



National Transportation Safety Board Aviation Accident Final Report

Location:	Mammoth, California	Accident Number:	GAA16CA069
Date & Time:	December 3, 2015, 12:20 Local	Registration:	N546C
Aircraft:	Piper PA 46-350P	Aircraft Damage:	Substantial
Defining Event:	Runway excursion	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, he checked the winds via his onboard weather reporting device during the run-up, and he stated that the 25 knot wind sock was about $\frac{3}{4}$ full just moments before the takeoff roll. He reported that during the takeoff roll the airplane encountered a significant wind gust from the right. He stated that the wind gust forced the airplane to exit the left side of the runway, the landing gear collapsed, and the airplane collided with metal pylons which surrounded the wind sock. The airplane sustained substantial damage to both wings, fuselage, horizontal stabilizer and elevator.

The pilot reported that there were no mechanical failures or anomalies prior to or during the flight that would have prevented normal flight operation.

According to the Airport/Facility Directory, the Airport Remarks state:

Airport located in mountainous terrain with occasional strong winds and turbulence. Lighted windsock available at runway ends and centerfield. With southerly crosswinds in excess of 15 knots, experiencing turbulence and possible windshear along first 3000' of Runway 27.

The reported wind at the airport during the time of the accident was from 200 degrees true at 22 knots, with gusts at 33 knots, and the departure runway heading was 27.

According to the pilot operating hand book the maximum demonstrated crosswind component for this airplane is 17 knots. The crosswind component during the time of the accident was 26 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's decision to takeoff in high crosswind conditions resulting in the inability to maintain an adequate crosswind correction, consequently failing to maintain directional control and departing the runway, and subsequently colliding with fixed airfield equipment.

Findings

Personnel issues	Aircraft control - Pilot
Personnel issues	Decision making/judgment - Pilot
Aircraft	Crosswind correction - Not attained/maintained
Aircraft	Directional control - Not attained/maintained
Environmental issues	Gusts - Effect on equipment

Factual Information

History of Flight

Takeoff	Other weather encounter
Takeoff	Runway excursion (Defining event)
Takeoff	Collision during takeoff/land
Takeoff	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	69, Male
Airplane Rating(s):	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 FAA Medical Exam:	February 1, 2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	November 1, 2015
Flight Time:	4000 hours (Total, all aircraft), 2000 hours (Total, this make and model), 4000 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:		Age:	Male
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N546C
Model/Series:	PA 46-350P 350P	Aircraft Category:	Airplane
Year of Manufacture:	2014	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	4636626
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	May 1, 2015 Annual	Certified Max Gross Wt.:	4299 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	230 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	C91 installed, not activated	Engine Model/Series:	TIO-540-AE2A
Registered Owner:		Rated Power:	350 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:	KMMH, 7128 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	20:15 Local	Direction from Accident Site:	315°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	22 knots / 33 knots	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.05 inches Hg	Temperature/Dew Point:	12° C / -7° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Mammoth, CA (MMH)	Type of Flight Plan Filed:	None
Destination:	Mammoth, CA (MMH)	Type of Clearance:	None
Departure Time:	12:20 Local	Type of Airspace:	Class E

Airport Information

Airport:	MAMMOTH YOSEMITE MMH	Runway Surface Type:	Asphalt
Airport Elevation:	7135 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	7000 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:	37.624168,-118.83889(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Lee A Oscar; Federal Aviation Administration; Reno, NV
Original Publish Date:	March 14, 2016
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=92409

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