Aviation Investigation Final Report

Location:	Lompoc, California	**Accident Number:**	LAX02LA149
Date & Time:	May 5, 2002, 13:45 Local	**Registration:**	N256SB
Aircraft:	Sierra RAF 2000 GTX-SE	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The winds were reported ast 270 degrees at 14 knots about the time when the accident occurred. The takeoff was conducted on runway 25. According to the pilot, he increased power to initiate takeoff with a corresponding increase in rotor speed from 208 rpm to above 212 rpm. The aircraft began to roll about 5 mph with the increase in power. As the aircraft lifted off, it started to "lean to the right" and he took corrective action with left stick input that for a half a second was effective. However, the aircraft conitnued in a right turn, despite the control input. The pilot reported that the control stick seemed to be stuck or frozen in place, and he was not able to move he stick to the left. The aircraft continued in the right turn, until the rotor blades struck the ground. The aircraft slid off the right, and came to rest along the right side of the runway.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to compensate for wind condition.

Findings

Occurrence #1: ROLL OVER
Phase of Operation: TAKEOFF

Findings

1. WEATHER CONDITION - CROSSWIND
2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND

Factual Information

On May 5, 2002, at 1345 Pacific daylight time, a Sierra RAF 2000 GTX-SE, N256SB, experienced rotor contact with the ground and the vertical fin during takeoff at the Lompoc, California, airport. The private-certificated pilot and one passenger were not injured. The experimental, amateur-built, gyrocopter was substantially damaged. The gyrocopter was being operated by the owner under 14 CFR Part 91 and was departing for a local area personal flight. Visual meteorological conditions prevailed and no flight plan was filed.

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Pilot Information

Certificate:	Private	**Age:**	46,Male
Airplane Rating(s):	None	**Seat Occupied:**	Left
Other Aircraft Rating(s):	Gyroplane	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	August 2, 2001
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	150 hours (Total, all aircraft), 99 hours (Pilot In Command, all aircraft), 4 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Sierra	**Registration:**	N256SB
Model/Series:	RAF 2000 GTX-SE	**Aircraft Category:**	Gyroplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	H2-978294
Landing Gear Type:	Tricycle	**Seats:**	2
Date/Type of Last Inspection:	January 21, 2002 Annual	**Certified Max Gross Wt.:**	1540 lbs
Time Since Last Inspection:	10 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	168 Hrs at time of accident	**Engine Manufacturer:**	Subaru
ELT:	Installed	**Engine Model/Series:**	EJ22
Registered Owner:	Paul F. Sierra	**Rated Power:**	130 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	LPC,88 ft msl	**Distance from Accident Site:**	
Observation Time:	13:55 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	14 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	270°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.07 inches Hg	**Temperature/Dew Point:**	16°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lompoc, CA (LPC)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	13:45 Local	**Type of Airspace:**	Class E

Airport Information

Airport:	Lompoc LPC	**Runway Surface Type:**	Asphalt
Airport Elevation:		**Runway Surface Condition:**	Dry
Runway Used:	25	**IFR Approach:**	None
Runway Length/Width:	3620 ft / 100 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	34.665,-120.466667

Administrative Information

Investigator In Charge (IIC):	Parker, Richard
Additional Participating Persons:	Ladd A Scott; Federal Aviation Administration - FSDO; Van Nuys, CA
Original Publish Date:	May 13, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=54637