Aviation Investigation Final Report

Location:	Hollister, California	**Accident Number:**	WPR15LA233
Date & Time:	August 6, 2015, 10:30 Local	**Registration:**	N48701
Aircraft:	RYAN AERONAUTICAL ST3KR	**Aircraft Damage:**	Substantial
Defining Event:	Collision during takeoff/land	**Injuries:**	1 Fatal, 1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

Following an uneventful flight in the tailwheel-equipped airplane, the pilot entered the airport traffic pattern for the nontowered airport, which featured a single turf runway. The pilot announced his position on the airport's common traffic advisory frequency (CTAF). The pilot continued to turn onto the base leg and then onto final, announced his position on each segment, and landed in a 3-point attitude. During the landing roll, the airplane struck a stationary, occupied lawnmower and a truck on the right side of the runway. The pilot further reported that he did not see the lawnmower while he was in the traffic pattern or during the landing sequence. The driver of the truck, who was talking to the person operating the lawnmower, reported that they were located on the right side of the runway, just beyond a turnoff to the taxiway, and were discussing an issue with the mower. The driver further reported that the lawnmower operator did have a headset connected to an aircraft transceiver; however, he was not wearing it during the conversation.

It is likely that the nose-high attitude of the tailwheel-equipped airplane and the pilot's position in the rear seat reduced the pilot's forward visibility during the landing and subsequent landing roll precluded his ability to see objects directly in front of the airplane. However, the pilot would have had adequate visibility to inspect the runway for obstructions while operating in the traffic pattern. In addition, if the lawnmower operator had been using the transceiver to monitor the CTAF, it is likely that he would have heard the approaching airplane and repositioned the lawnmower off the runway before the airplane landed.

Probable Cause and Findings

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

The pilot's failure to observe the runway environment while operating in the traffic pattern and his subsequent failure to maintain clearance from a lawnmower on the runway during the landing roll. Contributing to the accident was the lawnmower operator's decision to remain on the runway while troubleshooting the mowing equipment without monitoring the airport's common traffic advisory frequency.

Findings

Personnel issues	Monitoring environment - Pilot
Personnel issues	Monitoring communications - Airport personnel
Environmental issues	Visibility - Contributed to outcome
Personnel issues	Decision making/judgment - Airport personnel
Environmental issues	Ground vehicle - Awareness of condition

Factual Information

History of Flight

Landing-landing roll	Collision with terr/obj (non-CFIT)
Landing-landing roll	Collision during takeoff/land (Defining event)

On August 6, 2015, about 1030 Pacific daylight time, a tailwheel equipped Ryan Aeronautical ST3KR, N48701, was substantially damaged when it collided with an occupied riding lawn mower during landing at the Frazier Lake Airport (1C9), Hollister, California. The airplane was registered to, and operated by, the pilot under the provisions of Title 14 Code of Federal Regulations Part 91. The private pilot sustained minor injuries and the pilot rated passenger sustained serious injuries. The pilot rated occupant of the lawn mower sustained fatal injuries. Visual meteorological conditions prevailed, and no flight plan was filed for the personal flight. The local flight originated from the Reid-Hillview Airport, San Jose, California, at 1000, with 1C9 as the intended destination.

In a written statement to, and a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge, the pilot reported that he initially transmitted his intention of landing about 8 miles from the airport on the airport's common traffic advisory frequency (CTAF). The pilot said he then entered the airport traffic pattern on a right downwind for runway 23, reported that he was on right downwind and continued to announce his position on downwind, base, and final for the runway on the CTAF. The pilot stated that he landed slightly longer than normal, and during the landing roll, the airplane struck a lawn mower. The pilot further reported that he did not see the lawnmower while he was in the traffic pattern or during the landing sequence.

