



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

December 3, 2015

ATC Factual Report

AIR TRAFFIC CONTROL

ERA15FA326

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A. Accident

Location: Houlton International Airport (KHUL), Houlton, Maine
Date: August 27, 2015
Time: 0155 eastern standard time (EST)¹ / 0555 universal coordinated time (UTC)²
Airplane: N553MD, PA-44-180

B. AIR TRAFFIC CONTROL SPECIALIST

Mr. Charles Olvis
Operational Factors Division (AS-30)
National Transportation Safety Board
490 L'Enfant Plaza East, SW
Washington, DC 20594-2000

C. SUMMARY

On August 27, 2015, about 0155 eastern daylight time (EDT), a Piper PA-44-180, N553MD, was destroyed when it impacted trees and terrain while conducting an instrument approach to Houlton International Airport (HUL), Houlton, Maine. The airline transport pilot was fatally injured. The flight departed Goose Bay Airport (CYYR), Goose Bay, Labrador, Canada, about 2115 EDT. Instrument meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan was filed for the flight, which was conducted under the provisions of Title 14 Code of Federal Regulations Part 91.

D. FACTUAL INFORMATION

1.0 History of Flight (UTC)

At 0115:06, The Boston Air Route Traffic Control Center (ZBW) air traffic controller transmitted to the pilot of N553MD, "And 553MD, looking at the approach into Houlton, I show two initial approach fixes (IAF) I can send you to. I can send you to CIYEP where you can do the procedure turn, or, you can go to WATAN and not do the procedure turn."

At 0115:21, the pilot responded "well ah, can I (unintelligible) direct to AHOLA?"

At 0115:28, the ZBW air traffic controller responded "And 3MD, unfortunately I have to send you over an initial approach fix, I can't send you over to the ah Final Approach Fix."

At 0115:36, the pilot responded "roger, we'll go to CIYEP and do the (unintelligible)."

¹ All times are expressed in eastern daylight time (edt) unless otherwise noted.

² UTC – coordinated universal time – an international time standard using four digits of a 24-hour clock in hours and minutes based on the time in Greenwich, England.

At 0115:40 the ZBW air traffic controller instructed the pilot to proceed to CIYEP, cross CIYEP at or above 3,500', and cleared the pilot for the approach. The pilot of N553MD correctly read back the approach clearance.

At 0116:59, the pilot of N553MD advised the ZBW air traffic controller "...my GPS does not know ah CIYEP." The ZBW air traffic controller advised the pilot that the other initial approach fix was WATAN and provided a phonetic spelling. The ZBW air traffic controller asked the pilot if WATAN was stored in the GPS, and the pilot asked ZBW to stand by.

At 0123:23, the ZBW air traffic controller transmitted "...looks like you are proceeding direct WATAN is that correct?" The pilot of N553MD responded "Ah we flying ah, to WATAN." The ZBW air traffic controller advised the pilot "same clearance, cross WATAN at or above 3,500, you are cleared the GPS to Houlton." The pilot correctly read back the clearance.

At 0132:22, the pilot of N553MD contacted the ZBW air traffic controller with a request to proceed direct to CIYEP. The ZBW air traffic controller responded "understand you found CIYEP on your GPS, proceed direct CIYEP, cross CIYEP at or above 3,500, you are cleared the GPS into Houlton." The pilot acknowledged and correctly read back the approach clearance.

At 0138:38, the ZBW air traffic controller transmitted "...I show you two-two miles to the north of CIYEP, radar services are terminated, frequency change approved. Report the cancellation on this frequency in the air or on the ground, you should be able to talk to me, and if unable through flight service." The pilot of N553MD responded "radar services terminated, ah we'll call you to close the flight plan ah when we get, when we are on the runway."

There were no further transmissions from the pilot.

The last radar target was at 0154:47 at latitude and longitude 46 03 29.007° N, 067 50 23.137° W. The reported accident location was 46.10083° N 67.80444° W; about 2.11 nautical miles from the last radar target.

At 0608:33 and at 0612:42, the ZBW air traffic controller attempted to contact the pilot of N553MD. No further ATC communications were examined.

2.0 Radar Data

Radar and communications data for this report were obtained from ZBW and were of good quality. Radar mode C altitude data indicated the pilot flew over the initial approach fix (IAF) CIYEP outbound at 3,100', 400' lower than cleared. Radar data indicated the pilot flew a right turn back towards CIYEP. On the inbound leg to the airport, the pilot crossed CIYEP at 2,300', 700' lower than the instrument approach procedure authorized. The last radar target was near the final approach fix (FAF) AHOLA at an altitude of 1,500', 300' lower than the instrument approach procedure authorized.

