



# Aviation Investigation Final Report

<b>Location:</b>	LAKELAND, Florida	<b>Accident Number:</b>	MIA98LA141
<b>Date &amp; Time:</b>	April 21, 1998, 10:54 Local	<b>Registration:</b>	N914SL
<b>Aircraft:</b>	Star-Lite Engineering Ltd WARP 1A	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot was observed to takeoff with a left quartering tailwind. A witness stated the airplane climbed out at very slow airspeed on the verge of a stall. The airplane was observed in a shallow right crosswind turn, when the angle of bank increased between 60 to 90 degrees. The nose pitched down, and the airplane was observed to roll over inverted before disappearing from view. No change in engine sound was noted. The airplane collided with a building and the terrain, and the pilot was fatally injured. Review of the pilot's logbook revealed no recorded flight time in the Warp 1A airplane.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to maintain airspeed, while maneuvering on crosswind in the traffic pattern, which resulted in an inadvertent stall, and an in-flight collision with a building and the terrain. Factors relating to the accident were: the pilot's decision to take off with a right quartering tailwind, and his lack of experience in the make and model of airplane.

### Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: MANEUVERING

Findings

1. (F) WEATHER CONDITION - TAILWIND
  2. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
  3. (C) STALL - INADVERTENT - PILOT IN COMMAND
  4. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
- 

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: DESCENT - UNCONTROLLED

Findings

5. OBJECT - BUILDING(NONRESIDENTIAL)
- 

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

## Factual Information

On April 21, 1998, about 1054 eastern daylight time, a Star-Lite Engineering LTD, N914SL, registered to Star-Lite Engineering LTD, operating as a 14 CFR Part 91 personal flight, crashed while maneuvering in the vicinity of Lakeland-Linder Regional airport, Lakeland, Florida. Visual meteorological conditions prevailed and no flight plan was filed. The airplane was destroyed. The private pilot was fatally injured. The flight originated from Lakeland-Linder Airport, about 4 minutes before the accident.

Witnesses stated they observed the airplane on takeoff from runway 09 at the ultralight strip and on initial climb out flying towards the south-southwest in the vicinity of the GEICO Insurance Building. A witness who observed the takeoff stated it appeared that the pilot departed with a little bit of a tailwind and forced the airplane off the runway. He climbed out at a very slow airspeed on the verge of a stall. He leveled off at about a 100 feet, started a shallow turn to the right, and the bank increased between 60 to 90 degrees. The nose pitched down and the airplane disappeared below the tree line and buildings. Another witness stated the airplane rolled over inverted in a descending attitude before the airplane disappeared from view. No change in engine noise was heard.

Visual meteorological conditions prevailed at the time of the accident. The Lakeland-Linder Regional Airport, Lakeland, Florida, 1054 surface weather information was: 1,500 scattered, 4,000 broken, visibility 8 miles, temperature 76 degrees Fahrenheit, dew point 66 degrees Fahrenheit, wind from 040 degrees at 5 knots, and the altimeter was not recorded.

Postmortem examination of the pilot was conducted by Dr. Alexander M. Melamund, Associate Medical Examiner, District Ten, Bartow, Florida, on April 22, 1998. The cause of death was multiple injuries. Postmortem toxicology of specimens from the pilot was forwarded to the Wuesthoff Memorial Hospital, Rockledge, Florida. These studies were negative for neutral, acidic, and basic drugs.

Examination of the crash site revealed the right wing tip collided with the corner of the GEICO Insurance building located at 3535 Medulla Road Lakeland, Florida. The airplane was inverted on a heading of about 220 degrees magnetic. The nose of the airplane pitched down and collided with the ground 14 feet from the initial point of contact with the building,, and cartwheeled backwards. The left wing collided with the ground, the cockpit area separated, and the airplane came to rest upright 67 feet from the initial point of impact on a heading of 070 degrees magnetic.

Examination of the airframe, flight controls, propeller system, engine assembly and accessories revealed no evidence of a precrash mechanical failure or malfunction. Fuel was present in the left and right carburetor bowl, header fuel tank, and left and right fuel tank.

Continuity of the drive train was confirmed and compression was present on all cylinders. Continuity of the flight control system was confirmed for pitch, roll, and yaw.

Review of the pilot's logbook revealed no recorded flight time in the Warp 1A airplane.

The wreckage of N914SL was released to the registered owner, Mr. Melvin A. Woting, Vice President, Star-Lite Engineering LTD, on April 21, 1998.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	51, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	September 25, 1997
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	857 hours (Total, all aircraft), 3 hours (Last 90 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Star-Lite Engineering Ltd	<b>Registration:</b>	N914SL
<b>Model/Series:</b>	WARP 1A WARP 1A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	9970001
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	December 22, 1997 Annual	<b>Certified Max Gross Wt.:</b>	950 lbs
<b>Time Since Last Inspection:</b>	38 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	42 Hrs	<b>Engine Manufacturer:</b>	Rotax
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	503
<b>Registered Owner:</b>	STAR-LITE ENGINEERING LTD	<b>Rated Power:</b>	52 Horsepower
<b>Operator:</b>	LARRY L. COLLINS	<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>	LAL ,142 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	10:54 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Scattered / 1500 ft AGL	<b>Visibility</b>	8 miles
<b>Lowest Ceiling:</b>	Broken / 4000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	40°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	24°C / 19°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(LAL )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:50 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	LAKELAND-LINDER REGIONAL LAL	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Fatal	<b>Latitude, Longitude:</b>	27.979982,-82.009445(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Smith, Carrol
<b>Additional Participating Persons:</b>	JACK W REED; ORLANDO , FL
<b>Original Publish Date:</b>	October 30, 1998
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=38505">https://data.nts.gov/Docket?ProjectID=38505</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](#).