



National Transportation Safety Board Aviation Accident Final Report

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|--------------------------------|--------------------------------------|-------------------------|-------------|
| Location: | FRIENDSWOOD, TX | Accident Number: | FTW88DRA10 |
| Date & Time: | 05/01/1988, 1415 CDT | Registration: | N331LB |
| Aircraft: | NEW RUTAN LONG-EZE | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 2 Minor |
| Flight Conducted Under: | Part 91: General Aviation - Personal | | |

Analysis

THE PILOT OVERROTATED THE AIRCRAFT ON TAKEOFF TO A NOSE HIGH ATTITUDE, THEN OVERCONTROLLED IN THE OPPOSITE DIRECTION TO GET THE NOSE DOWN. THE AIRCRAFT TOUCHED DOWN NOSE GEAR FIRST AND ALL THREE LANDING GEARS COLLAPSED, A WING SHEARED OFF, AND THE AIRCRAFT ROLLED OVER INVERTED.

Probable Cause and Findings

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

Findings

Occurrence #1: ABRUPT MANEUVER

Phase of Operation: TAKEOFF

Findings

1. (F) ROTATION - EXCESSIVE - PILOT IN COMMAND
2. (C) REMEDIAL ACTION - IMPROPER - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: TAKEOFF

Occurrence #3: COMPLETE GEAR COLLAPSED

Phase of Operation: TAKEOFF

Findings

3. LANDING GEAR,MAIN GEAR - OVERLOAD
4. LANDING GEAR,NOSE GEAR - OVERLOAD

Occurrence #4: NOSE OVER

Phase of Operation: TAKEOFF

Factual Information

Pilot Information

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|----------------------------------|--|--|----------------------------|
| Certificate: | Airline Transport | Age: | 67, Male |
| Airplane Rating(s): | Multi-engine Land; Single-engine Land | Seat Occupied: | Front |
| Other Aircraft Rating(s): | None | Restraint Used: | Seatbelt, Shoulder harness |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 1 Valid Medical--no waivers/lim. | Last FAA Medical Exam: | 12/02/1987 |
| Occupational Pilot: | | Last Flight Review or Equivalent: | |
| Flight Time: | 27170 hours (Total, all aircraft), 28 hours (Total, this make and model), 27170 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 28 hours (Last 30 days, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|---------------------------|---------------------------------------|-----------------|
| Aircraft Make: | NEW | Registration: | N331LB |
| Model/Series: | RUTAN LONG-EZE RUTAN LONG | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental | Serial Number: | 1151 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 2 |
| Date/Type of Last Inspection: | 03/01/1988, Unknown | Certified Max Gross Wt.: | 1425 lbs |
| Time Since Last Inspection: | 28 Hours | Engines: | 1 Reciprocating |
| Airframe Total Time: | 28 Hours | Engine Manufacturer: | LYCOMING |
| ELT: | Not installed | Engine Model/Series: | O-320-2A |
| Registered Owner: | NEW LEO | Rated Power: | 150 hp |
| Operator: | NEW LEO | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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|----------------------------------|-----------------------|---|------------------|
| 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: | Clear / 0 ft agl | Visibility | 10 Miles |
| Lowest Ceiling: | None / 0 ft agl | Visibility (RVR): | 0 ft |
| Wind Speed/Gusts: | 8 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 120° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30 inches Hg | Temperature/Dew Point: | 27° C / 13° C |
| Precipitation and Obscuration: | | | |
| Departure Point: | FRIENDSWOOD, TX (T02) | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | None |
| Departure Time: | 1415 CDT | Type of Airspace: | Class G |

Airport Information

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|----------------------|-------------------|---------------------------|---------|
| Airport: | FRIENDSWOOD (T02) | Runway Surface Type: | Asphalt |
| Airport Elevation: | 44 ft | Runway Surface Condition: | Dry |
| Runway Used: | 14 | IFR Approach: | None |
| Runway Length/Width: | 4322 ft / 70 ft | VFR Approach/Landing: | None |

Wreckage and Impact Information

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|---------------------|---------|----------------------|-------------|
| Crew Injuries: | 1 Minor | Aircraft Damage: | Substantial |
| Passenger Injuries: | 1 Minor | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 Minor | Latitude, Longitude: | |

Administrative Information

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|-----------------------------------|--|--------------|------------|
| Investigator In Charge (IIC): | N. R DASILVA | Report Date: | 02/28/1989 |
| Additional Participating Persons: | | | |
| 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](#).