



National Transportation Safety Board Aviation Accident Final Report

Location:	ALBUQUERQUE, NM	Accident Number:	DEN92LA038
Date & Time:	03/01/1992, 1300 MST	Registration:	N48DD
Aircraft:	THORPE T-18	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

DURING LANDING ROLL, THE PILOT INADVERTENTLY ENTERED A GROUND LOOP. WHEN HE ATTEMPTED RUDDER INPUT TO CORRECT FOR THE GROUND LOOP, THE RUDDER CONTROL MIXING UNIT IN THE EMPENNAGE SHIFTED AND JAMMED THE RUDDER. CONTINUED PRESSURE ON THE RUDDER PEDALS BY THE PILOT FRACTURED THE LEFT RUDDER PEDAL AT THE CROSSOVER BAR. THE AIRCRAFT WING STRUCK THE GROUND DURING THE EVOLUTION CAUSING SUBSTANTIAL DAMAGE TO THE LEFT WING.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
A FAILURE OF THE RUDDER CONTROL SYSTEM WHEN THE PILOT ATTEMPTED TO CORRECT FOR AN INADVERTENT GROUND LOOP DURING LANDING ROLL.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

Findings

1. (C) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Occurrence #2: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: LANDING - ROLL

Findings

2. (C) FLT CONTROL SYST, RUDDER CONTROL ATTACH POINTS - JAMMED

3. FLT CONTROL SYST, RUDDER - FRACTURED

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Factual Information

Pilot Information

Certificate:	Private	Age:	47, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Balloon; Glider	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	03/18/1992
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	980 hours (Total, all aircraft), 37 hours (Total, this make and model), 5 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	THORPE	Registration:	N48DD
Model/Series:	T-18 T-18	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	958
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	11/30/1991, Annual	Certified Max Gross Wt.:	1733 lbs
Time Since Last Inspection:	25 Hours	Engines:	1 Reciprocating
Airframe Total Time:	244 Hours	Engine Manufacturer:	LYCOMING
ELT:		Engine Model/Series:	O-360-A1FGP
Registered Owner:	GORDON HALL	Rated Power:	180 hp
Operator:	GORDON HALL	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 10000 ft agl	Visibility	60 Miles
Lowest Ceiling:	Overcast / 20000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	16° C / -7° C
Precipitation and Obscuration:			
Departure Point:	COLORADO SPRING, CO (COS)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	0900 MST	Type of Airspace:	Class D; Class E

Airport Information

Airport:	ALBUQUERQUE INTERNATIONAL (ABQ)	Runway Surface Type:	Asphalt
Airport Elevation:	6280 ft	Runway Surface Condition:	Dry
Runway Used:	3	IFR Approach:	None
Runway Length/Width:	9000 ft / 50 ft	VFR Approach/Landing:	Full Stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	NORMAN F WIEMEYER	Report Date:	06/11/1993
Additional Participating Persons:	KAM KATTELL; ALBUQUERQUE, NM		
Publish Date:			
Investigation Docket:	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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).