Examination of the airplane by a Federal Aviation Administration (FAA) aviation safety inspector revealed that the fuselage of the airplane was structurally damaged. The lawnmower, yellow in color, remained partially underneath the engine of the airplane, with the front of the lawnmower facing in the direction of travel of the airplane. In addition, the inspector reported that the airplane also struck a parked vehicle, which was white in color that was parked adjacent to the lawnmower.

A witness, who was located in the run up area for runway 23, reported that he saw the lawnmower on the right side of the runway. The witness said that during his taxi to the run up area, and during his run up, he never heard any radio communication from the person on the lawnmower, however, he did hear the pilot of the accident airplane report that they were 5 miles out, followed by a report on downwind. The witness further reported that he saw the accident airplane on final approach, just crossing the runway numbers about 50 to 70 feet above ground level, and that it seemed to be fast, as if he was conducting a long landing. He then observed the airplane land in a 3-point attitude, and shortly after, impact the lawn mower.

The driver of the truck who was located adjacent to the lawnmower, reported that he was having a conversation with the person who was seated on a mower about an issue he was having with it not cutting properly. He stated that they were just past the turn off to the taxiway on the right side of runway 23, and at no time heard or saw the airplane prior to the collision. He further stated that the person on the

lawnmower did have a headset connected to an aircraft transceiver; however, he did not have the headset on during their conversation.

1C9 is a non-towered airport, which features a single turf runway (5/23) that is 2,500 feet in length and 100-feet wide. In addition, the airport features a water runway located adjacent to the turf runway that is 3,000 feet in length and 60-feet wide. Review of the FAA Airport Facilities Directory revealed that at the time of the accident, no remarks were present for mowing operations. In addition, at the time of the accident, no Notices to Airmen (NOTAMS) were present for mowing operations.

The Ryan Aeronautical ST3KR is a two-place, tandem configured, low wing, tailwheel equipped monoplane, manufactured in 1942. The airplane is commonly flown from the aft seat, which is located just aft of the wing. Visibility from the aft seat is limited in a three-point attitude due to the nose high angle and engine.

Pilot Information

Certificate:	Private	**Age:**	75,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Rear
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	July 1, 2014
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	July 4, 2015
Flight Time:	2186 hours (Total, all aircraft), 220 hours (Total, this make and model), 2100 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	RYAN AERONAUTICAL	**Registration:**	N48701
Model/Series:	ST3KR NO SERIES	**Aircraft Category:**	Airplane
Year of Manufacture:	1942	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	2101
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	May 15, 2014 Annual	**Certified Max Gross Wt.:**	
Time Since Last Inspection:	15 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	2513 Hrs as of last inspection	**Engine Manufacturer:**	KINNER
ELT:	Installed, not activated	**Engine Model/Series:**	R5 SERIES
Registered Owner:	On file	**Rated Power:**	160 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KCVH,237 ft msl	**Distance from Accident Site:**	4 Nautical Miles
Observation Time:	17:30 Local	**Direction from Accident Site:**	145°
Lowest Cloud Condition:	Clear	**Visibility**	7 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	3 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	300°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.94 inches Hg	**Temperature/Dew Point:**	21°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	San Jose, CA	**Type of Flight Plan Filed:**	None
Destination:	Hollister, CA (1C9)	**Type of Clearance:**	None
Departure Time:	10:00 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	FRAZIER LAKE AIRPARK 1C9	**Runway Surface Type:**	Grass/turf
Airport Elevation:	152 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	23	**IFR Approach:**	None
Runway Length/Width:	2500 ft / 100 ft	**VFR Approach/Landing:**	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 Serious	**Aircraft Fire:**	None
Ground Injuries:	1 Fatal	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal, 1 Serious, 1 Minor	**Latitude, Longitude:**	36.952777,-121.46389(est)

Administrative Information

Investigator In Charge (IIC):	Cawthra, Joshua
Additional Participating Persons:	Jordan Rolih; Federal Aviation Administration; San Jose, CA
Original Publish Date:	September 12, 2016
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=91720