Figure 1 illustrates the radar plots of the aircraft as it maneuvered to land at KHUL. Figure 2 is a close-up of the last radar targets as the aircraft flew the final approach, and illustrates the accident sequence.

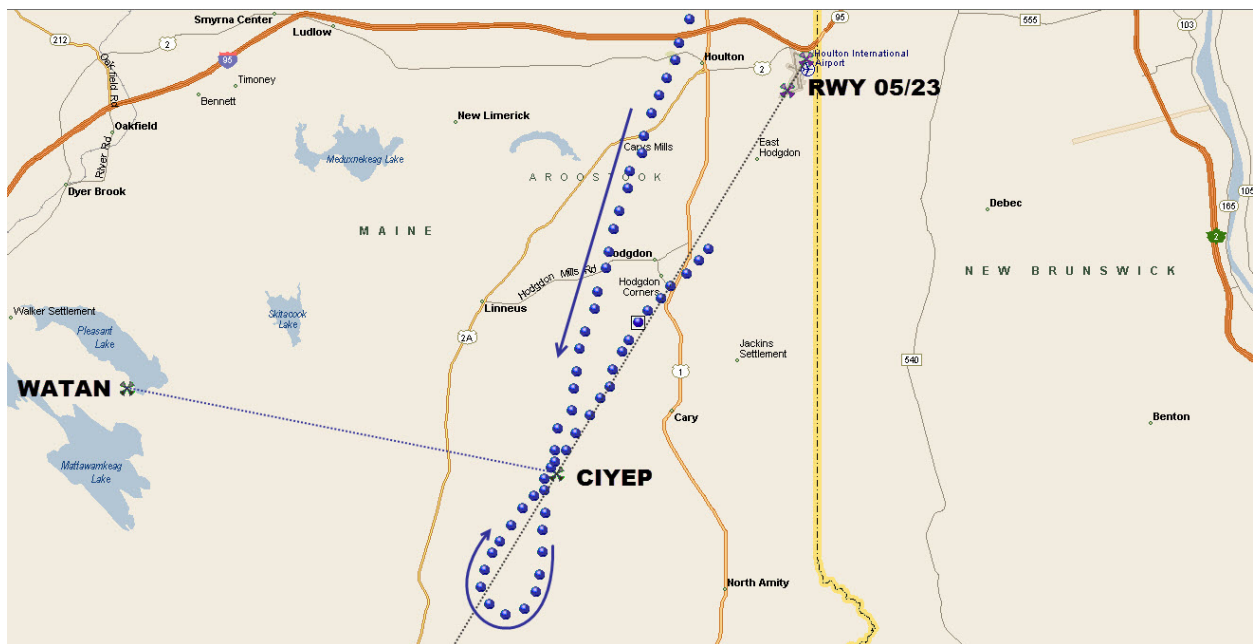


Figure 1 – Radar plot of the aircraft as it maneuvered for landing at KHUL. The “x’s” depict the latitude and longitude of the fixes for the instrument procedure, and of the runway ends.

