



# Aviation Investigation Final Report

<b>Location:</b>	OKLAHOMA CITY, Oklahoma	<b>Accident Number:</b>	FTW97LA057
<b>Date &amp; Time:</b>	November 10, 1996, 15:00 Local	<b>Registration:</b>	N18VE
<b>Aircraft:</b>	GILBERT RUTAN VARI EZE	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

During hand propping of the airplane, the throttle is placed in the idle position with the ignition (magneto) switch and fuel on. However, when the engine is flooded, a clearing procedure must be used. For clearing the engine, the pilot turned off the ignition and the fuel and placed the throttle full open before pulling the propeller through backwards 10 blades. Subsequently, the pilot turned on the ignition and the fuel. However, he did not close the throttle. As the pilot pulled the propeller through a revolution, the engine started and the airplane went forward with full power. The left wing tip struck a steel pole and crossed the ramp, a taxiway, and a runway before striking windsock guy wires and coming to a stop. The airplane was not equipped with a parking brake, and at idle power a rubber parking pad at the nose served as the chock. On the Pilot/Operator Report the pilot recommended installing a hand brake, using full lean mixture for flooded procedures, and using a checklist.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to follow proper starting procedures and set the throttle to idle before hand propping.

### Findings

Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: STANDING - STARTING ENGINE(S)

Findings

1. (C) STARTING PROCEDURE - IMPROPER - PILOT IN COMMAND
2. (C) THROTTLE/POWER CONTROL - NOT SET - PILOT IN COMMAND
3. OBJECT - POLE
4. OBJECT - GUY WIRE

## Factual Information

On November 10, 1996, at 1500 central daylight time, a Gilbert Rutan Vari Eze, N18VE, registered to and operated by a private owner, under Title 14 CFR Part 91, struck a pole and windsock guy wires at the Sundance Airport, Oklahoma City, Oklahoma. The private pilot was not injured and the airplane sustained substantial damage. Visual meteorological conditions prevailed for the planned local personal flight and a flight plan was not filed.

During an interview, conducted by the investigator-in-charge, on a pilot statement sent to the FAA inspector, and on the Pilot/Operator Report, the following information was reported by the pilot. The intention for the day was to fuel the airplane and fly for 1 hour; therefore, the pilot taxied the airplane and parked it at the fueling area where he added approximately 6 gallons of fuel. Since the airplane does not have a starter, the airplane is hand propped for starting. During the start, the throttle is placed in the idle position with the ignition (magneto) switch and fuel on; however, if the engine does not start on the first or second flip of the propeller, then the engine is flooded and a clearing procedure must be used. For clearing the engine, the pilot turned off the ignition and the fuel and placed the throttle full open before pulling the propeller through backwards 10 blades. Subsequently, the pilot turned on the ignition and the fuel; however, he did not close the throttle. As the pilot pulled the propeller through a revolution, the engine started and the airplane went forward with full power.

The left wing tip struck a steel pole and the airplane pivoted 90 degrees before the wing cleared the pole. Subsequently, the airplane crossed the ramp, a taxiway, and a runway before striking windsock guy wires and coming to a stop. The engine continued to run until the pilot reached the airplane and shut down the engine. The pilot further stated that clearance from the main wheel pants to the ground did not give enough room to chock the main wheels and the airplane was not equipped with a parking brake. At idle power, a rubber parking pad at the nose served as the chock. On the Pilot/Operator Report the pilot recommended installing a hand brake, using full lean mixture for flooded procedures, and using a checklist.

The FAA inspector examined the airplane and found that damage occurred to the left wing, canard, right elevator, nose gear, propeller, and wheel pants.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	49, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Unknown
<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>	No
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	December 8, 1994
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	282 hours (Total, all aircraft), 80 hours (Total, this make and model), 235 hours (Pilot In Command, all aircraft), 7 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	GILBERT	<b>Registration:</b>	N18VE
<b>Model/Series:</b>	RUTAN VARI EZE RUTAN VARI	<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>	948
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	August 25, 1996 Annual	<b>Certified Max Gross Wt.:</b>	1100 lbs
<b>Time Since Last Inspection:</b>	9 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	97 Hrs	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-200
<b>Registered Owner:</b>	GREGORY C. GILBERT	<b>Rated Power:</b>	100 Horsepower
<b>Operator:</b>		<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>	10 miles
<b>Lowest Ceiling:</b>	Unknown	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	12 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	180°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	21°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	Unknown
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	00:00 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	SUNDANCE AIRPARK HSD	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	1193 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<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 None	<b>Latitude, Longitude:</b>	35.399875,-97.429985(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Smith, Joyce
<b>Additional Participating Persons:</b>	WALLACE D BLACK; OKLAHOMA CITY , OK
<b>Original Publish Date:</b>	August 25, 1997
<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=20122">https://data.nts.gov/Docket?ProjectID=20122</a>

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