



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Cross Keys, NJ	<b>Accident Number:</b>	NYC02LA107
<b>Date &amp; Time:</b>	06/01/2002, 0700 EDT	<b>Registration:</b>	N753KD
<b>Aircraft:</b>	Karl & Dot, Inc. Comp Air 7SL	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	4 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

During a landing rollout, the homebuilt airplane's tailwheel spring fractured, and the assembly jammed the rudder. The airplane veered off the runway and came to rest in a drainage ditch. The main landing gear collapsed, and the fuselage and wings were damaged. Previous damage, including beach marks and rust, were found on the spring's fracture surfaces.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Fatigue fracture of the tail wheel spring, which resulted in a loss of control and impact with a ditch.

## Findings

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Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: LANDING - ROLL

### Findings

1. (C) LANDING GEAR, TAILWHEEL ASSEMBLY - FRACTURED
2. (C) LANDING GEAR, TAILWHEEL ASSEMBLY - FATIGUE

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Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: LANDING - ROLL

### Findings

3. DIRECTIONAL CONTROL - NOT POSSIBLE

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Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: LANDING - ROLL

### Findings

4. TERRAIN CONDITION - DITCH

## Factual Information

On June 1, 2002, about 0700 eastern daylight time, a homebuilt Comp Air 7SL, N753KD, was substantially damaged during a landing rollout at Cross Keys Airport (17N), Cross Keys, New Jersey. The certificated private pilot, two pilot-rated passengers, and one additional passenger were not injured. Visual meteorological conditions prevailed at the time. No flight plan had been filed for the flight, from Old Mans Airport (7N7), Pedricktown, New Jersey. The personal flight was conducted under 14 CFR Part 91.

The pilot reported that during the landing rollout on runway 27, the "tail wheel broke." It then jammed into the rudder and elevator, "which caused [us] to lose our steering and control of the airplane."

One of the pilot-rated passengers stated that the "tail wheel broke and flipped up between the elevator, jamming the rudder and causing the aircraft to skid." The airplane subsequently swerved off the right side of the runway, and came to rest in a drainage ditch.

According to a Federal Aviation Administration (FAA) inspector, the tailwheel spring fractured and jammed the rudder. The airplane veered off the runway, the main landing gear collapsed, and the fuselage and wings were damaged. Examination of the spring revealed previous damage, including beach marks and rust on the fracture surfaces.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	71, Male
<b>Airplane Rating(s):</b>	Single-engine Land; Single-engine Sea	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	01/01/2001
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	11/09/2001
<b>Flight Time:</b>	1830 hours (Total, all aircraft), 93 hours (Total, this make and model), 1573 hours (Pilot In Command, all aircraft), 33 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Karl & Dot, Inc.	<b>Registration:</b>	N753KD
<b>Model/Series:</b>	Comp Air 75L	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental	<b>Serial Number:</b>	017257SL
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	08/17/2001, Condition	<b>Certified Max Gross Wt.:</b>	5200 lbs
<b>Time Since Last Inspection:</b>	115 Hours	<b>Engines:</b>	1 Turbo Prop
<b>Airframe Total Time:</b>	115 Hours at time of accident	<b>Engine Manufacturer:</b>	Walter
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	610D
<b>Registered Owner:</b>	Karl and Dot, Inc.	<b>Rated Power:</b>	650 hp
<b>Operator:</b>	Karl O. Baker	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	PHL, 121 ft msl	<b>Distance from Accident Site:</b>	15 Nautical Miles
<b>Observation Time:</b>	0654 EDT	<b>Direction from Accident Site:</b>	150°
<b>Lowest Cloud Condition:</b>	Few / 10000 ft agl	<b>Visibility</b>	10 Miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	320°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.75 inches Hg	<b>Temperature/Dew Point:</b>	21°C / 17°C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	PEDRICKTOWN, NJ (7N7)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Cross Keys, NJ (17N)	<b>Type of Clearance:</b>	Unknown
<b>Departure Time:</b>	0615 EDT	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	Cross Keys Airport (17N)	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	162 ft	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	27	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3500 ft / 50 ft	<b>VFR Approach/Landing:</b>	Full Stop; Traffic Pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	3 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	4 None	<b>Latitude, Longitude:</b>	39.705556, -75.033056

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Paul R Cox	<b>Report Date:</b>	04/08/2003
<b>Additional Participating Persons:</b>	Edward Coudon; FAA/FSDO; Philadelphia, PA		
<b>Publish Date:</b>			
<b>Investigation Docket:</b>	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).