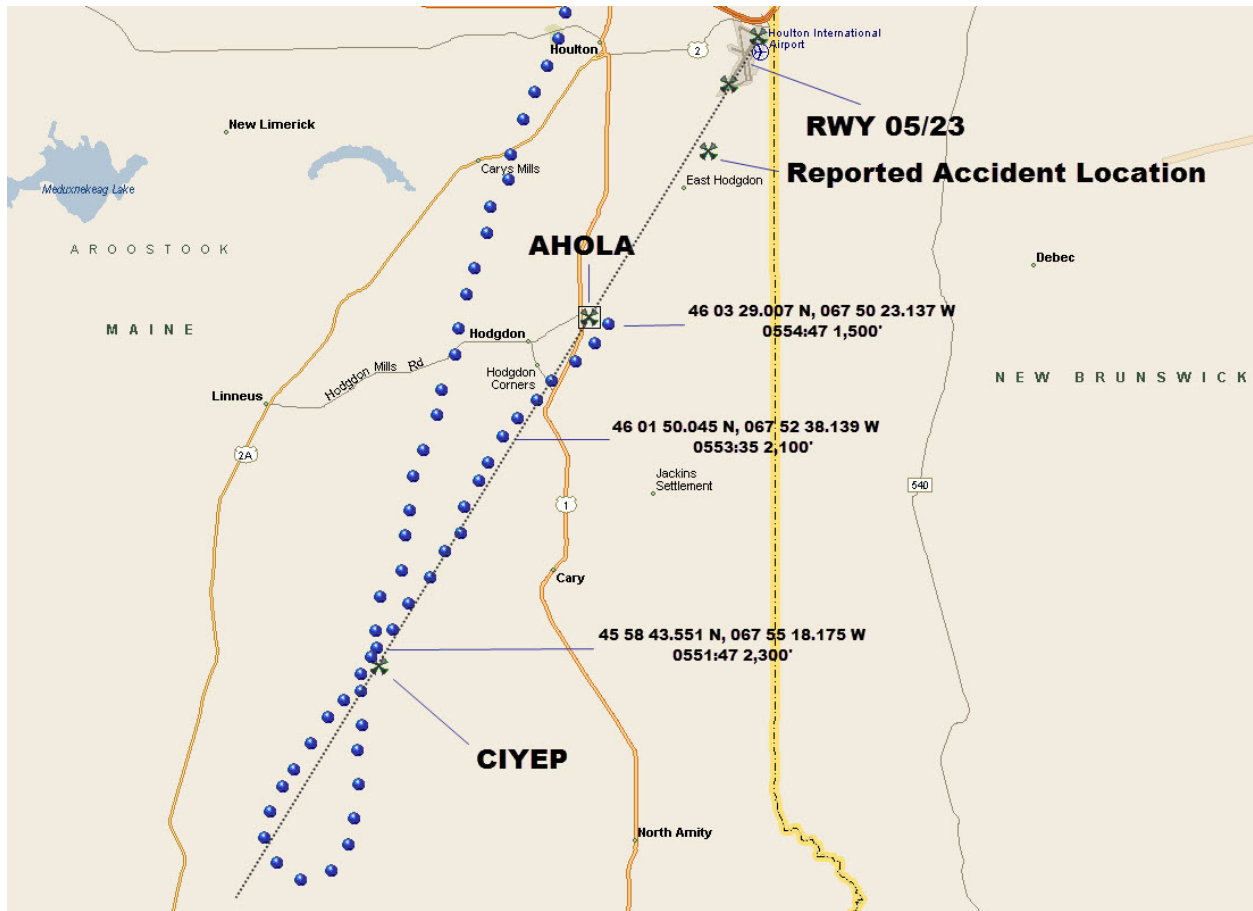


Figure 2 - The final radar plots of N553MD.

3.0 Weather Information

The 0536 UTC recorded weather at HUL was:

KHUL 270536Z AUTO 23003KT 10SM OVC004 18/17 A2989

METAR decoded; August 27th at 0536 Zulu, wind 230 degrees at 3 knots, 10 statute miles visibility, and an overcast ceiling at 400 feet. The temperature was 18 degrees C, the dew point was 17 degrees C, and the altimeter setting was 29.89 inHg.

The 0645 UTC recorded weather at HUL was:

KHUL 270645Z AUTO 00000KT 1/2SM FG VV002 17/17 A2988

METAR decoded; August 27th at 0645 Zulu, wind calm, 1/2 statute miles visibility in fog, vertical visibility 200 feet. The temperature was 17 degrees C, the dew point was 17 degrees C, and the altimeter setting was 29.88 inHg.

For further weather information, see the weather group chairman's factual report.

4.0 Instrument Procedure

The aircraft accident occurred while the pilot was flying the RNAV (GPS) Runway 5 approach to KHUL. The instrument procedure has three IAFs; WATAN, RUBOC, and CIYEP. After initial communications were established with ZBW, the pilot requested to fly direct to the final approach fix, AHOLA. That request was denied and the pilot was offered either CIYEP with the procedure turn or WATAN without a procedure turn; the pilot initially chose CIYEP, but after he could not find it in his GPS he was issued direct WATAN. Subsequently, the pilot requested to fly direct CIYEP and was cleared for the GPS approach from CIYEP.

The notes on the RNAV (GPS) RWY 5 approach into Houlton identify the procedure as “Procedure NA (not authorized) at Night.”

Charles Olvis
Senior Air Traffic Investigator
December 3, 2015