



# **Aviation Investigation Final Report**

**Location:** DELAND, Florida **Accident Number:** MIA97LA122

Date & Time: April 6, 1997, 15:45 Local Registration: N7KR

Aircraft: Kunc KR-1 Aircraft Damage: Substantial

**Defining Event:** 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

## **Analysis**

As the pilot was on an approach to land, the engine lost power. Attempts to restart the engine were unsuccessful. During a forced landing, the aircraft collided with trees, then crashed into a pasture. There was no fuel leakage from the aircraft after the accident. The aircraft builder stated that the aircraft held 10 gallons of usable fuel and consumed 3.5 to 4 gallons per hour. The aircraft had flown about 3 flight hours since the last refueling.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper planning/decision, by failing to ensure there was sufficient fuel to safety complete the flight, which resulted in fuel exhaustion, loss of engine power, a forced landing, and subsequent collision with tree(s).

## **Findings**

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: APPROACH

#### **Findings**

1. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

2. (C) FLUID, FUEL - EXHAUSTION

3. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

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Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: EMERGENCY LANDING

Findings

4. OBJECT - TREE(S)

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Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

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### **Factual Information**

On April 6, 1997, about 1545 eastern daylight time, a Kunc KR-1, N7KR, registered to a private individual, crashed during a forced landing following loss of engine power while on approach to the Deland Airport, Deland, Florida, while on a Title 14 CFR Part 91 personal flight. Visual meteorological conditions prevailed at the time and no flight plan was filed. The aircraft received substantial damage and the commercial-rated pilot received minor injuries. The flight originated from Deland, Florida, the same day, about 1400.

The pilot stated that while on approach to the Deland Airport, the engine failed and he could not get it restarted. While attempting to glide to the airport, the aircraft lost altitude and collided with two oak trees. The aircraft then crashed into a pasture. He had filled the fuel tank in the morning and had flown two flights, totaling about 3 flight hours since the refueling. He had purchased the aircraft the day before the accident and believed it had a 8 gallon fuel tank and used about 2 gallons of fuel per hour. He stated there was no fuel leakage from the aircraft after the accident.

The person who built the aircraft and sold it to the accident pilot stated the aircraft had a 10 gallon fuel tank of which all of the fuel was usable. He stated the aircraft used between 3.5 and 4 gallons per hour.

The aircraft and engine was not examined by FAA or NTSB personnel after the accident. The NTSB did not receive a completed aircraft accident report from the pilot.

### **Pilot Information**

| Certificate:              | Commercial   | Age:                              | 37,Male           |
|---------------------------|--|-----------------------------------|-------------------|
| Airplane Rating(s):       | Single-engine land; Multi-engine land                                  | Seat Occupied:                    | Front             |
| Other Aircraft Rating(s): | None   | Restraint Used:                   |                   |
| Instrument Rating(s):     | Airplane   | Second Pilot Present:             | No                |
| Instructor Rating(s):     | None   | Toxicology Performed:             | No                |
| Medical Certification:    | Class 1 Valid Medicalno waivers/lim.                                   | Last FAA Medical Exam:            | September 3, 1996 |
| Occupational Pilot:       | No   | Last Flight Review or Equivalent: |                   |
| Flight Time:              | 400 hours (Total, all aircraft), 5 hours (Last 24 hours, all aircraft) |                                   |                   |

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**Aircraft and Owner/Operator Information** 

| Aircraft Make:                   | Kunc                     | Registration:                     | N7KR            |
|----------------------------------|--------------------------|-----------------------------------|-----------------|
| Model/Series:                    | KR-1 KR-1                | Aircraft Category:                | Airplane        |
| Year of Manufacture:             |                          | Amateur Built:                    | Yes             |
| Airworthiness Certificate:       | Experimental (Special)   | Serial Number:                    | 5391            |
| Landing Gear Type:               | Tailwheel                | Seats:                            | 1               |
| Date/Type of Last<br>Inspection: | November 30, 1996 Annual | Certified Max Gross Wt.:          | 1000 lbs        |
| Time Since Last Inspection:      | 8 Hrs                    | Engines:                          | 1 Reciprocating |
| Airframe Total Time:             | 93 Hrs                   | Engine Manufacturer:              | Volkswagen      |
| ELT:                             | Not installed            | Engine Model/Series:              | 4 CYLINDER      |
| Registered Owner:                | RICHARD A. BAIZE         | Rated Power:                      |                 |
| Operator:                        |                          | Operating Certificate(s)<br>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: | ORL ,80 ft msl              | Distance from Accident Site:         | 30 Nautical Miles |
| Observation Time:                | 15:56 Local                 | Direction from Accident Site:        | 190°              |
| <b>Lowest Cloud Condition:</b>   | Scattered / 7500 ft AGL     | Visibility                           | 10 miles          |
| Lowest Ceiling:                  | None                        | Visibility (RVR):                    |                   |
| Wind Speed/Gusts:                | 8 knots /                   | Turbulence Type Forecast/Actual:     | /                 |
| Wind Direction:                  | 200°                        | Turbulence Severity Forecast/Actual: | /                 |
| Altimeter Setting:               | 30 inches Hg                | Temperature/Dew Point:               | 28°C / 13°C       |
| Precipitation and Obscuration:   | No Obscuration; No Precipit | ation                                |                   |
| Departure Point:                 | (DED)                       | Type of Flight Plan Filed:           | None              |
| Destination:                     |                             | Type of Clearance:                   | None              |
| Departure Time:                  | 14:00 Local                 | Type of Airspace:                    | Class G           |
|                                  |                             |                                      |                   |

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# **Airport Information**

| Airport:             |   | Runway Surface Type:             |                |
|----------------------|---|----------------------------------|----------------|
| Airport Elevation:   |   | <b>Runway Surface Condition:</b> |                |
| Runway Used:         | 0 | IFR Approach:                    |                |
| Runway Length/Width: |   | VFR Approach/Landing:            | Forced landing |

# Wreckage and Impact Information

| Crew Injuries:         | 1 Minor | Aircraft Damage:        | Substantial |
|------------------------|---------|-------------------------|-------------|
| Passenger<br>Injuries: |         | Aircraft Fire:          | None        |
| Ground Injuries:       | N/A     | Aircraft Explosion:     | None        |
| Total Injuries:        | 1 Minor | Latitude,<br>Longitude: |             |

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### **Administrative Information**

Investigator In Charge (IIC): Kennedy, Jeffrey

Additional Participating Persons:

Original Publish Date: September 30, 1997

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=38249

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.

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