



# National Transportation Safety Board Aviation Accident Factual Report

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<b>Location:</b>	Raeford, NC	<b>Accident Number:</b>	ERA16LA059
<b>Date &amp; Time:</b>	12/03/2015, 1120 EST	<b>Registration:</b>	N216PK
<b>Aircraft:</b>	PACIFIC AEROSPACE CORP LTD 750XL	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Landing area overshoot	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Skydiving		

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On December 3, 2015, about 1120 eastern standard time, a Pacific Aerospace 750XL, N216PK, registered to and operated by Paraclete Aviation LLC., was substantially damaged during a precautionary landing at P K Airpark (5W4), Raeford, North Carolina. The commercial pilot was not injured. The commercial skydiving flight was conducted under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed and no flight plan was filed for the local flight, which departed 5W4 about 1100.

The pilot reported that the airplane was at 13,000 feet mean sea level (msl) as he was preparing to release the skydivers. He then noticed that the torque gauge was in the red arc and indicated a torque of 70 psi when it should have indicated about 25 psi; the maximum allowed torque indication was 64.5 psi. The pilot notified the skydivers of the anomaly and told them to jump, which they did uneventfully. As the pilot was approaching 5W4 for a normal landing, the airplane was at 9,000 feet msl and the torque gauge indicated 80 psi while the engine was at idle. At that time he decided to perform a precautionary engine shutdown to prevent catastrophic engine failure. The pilot further stated that during the landing with no engine power, the airplane was fast and touched down about halfway down runway 4, a 3,402-foot-long asphalt runway. The pilot applied heavy braking, but the airplane traveled about 1,000 feet beyond the departure end of the runway, before coming to rest upright in a field with a collapsed left main landing gear.

Examination of the wreckage by a Federal Aviation Administration (FAA) inspector revealed substantial damage to both wings. The airplane was manufactured in 2005 and equipped with a Pratt and Whitney PT6A-34 turboprop engine. Subsequent examination of the engine by the FAA inspector and a representative from the engine manufacturer did not reveal any preimpact anomalies or evidence of overtorque. A "dead weight" test was then performed, to simulate pressure from the engine and test the torque indicating transducer and gauge. The test was performed satisfactorily and no anomalies were noted with the transducer or gauge.

The operator subsequently performed a second examination of the engine due to a propeller strike during the precautionary landing. That examination also did not reveal any evidence of overtorque or anything that would have caused a faulty torque indication. The examinations did note that an automotive-type wiring bundle was used to wire the torque transducer to the

airplane's electrical system. Although the results of the "dead weight" were satisfactory, the test may not have been able to detect an intermittent wiring anomaly. Additionally, the airplane manufacturer reported that the torque meter manufacturer upgraded the wiring about 4 years prior to the accident, from spade connectors to overlap connectors.

Pope Army Airfield (POB), Fayetteville, North Carolina, was located about 12 miles northeast of the accident site. The recorded weather at POB, at 1118, included wind from 360 degrees at 10 knots, clear sky, and visibility 10 miles.

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	25, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	4-point
<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 2 Without Waivers/Limitations	<b>Last Medical Exam:</b>	08/26/2015
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	09/01/2015
<b>Flight Time:</b>	379 hours (Total, all aircraft), 42 hours (Total, this make and model), 309 hours (Pilot In Command, all aircraft), 63 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	PACIFIC AEROSPACE CORP LTD	<b>Registration:</b>	N216PK
<b>Model/Series:</b>	750XL NO SERIES	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2005	<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	114
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	18
<b>Date/Type of Last Inspection:</b>	09/05/2015, Continuous Airworthiness	<b>Certified Max Gross Wt.:</b>	7500 lbs
<b>Time Since Last Inspection:</b>	107 Hours	<b>Engines:</b>	1 Turbo Prop
<b>Airframe Total Time:</b>	4213 Hours	<b>Engine Manufacturer:</b>	Pratt & Whitney
<b>ELT:</b>	C126 installed, not activated	<b>Engine Model/Series:</b>	PT6A-34
<b>Registered Owner:</b>	PARACLETE AVIATION LLC	<b>Rated Power:</b>	750 hp
<b>Operator:</b>	PARACLETE AVIATION LLC	<b>Air Carrier Operating Certificate:</b>	None

## Meteorological Information and Flight Plan

Observation Facility, Elevation:	POB, 218 ft msl	Observation Time:	1118 EST
Distance from Accident Site:	12 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	40°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	10° C / -2° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	10 knots, 360°	Visibility (RVR):	
Altimeter Setting:	30.17 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Raeford, NC (5W4)	Type of Flight Plan Filed:	None
Destination:	Raeford, NC (5W4)	Type of Clearance:	None
Departure Time:	1100 EST	Type of Airspace:	

## Airport Information

Airport:	P K Airport (5W4)	Runway Surface Type:	Asphalt
Airport Elevation:	304 ft	Runway Surface Condition:	Dry
Runway Used:	4	IFR Approach:	None
Runway Length/Width:	3402 ft / 60 ft	VFR Approach/Landing:	Full Stop; Precautionary Landing; Traffic Pattern

## 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		

## Administrative Information

Investigator In Charge (IIC):	Robert J Gretz
Additional Participating Persons:	John Combrinck-Graham; FAA/FSDO; Greensboro, NC
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=92398">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=92398</a>