National Transportation Safety Board
Aviation Accident Factual Report

Location:	Addison, TX	**Accident Number:**	CEN16LA153
Date & Time:	04/01/2016, 1720 CDT	**Registration:**	N992BC
Aircraft:	GILL CRAIG LANCAIR IV P PROPJET	**Aircraft Damage:**	Substantial
Defining Event:	Landing gear collapse	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

On April 1, 2016, about 1720 central daylight time, an experimental, amateur-built Gill Lancair IV-P Propjet airplane, N992BC, was substantially damaged during landing on runway 33 (7,203 feet by 100 feet, asphalt) when the nose landing gear collapsed resulting in a runway excursion at the Addison Airport (ADS), Addison, Texas. The pilot was not injured. The airplane was registered to N992BC Properties LLC and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed for the flight, which was operated on an instrument flight rules flight plan. The flight originated from the Georgetown Municipal Airport (GTU), Georgetown, Texas, about 0930.

The pilot reported that on his initial approach to runway 33, a gusty wind condition caused the airplane to "balloon" on short final and he elected to execute a go-around. On the second approach, the airplane touched down "just left" of the runway centerline, about 1,000 feet from the approach threshold. However, when the pilot placed the propeller into beta, the nose landing gear collapsed. He was unable to maintain directional control and the airplane subsequently departed the right side of the runway. He "felt a loud bang" after the airplane had exited the runway pavement. He noted that the left landing gear strut had failed above the wheel and the strut dug into the ground before the airplane came to rest.

Video footage from cameras positioned at the approach end of the runway was provided by airport management. The airplane initially touched down on the right main landing gear, followed by the left main landing gear. The right main wheel appeared to leave the pavement momentarily before settling back down. Shortly afterward, the nose landing gear collapsed. The airplane subsequently veered to the right and departed the runway pavement. The airplane continued to travel through the grass area adjacent to the runway and rotated abruptly to the right immediately before coming to rest.

Federal Aviation Administration (FAA) inspectors identified runway propeller strike and tire skid marks attributable to the accident airplane. A line of propeller strike marks began at the runway number markings, about 10 feet left of the centerline, and appeared to initially parallel the runway centerline. Small fiberglass fragments were located near the strike marks. Shortly afterward, the strike marks began tracking toward the right side of the runway. The strike marks were joined by a set of three tire skid marks. The center mark was defined by two

uniform marks consistent with being formed by the edges of the tire. This mark was collocated with the propeller strike marks and was continuous until it reached the right side of the runway pavement. The left and right tire skid marks were also continuous to the edge of the runway pavement; however, they were lighter/more faint and narrower than the center skid mark. The skid marks continued as ruts in the adjacent grass area and led to the accident site.

A postaccident examination of the airplane landing gear system by FAA inspectors did not identify any anomalies consistent with a preimpact failure or malfunction. The nose landing gear was collapsed/retracted. The left main landing gear strut had separated near the wheel assembly; the fracture surface appeared consistent with an overstress failure. The right main landing gear remained extended and appeared intact. The nose landing gear doors, lower engine cowling, and both wings were damaged. The nose landing gear strut, wheel assembly, support structure, extension/retraction linkage and hydraulic actuator appeared to be intact. The actuator did not exhibit any evidence of leakage.

Normal extension and retraction of the nose landing gear is provided by a hydraulic actuator. Landing gear extension begins when the pilot moves the cockpit landing gear handle to the down position, which directs hydraulic fluid to the extension side of the actuators. A pressure switch is incorporated into the system in order to maintain hydraulic system pressure. Once the nose landing gear is fully extended, the over-center linkage is intended to react the operating loads and to keep the nose landing gear in the down position until retraction is commanded by the pilot. Within its capability, the hydraulic actuator will resist movement of the over-center linkage provided the hydraulic system is operating normally. The emergency extension gas strut will also provide this function, within the limits of its capability.

Pilot Information

Certificate:	Commercial	**Age:**	55, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	3-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 With Waivers/Limitations	**Last Medical Exam:**	03/01/2014
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	03/02/2015
Flight Time:	4048 hours (Total, all aircraft), 523 hours (Total, this make and model), 3822 hours (Pilot In Command, all aircraft), 38 hours (Last 90 days, all aircraft), 16 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	GILL CRAIG	**Registration:**	N992BC
Model/Series:	LANCAIR IV P PROPJET	**Aircraft Category:**	Airplane
Year of Manufacture:	2007	**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental	**Serial Number:**	LIV-576-SFB-DO
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	04/20/2015, Conditional	**Certified Max Gross Wt.:**	3800 lbs
Time Since Last Inspection:	80 Hours	**Engines:**	1 Turbo Prop
Airframe Total Time:	652 Hours	**Engine Manufacturer:**	GARRETT
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	TPE331-2-201A
Registered Owner:	N992BC PROPERTIES LLC	**Rated Power:**	715 hp
Operator:	On file	**Air Carrier Operating Certificate:**	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	ADS, 645 ft msl	**Observation Time:**	1654 CDT
Distance from Accident Site:	0 Nautical Miles	**Condition of Light:**	Day
Direction from Accident Site:	360°	**Conditions at Accident Site:**	Visual Conditions
Lowest Cloud Condition:	Scattered / 11000 ft agl	**Temperature/Dew Point:**	18°C / -2°C
Lowest Ceiling:	None	**Visibility**	13 Miles
Wind Speed/Gusts, Direction:	8 knots/ 20 knots, 300°	**Visibility (RVR):**	
Altimeter Setting:	30.06 inches Hg	**Visibility (RVV):**	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Georgetown, TX (GTU)	**Type of Flight Plan Filed:**	IFR
Destination:	Addison, TX (ADS)	**Type of Clearance:**	IFR
Departure Time:	0930 CDT	**Type of Airspace:**	Class D

Airport Information

Airport:	Addison (ADS)	**Runway Surface Type:**	Asphalt
Airport Elevation:	645 ft	**Runway Surface Condition:**	Dry
Runway Used:	33	**IFR Approach:**	None
Runway Length/Width:	7203 ft / 100 ft	**VFR Approach/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):	Timothy Sorensen
Additional Participating Persons:	Jose Cabrera; FAA Flight Standards; Irving, TX
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=93022