



Aviation Investigation Final Report

Location:	GRAND JUNCTION, Colorado	Accident Number:	DEN85FTM04
Date & Time:	June 29, 1985, 12:49 Local	Registration:	N45877
Aircraft:	KOKES 133	SCORPION	Aircraft Damage: Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

A GROUP OF PLTS WERE PREPARING FOR AN AIRSHOW FLYBY. AS A FORMATION OF AIRPLANES WERE BEING TAXIED TO RWY 29, THE PLT OF A HOME BUILT SCORPION 133 HELICOPTER, N45877, WAS CLEARED TO AIR TAXI ACROSS RWY 29 & PROCEED TO RWY 22. AS THE HELICOPTER PLT WAS APPROACHING RWY 22 & WAS IN A DESCENDING LEFT TURN, A HOME BUILT AIRPLANE WAS TAKING OFF ON THE SAME RWY (22). TO AVOID A POSSIBLE COLLISION, THE HELICOPTER PLT MADE A HARD LEFT TURN & 'PUSHED IT TO THE GROUND' BETWEEN RWY 22 & THE PARALLEL TAXIWAY. DURING TOUCHDOWN, THE HELICOPTER ROLLED OVER. THE PLT STATED THAT THE LANDING WAS NOT HARD. HE BELIEVED THAT GYROSCOPIC PRECESSION CAUSED THE HELICOPTER TO ROLL OVER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: MISCELLANEOUS/OTHER
Phase of Operation: TAXI - AERIAL

Findings

1. (F) VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND

2. OBJECT - AIRCRAFT MOVING ON GROUND
3. MANEUVER - PERFORMED - PILOT IN COMMAND

Occurrence #2: ROLL OVER
Phase of Operation: TAXI - AERIAL

Findings

4. (C) AIRCRAFT HANDLING - NOT MAINTAINED - PILOT IN COMMAND
5. (F) LACK OF RECENT EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Private	Age:	47, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	January 18, 1984
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	478 hours (Total, all aircraft), 170 hours (Total, this make and model), 426 hours (Pilot In Command, all aircraft), 7 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	KOKES	Registration:	N45877
Model/Series:	SCORPION 133 SCORPION 1	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	12598
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	January 19, 1985 Annual	Certified Max Gross Wt.:	1235 lbs
Time Since Last Inspection:	94 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1756 Hrs	Engine Manufacturer:	Rotorway
ELT:	Not installed	Engine Model/Series:	RW133
Registered Owner:	ROBERT L. KOKES	Rated Power:	160 Horsepower
Operator:		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:	GJT ,4858 ft msl	Distance from Accident Site:	
Observation Time:	12:30 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Unknown / 25000 ft AGL	Visibility	90 miles
Lowest Ceiling:	Broken / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots / 10 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	28°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(GJT)	Type of Flight Plan Filed:	None
Destination:	(GJT)	Type of Clearance:	Traffic advisory
Departure Time:	00:00 Local	Type of Airspace:	Class D;Class E

Airport Information

Airport:	WALKER FIELD GJT	Runway Surface Type:	Asphalt
Airport Elevation:	4858 ft msl	Runway Surface Condition:	Dry
Runway Used:	22	IFR Approach:	None
Runway Length/Width:	5366 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	39.10958,-108.530517(est)

Administrative Information

Investigator In Charge (IIC): Zaremba, George

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=16576>

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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](#).