National Transportation Safety Board
Aviation Accident Final Report

Location:	Sidney, NY	**Accident Number:**	GAA18CA015
Date & Time:	10/18/2017, 1715 EDT	**Registration:**	N37TP
Aircraft:	THOMAS G PARKHURST KITFOX IV	**Aircraft Damage:**	Substantial
Defining Event:	Loss of control in flight	**Injuries:**	2 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that, during final approach, the airplane was "out of alignment to the left edge of the runway." He decided to add throttle and realign with the runway, but as he reached for the throttle to add power, at that instant, he was "blinded" by sun glare, and he had "no memory of [the] events for approximately 6 seconds" after that point. He added that, just before impact, he saw the ground, but "there was nothing that could be done." The airplane impacted a parking lot in a nose-low, left-wing-down attitude.

The airplane sustained substantial damage to the fuselage, empennage, and both wings.

During a telephone conversation with the National Transportation Safety Board investigator-in-charge, the passenger reported that, during landing, the airplane was crabbing to the left but traveling forward. He reported that, before the runway threshold, there was a momentary sun flash that "lit up the plastic windscreen." He further reported that the pilot applied power, pulled back on the control stick, and the airplane "spiraled" and "twisted" left and downward into a parking lot.

The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

It is likely that the pilot exceeded the airplane's critical angle of attack and then entered an aerodynamic stall/spin.

Probable Cause and Findings

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

The pilot's exceedance of the airplane's critical angle of attack following a loss of ground reference during landing in glaring sun conditions, which resulted in an aerodynamic stall/spin.

Findings

Aircraft	Angle of attack - Capability exceeded (Cause)
	Airspeed - Not attained/maintained (Cause)
Personnel issues	Aircraft control - Pilot (Cause)
	Situational awareness - Pilot (Cause)
Environmental issues	Glare - Effect on personnel

Factual Information

History of Flight

Approach-VFR pattern final	Other weather encounter Loss of visual reference Loss of control in flight (Defining event)
Approach-VFR go-around	Aerodynamic stall/spin Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Flight Instructor; Recreational; Sport Pilot	**Age:**	68, Male
Airplane Rating(s):	Single-engine Land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	4-point
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	Sport Pilot	**Toxicology Performed:**	No
Medical Certification:	Sport Pilot None	**Last FAA Medical Exam:**	
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	07/08/2017
Flight Time:	(Estimated) 394 hours (Total, all aircraft), 90 hours (Total, this make and model), 302 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	THOMAS G PARKHURST	**Registration:**	N37TP
Model/Series:	KITFOX IV NO SERIES	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental	**Serial Number:**	ASC-199
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	05/02/2017, Condition	**Certified Max Gross Wt.:**	1200 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	81 Hours as of last inspection	**Engine Manufacturer:**	Rotax
ELT:	C91A installed, activated, did not aid in locating accident	**Engine Model/Series:**	912
Registered Owner:	On file	**Rated Power:**	80 hp
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	KBGM, 1636 ft msl	**Distance from Accident Site:**	25 Nautical Miles
Observation Time:	2153 UTC	**Direction from Accident Site:**	240°
Lowest Cloud Condition:	Clear	**Visibility**	10 Miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots /	**Turbulence Type Forecast/Actual:**	/ None
Wind Direction:	220°	**Turbulence Severity Forecast/Actual:**	/ N/A
Altimeter Setting:	30.23 inches Hg	**Temperature/Dew Point:**	17°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SIDNEY, NY (N23)	**Type of Flight Plan Filed:**	None
Destination:	Sidney, NY (N23)	**Type of Clearance:**	None
Departure Time:	1630 EST	**Type of Airspace:**	Class G

Airport Information

Airport:	SIDNEY MUNI (N23)	**Runway Surface Type:**	Asphalt
Airport Elevation:	1026 ft	**Runway Surface Condition:**	Dry
Runway Used:	25	**IFR Approach:**	None
Runway Length/Width:	4201 ft / 75 ft	**VFR Approach/Landing:**	Go Around; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 Minor	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Minor	**Latitude, Longitude:**	42.305278, -75.408889 (est)

Preventing Similar Accidents

Prevent Aerodynamic Stalls at Low Altitude

While maneuvering an airplane at low altitude in visual meteorological conditions, many pilots fail to avoid conditions that lead to an aerodynamic stall, recognize the warning signs of a stall onset, and apply appropriate recovery techniques. Many stall accidents result when a pilot is momentarily distracted from the primary task of flying, such as while maneuvering in the airport traffic pattern, during an emergency, or when fixating on ground objects.

An aerodynamic stall can happen at any airspeed, at any altitude, and with any engine power setting. Pilots need to be honest with themselves about their knowledge of stalls and preparedness to recognize and handle a stall situation. Training can help pilots fully

understand the stall phenomenon, including angle-of-attack (AOA) concepts and how weight, center of gravity, turbulence, maneuvering loads, and other factors can affect an airplane's stall characteristics. The stall characteristics may be different in each type of airplane, so learn them before you fly.

The stall airspeeds marked on the airspeed indicator (for example, the bottom of the green arc and the bottom of the white arc) typically represent steady flight speeds at 1G at the airplane's maximum gross weight in the specified configuration. Maneuvering loads and other factors can increase the airspeed at which the airplane will stall. For example, increasing bank angle can increase stall speed exponentially.

Reducing AOA by lowering the airplane's nose at the first indication of a stall is the most important immediate response for stall avoidance and stall recovery. This may seem counterintuitive at low altitudes, but is a necessary first step.

See http://www.ntsb.gov/safety/safety-alerts/documents/SA_019.pdf for additional resources.

The NTSB presents this information to prevent recurrence of similar accidents. Note that this should not be considered guidance from the regulator, nor does this supersede existing FAA Regulations (FARs).

Administrative Information

Investigator In Charge (IIC):	Adam M Gerhardt	**Report Date:**	02/21/2018
Additional Participating Persons:	Todd Moses; FAA/ FSDO; Albany, NY		
Publish Date:	10/04/2019		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=96214		