NATIONAL TRANSPORTATION SAFETY BOARD
Office of Research and Engineering
Washington, D.C. 20594

April 1, 2022

Airport Cameras – Factual Report

NTSB Case Number:
WPR21FA283

A. ACCIDENT

Location:	Lewiston, Idaho
Date:	July 24, 2021
Time:	1152 PDT
Aircraft:	SIAI-Marchetti, SM1019B

B. AUTHOR

Dan T. Horak
NTSB

C. ACCIDENT SUMMARY

On July 24, 2021, about 1152 Pacific daylight time, a SIAI Marchetti SM-1019B, airplane, N28U, was substantially damaged when it was involved in an accident at the Lewiston-Nez Perce County Airport (LWS), Lewiston, Idaho. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

D. DETAILS OF INVESTIGATION

The goal of this investigation was estimating the deflections of the airplane elevators and ailerons. Analysis was based on videos recorded by three airport cameras. The cameras were installed on an airport building, had resolution of 4000x3000 and frame rate of 30 frames/second. Two of the cameras recorded the entire flight of the airplane. At takeoff, the airplane was about 1300 feet from the cameras. It climbed for about 4 seconds aligned with the runway and then started a left roll.

Figure 1 is a composite image that shows the airplane during the left roll. The first airplane image in the figure was recorded 3.7 seconds after takeoff, before the left roll started. The last image was taken 7.3 seconds after takeoff. The airplane impacted the

ground 0.7 seconds later, about 8 seconds after takeoff. The impact location was about 600 feet from the cameras.

**Figure 1. Composite Image Showing the Airplane between
3.7 seconds and 7.3 seconds after Takeoff**

The high resolution of the videos and the airplane closeness to the cameras allowed for relatively accurate estimation of the deflections of the control surfaces. The deflections of the elevators and ailerons were either zero or so small that they could not be seen by zooming into frames of the three videos. The airplane flaps were deflected.