

Aviation Investigation Final Report

Location:	Homedale, Idaho	Accident Number:	SEA03LA168
Date & Time:	August 12, 2003, 14:30 Local	Registration:	N222JN
Aircraft:	Nolen Kitfox Lite Squared	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The subject aircraft had received its temporary experimental airworthiness certificate on the morning of the accident, and this was to be its first flight. When the temporary certificate was issued, the FAA inspector who issued it told the pilot not to take off on runway 31 until the required 40 hours had been flown off, since to do so might take the aircraft over the town of Homedale, a congested area. At the time the pilot made the decision to take off on runway 13, there was a left quartering tailwind of about 10 knots, gusting to around 15 knots. Although the pilot was aware he was taking off with a tailwind, he did not want to wait until the wind died down, and since he could not take off to the north because of the FAA restriction, he elected to attempt the southerly departure (runway 13). Just after liftoff near the end of the runway, a gust of wind elevated the left wing "...to the point where the tip of the right wing scrapped the runway surface." During the pilot's attempt to recover control of the aircraft, it sank/mushed into the runway surface with sufficient force to result in substantial damage. There was no evidence of any anomalies in the aircraft flight control system or its engine. During the investigation, it was determined that the pilot had never before flown this make and model aircraft.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate compensation for winds and his failure to maintain an airspeed above stalling speed (Vs) just as the aircraft was becoming airborne during the takeoff roll. Factors include a gusty quartering tailwind, and the pilot's preflight decision to take off in the downwind direction, and the pilot's total lack of experience in this make and model aircraft.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: TAKEOFF

Findings

- 1. (C) COMPENSATION FOR WIND CONDITIONS INADEQUATE PILOT IN COMMAND
- 2. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT PILOT IN COMMAND
- 3. (C) AIRSPEED(VS) NOT MAINTAINED PILOT IN COMMAND
- 4. (F) PREFLIGHT PLANNING/PREPARATION IMPROPER PILOT IN COMMAND
- 5. (F) WEATHER CONDITION CROSSWIND
- 6. (F) WEATHER CONDITION TAILWIND
- 7. (F) WEATHER CONDITION GUSTS

Factual Information

On August 12, 2003, approximately 1430 mountain daylight time, an experimental Nolen Kitfox Lite Squared, N222JN, impacted the terrain near the southeast end of runway 13 at Homedale Municipal Airport, Homedale, Idaho. The commercial pilot, who was the sole occupant, was not injured, but the aircraft, which is owned and operated by the pilot, sustained substantial damage. The local 14 CFR Part 91 personal pleasure flight was being operated in visual meteorological conditions. No flight plan had been filed. There was no ELT activation.

According to the pilot/builder, the aircraft had received its temporary experimental airworthiness certificate on the morning of the accident, and this was to be its first flight. When the temporary certificate was issued, the FAA inspector who issued it told the pilot not to take off on runway 31 until the required 40 hours had been flown off, since to do so might take the aircraft over the town of Homedale, a congested area. At the time the pilot made the decision to take off on runway 13, there was a left quartering tailwind of about 10 knots, gusting to around 15 knots. Although the pilot was aware he was taking off with a tailwind, he did not want to wait until the wind died down, and since he could not take off to the north because of the FAA restriction, he elected to attempt the southerly departure (runway 13). He said that just after liftoff near the end of the runway, a gust of wind elevated the left wing "...to the point where the tip of the right wing scrapped the runway surface." According to the pilot, during his attempt to recover control of the aircraft, it sank/mushed into the runway surface with sufficient force to result in substantial damage.

According to both the pilot and the FAA inspector who responded to the scene, there was no evidence of any anomalies in the aircraft flight control system or its engine.

During the investigation, it was determined that the pilot had never before flown this make and model aircraft.

Pilot Information

Certificate:	Commercial	Age:	71,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None Expired	Last FAA Medical Exam:	June 3, 1989
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	June 3, 1989
Flight Time:	2157 hours (Total, all aircraft), 0 hours (Total, this make and model), 2046 hours (Pilot In Command, all aircraft), 0 hours (Last 90 days, all aircraft), 0 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Nolen	Registration:	N222JN
Model/Series:	Kitfox Lite Squared	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	2120287
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Condition	Certified Max Gross Wt.:	1200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	912S
Registered Owner:	Jack R, Nolen	Rated Power:	100 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
	violati (vivio)	-	buy
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 15 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	35°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Homedale, ID (S66)	Type of Flight Plan Filed:	None
Destination:	(S66)	Type of Clearance:	None
Departure Time:	14:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	Homedale Municipal S66	Runway Surface Type:	Asphalt
Airport Elevation:	2210 ft msl	Runway Surface Condition:	Dry
Runway Used:	13	IFR Approach:	None
Runway Length/Width:	2900 ft / 50 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	43.610832,-116.918891

Administrative Information

Investigator In Charge (IIC):	Anderson, Orrin
Additional Participating Persons:	Brent Morrow; Boise FSDO
Original Publish Date:	March 2, 2004
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=57693

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available <u>here</u>.