investigator In Charge (IIC):** | Gretz, Robert |
| **Additional Participating Persons:** | MIKE DIPAULO; FARMINGDALE , NY |
| **Original Publish Date:** | April 20, 2001 |
| **Last Revision Date:** | |
| **Investigation Class:** | Class |
| **Note:** | |
| **Investigation Docket:** | https://data.ntsb.gov/Docket?ProjectID=45623 |

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.