



# Aviation Investigation Final Report

<b>Location:</b>	KING CITY, California	<b>Accident Number:</b>	LAX93LA314
<b>Date &amp; Time:</b>	August 6, 1993, 14:15 Local	<b>Registration:</b>	N1153K
<b>Aircraft:</b>	MOONEY M20J	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

According to the pilot, the ground loop was induced when the right seat passenger accidentally pressed on the left rudder pedal as the aircraft neared lift off airspeed during the takeoff. The pilot reported that the aircraft yawed 45 degrees to the left when the passenger stepped on the left rudder pedal, and, he could not regain control of the aircraft prior to the ground loop.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's loss of directional control during the takeoff ground roll due to the inadvertent interference with the controls by a passenger.

## Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: TAKEOFF - ROLL/RUN

### Findings

1. (C) CONTROL INTERFERENCE - INADVERTENT - PASSENGER
  2. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
- 

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: TAKEOFF - ROLL/RUN



## Factual Information

On August 6, 1993, at 1415 hours Pacific daylight time, a Mooney M20J, N1153K, sustained substantial damage during a ground loop following a loss of directional control on takeoff at the King City, California, airport. Visual meteorological conditions prevailed at the time and no flight plan was filed for the operation. The certificated private pilot and his two passengers were not injured. The flight was originating at the time of the mishap as a personal cross country flight to San Jose, California.

According to the pilot, the ground loop was induced when the right seat passenger accidentally pressed on the left rudder pedal as the aircraft neared lift off airspeed during the takeoff. The pilot reported that the aircraft yawed 45 degrees to the left when the passenger stepped on the left rudder pedal, and, he could not regain control of the aircraft prior to the ground loop.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	51, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<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>	December 17, 1991
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	920 hours (Total, all aircraft), 805 hours (Total, this make and model), 771 hours (Pilot In Command, all aircraft), 37 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	MOONEY	<b>Registration:</b>	N1153K
<b>Model/Series:</b>	M20J M20J	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	24-1239
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	November 10, 1992 Annual	<b>Certified Max Gross Wt.:</b>	2740 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-360-A3B6D
<b>Registered Owner:</b>	G. M. UNRUH & K. FLECHSIG	<b>Rated Power:</b>	200 Horsepower
<b>Operator:</b>	GUNTER M. UNRUH	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	30 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	11 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	290°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	21°C / 14°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(KIC)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	SAN JOSE , CA (SJC)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:15 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	KING CITY KIC	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	370 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	29	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>	4485 ft / 100 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 None	<b>Latitude, Longitude:</b>	36.199665,-120.939399(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Rich, Jeff
<b>Additional Participating Persons:</b>	JIM TORRO; SAN JOSE , CA
<b>Original Publish Date:</b>	June 30, 1994
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=28442">https://data.ntsb.gov/Docket?ProjectID=28442</a>

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](#).