



## **NATIONAL TRANSPORTATION SAFETY BOARD**

Office of Aviation Safety  
Washington, D.C. 20594

October 1, 2017

### **Group Chairman's Factual Report**

# **AIR TRAFFIC CONTROL**

CEN17FA168

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## **A. ACCIDENT**

Location: Amarillo, Texas  
Date: April 28, 2017  
Time: 2348 central daylight time (CDT)  
0448 coordinated universal time (UTC)  
Airplane: N933DC, Pilatus PC-12

## **B. AIR TRAFFIC CONTROL GROUP**

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## **C. SUMMARY**

On April 28, 2017, about 2348 central daylight time, a Pilatus PC-12 airplane, N933DC, impacted terrain near Rick Husband Amarillo International Airport (AMA), Amarillo, Texas. The airline transport pilot and two flight crew were fatally injured. The airplane was destroyed. The airplane was registered to and operated by Rico Aviation LLC, under the provisions of 14 *Code of Federal Regulations* Part 135 as an air ambulance flight using the call sign LN933DC. Instrument meteorological conditions prevailed at the time of the accident and the flight was operated on an instrument flight rules (IFR) flight plan. The flight was originating at the time of the accident and was en route to Clovis Municipal Airport (CVN), Clovis, New Mexico.

## **D. DETAILS OF THE INVESTIGATION**

On May 16, 2017, the air traffic control group convened at the Amarillo terminal radar approach control (AMA TRACON) located in Amarillo, Texas. The group met with the AMA Air Traffic Manager Mr. Jim Adams and Shay Bowling, AMA NATCA FACREP for a facility inbrief. The group conducted a tour of the AMA operations floor and control tower, reviewed a playback of the incident on the standard terminal automation replacement system (STARS) display, reviewed facility data, controller training materials, and conducted air traffic control employee interviews (attachment 1).

On May 17, 2017, the group reconvened at AMA TRACON and continued interviews and collected additional data pertinent to the accident.

On May 18, 2017, the group completed data collections and departed the facility.

## **E. FACTUAL INFORMATION**

### **1.0 History of Flight**

A review of FAA air traffic control data revealed that at 2332:15<sup>1</sup> the pilot of N933DC contacted AMA ground control with ATIS Oscar<sup>2</sup> and requested an IFR clearance to CVN. At 2332:40 the ground controller issued the pilot a clearance to CVN “as filed” with a climb to a final altitude of 8,000 feet mean sea level (msl); the assigned transponder code was 4261 (see attachment 2, figure 1). The pilot correctly read back the clearance.

The pilot of N933DC contacted AMA ground control at 2341:54 and requested to taxi to the runway for departure. The ground controller instructed the pilot to taxi to runway 4 at the intersection of taxiway “A” via taxiways “P” and “A”.

At 2343:50, the local controller cleared N933DC for takeoff and instructed the pilot to turn right on course after departure. The pilot acknowledged the takeoff clearance and on course turn.

After departing runway 04, the local controller observed a primary target with an associated transponder code of 4254. Upon observing the 4254 target climb through 4,400 feet msl, the local controller instructed the pilot to reset the aircraft transponder to 4261 (the originally assigned beacon code given in the pilot’s initial clearance). The pilot apologized, and reset the transponder code. After observing the beacon code change from 4254 to 4261, the local controller advised the pilot “I’ve got you now” and instructed him to contact departure.

At 2346:54, the pilot contacted AMA departure control and reported “with you at 6,000” [feet msl]. The west radar departure controller radar identified the airplane.

At 2348:12 the west radar controller advised the pilot that he was no longer receiving the aircrafts transponder; the pilot of N933DC did not respond. The controller made three more transmissions to the pilot without response. The tower local controller reported to the approach controller that he had observed a fireball and reported a potential crash.

There were no further recorded transmissions to or from the aircraft.

### **2.0 Airport and Radar Data**

AMA was an FAA Class 1/B Part 139 airport<sup>3</sup>. The FAA provided air traffic control services in the air traffic control tower (ATCT) and terminal radar approach control facility (TRACON); both were located on the airport. The air traffic control facility was staffed each day from 0600 to midnight.

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<sup>1</sup> All times are expressed in central daylight time (cdt) unless otherwise noted.

<sup>2</sup> ATIS is the Automatic Terminal Information Service, a continuous broadcast of recorded noncontrol information like runway and weather information in selected terminal areas. The designator “Oscar” denotes the sequence of ATIS broadcasts.

<sup>3</sup> Part 139 Class 1 is an airport serving all types of scheduled operations of air carrier aircraft designed for at least 31 passenger seats (large air carrier aircraft) and any other type of air carrier operations. The Part 139 index B designation applies to the Aircraft Rescue and Fire Fighting (ARFF) certification.

There were two runways that serve AMA; runways 04/22 and 13/31 (see attachment 2, figure 2). Runway 04/22 was 13,502 feet long and 200 feet wide at an elevation of 3,606 feet msl. It was constructed of grooved concrete and was equipped with high intensity runway lights (HIRLs) on the edge of the runway; the heading of runway 04 was 038° magnetic/046° true. The accident aircraft had departed runway 04 from the intersection of taxiway A. The distance remaining on runway 04 from taxiway A was about 9,000 feet.

Radar data for this report was obtained from the FAA's AMA TRACON. The AMA plot playback (.PPB) data was of good quality and was part of the STARS utilized by air traffic control. Attachment 2, figure 3 illustrates the flight track of the accident aircraft from the time it departed AMA until it impacted terrain as indicated by radar data. It includes the mode C reported altitudes of the last eight recorded targets.

### **3.0 Weather Information**

At 2353, the AMA automated weather observation recorded wind from 360° at 21 knots gusting to 28 knots, 10 statute miles visibility, broken clouds at 700 feet above ground level (agl), overcast cloud base at 1,200 feet agl, temperature 7° Celsius (C), dew point 7° C, altimeter setting 29.78 inches of mercury. Remarks: peak wind from 360° at 32 knots at 2326, lightning distant west, rain began at 2314 and ended at 2325, variable ceiling from 500 to 900 feet agl.

A preliminary review of the weather data indicated wind shear beginning at about 6,000 feet msl along with a temperature inversion at the same altitude. Please see the meteorological group chairman's factual report for more detail.

## **F. LIST OF ATTACHMENTS**

Attachment 1: Interview summaries

Attachment 2: Graphics

Attachment 3: FAA Form 8020-3 Facility Accident/Incident Notification Record

Attachment 4: FAA Form 7230-4 Daily Record of Facility Operation

Attachment 5: FAA AMA Covered Event Reviews Local Control and West Radar

Submitted by:

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