

NATIONAL TRANSPORTATION SAFETY BOARD
Vehicle Recorder Division
Washington, DC 20594

November 9, 2017

Onboard and Security Video Recordings

Specialist's Factual Report
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1. EVENT

Location:	Fullerton, California
Date:	August 24, 2016
Aircraft:	Siai-Marchetti SF260, N16FD
Operator:	Air Combat USA
NTSB Number:	WPR16LA167

2. GROUP

A group was not convened.

3. SUMMARY

On August 24, 2016, about 1800 pacific daylight time, a Siai-Marchetti SF260 airplane, N16FD, sustained substantial damage following a loss of control during takeoff at the Fullerton Municipal Airport (FUL), Fullerton, CA. The flight was being operated by Air Combat USA, Fullerton, as an aerobatic training flight under the provisions of Title 14 *Code of Federal Regulations* Part 91. The airline transport rated pilot and one passenger received minor injuries. Visual meteorological conditions prevailed at the time of the accident and no FAA flight plan was on file.

4. DETAILS OF INVESTIGATION

The National Transportation Safety Board (NTSB) Vehicle Recorder Division received four video files.

4.1. Recorder Description

One recorder was a high-definition, onboard video recorder, recording video at 29 frames per second and high-quality audio from the aircraft intercom. This recorder had two different camera angles: one facing rearward at the pilots, the other facing forward from behind the pilots.

The other three videos were ground-based with fixed camera angles. These cameras had no sound and were of lower quality than the onboard recorder.

4.2. Timing and Correlation

All times are elapsed time from the start of each video (elapsed times are not synchronized between videos), expressed as mm:ss, where *mm* are minutes and *ss* are seconds.

4.3. Summary of Recording Contents

In agreement with the Investigator-In-Charge, a video group did not convene and only this summary report was prepared.

4.3.1. Video Recording One: Onboard Video

From the start of the video until 00:04, the vantage point was rearward facing (directly towards the crew faces) as N16FD was taxiing. Figures 1 and 2—both from the same video frame—show the flap position at this time.

Figure 1. Rearward facing view during taxi (redacted, with flap area annotated; brightness/contrast enhanced).

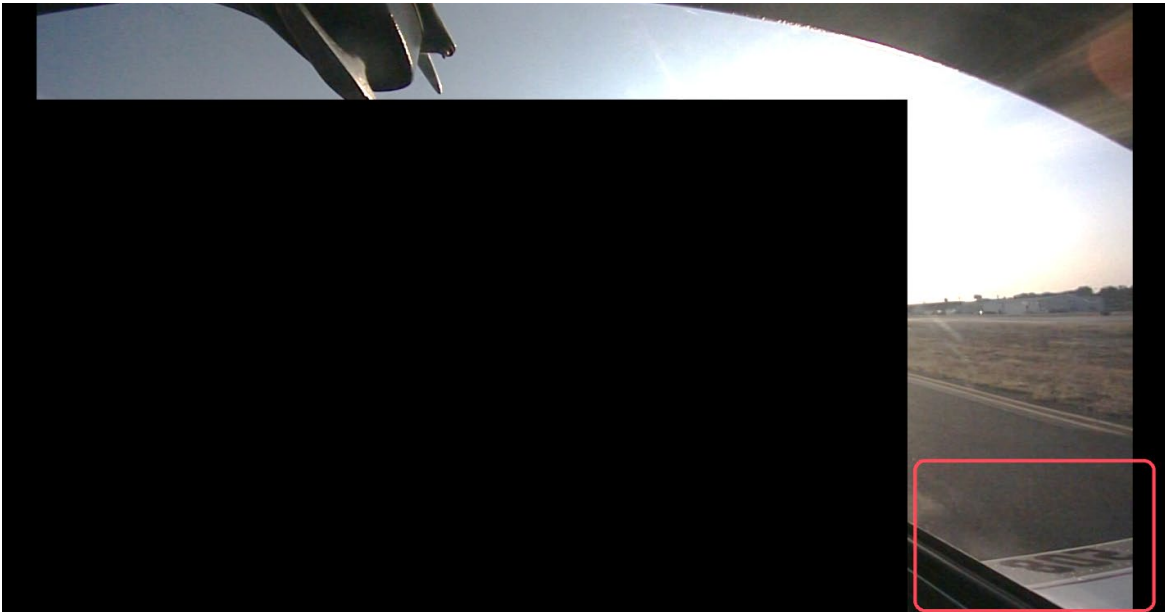


Figure 2. Flap area from figure 1 expanded (brightness/contrast enhanced).



At 00:04, the vantage point switched to behind the crew, facing forward, as N16FD continued movement beyond the runway hold short line.

At 00:11, N16FD began to enter the runway area as another Marchetti was starting its takeoff roll. The flap position of this other Marchetti could not be discerned in the video. By 00:14, the other Marchetti had begun its takeoff roll and accelerated away from N16FD.

Between 00:11 and 00:30, N16FD continued to roll into alignment with the runway. At 00:30, N16FD began its takeoff roll (from the start of the video until the start of the takeoff roll, N16FD never came to a full stop).

By 00:37, N16FD was accelerating and the crew noted the airspeed and other instruments were normal.

By 00:39, N16FD began a pitch rotation.

At 00:43, N16FD rolled slightly right.

By 00:44, N16FD rolled left.

By 00:46, N16FD position was left of the runway and the bank angle was about 15-20 degrees left.

By 00:50, N16FD crossed over the taxiway parallel to the runway, still in the aforementioned bank.

By 00:53, the left bank had increased to about 45 degrees and N16FD was close to (if not contacting) the ground. This was the last frame of the video.

At no time during the video did either pilot look in the direction of the flap on either wing or mention the flaps.

4.3.2. Video Recording Two: “08252016b”

This video is provided as attachment 1 to this report.

At about 00:22, N16FD entered the video’s field of view from the right, passing over parked planes, possibly contacting one.

By 00:24, N16FD struck the ground, followed by a plume of smoke as its position was obscured by a hangar.

The resolution of the video did not permit determination of the flap position.

4.3.3. Video Recording Three: “08252016c”

This video is provided as attachment 2 to this report.

At about 00:12, N16FD entered the video’s field of view from the right.

At about 00:14, N16FD passed over a taxiing high wing plane; as it passed, the high wing plane fluctuated right and left.

By 00:15, N16FD left the field of view of the camera to the left.

The resolution of the video did not permit determination of the flap position.

4.3.4. Video Recording Four: “sw ptz”

The video is provided as attachment 3 to this report.

At 00:04, N16FD entered the camera’s field of view from the left; it was still on the runway and accelerating.

At 00:07, the nose gear and left main gear were clear of the runway and N16FD banked slightly right.

At 00:09, N16FD was airborne, close to the runway, pitched slightly up, and the bank angle was passing through level towards a left bank.

By 00:10, N16FD’s left bank increased to about 15 degrees.

The usable video ended at 00:12, when N16FD was left of the runway, in a left bank, pitched slightly nose up, and banked about 10-15 degrees left.

The resolution of the video did not permit determination of the flap position.