NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

August 13, 2015

Air Traffic Control Specialist Report

AIR TRAFFIC CONTROL

ANC15FA021

A. AIRCRAFT ACCIDENT

Location: Whittier, Alaska

Date: April 14, 2015

Time: 1330 Alaska daylight time (AKDT) / 2130 Coordinated Universal Time (UTC)[1]

Aircraft: N9247C, a Cessna 180

[1]All times are expressed in Alaska daylight time (AKDT) unless otherwise noted.

B. SUMMARY

On April 14, 2015, about 1330 Alaska daylight time, a wheel-equipped Cessna 180 airplane, N9247C, is presumed to have sustained substantial damage during impact with ocean waters, about 18 miles east of Whittier, Alaska, following a reported loss of engine power. The airplane was being operated as an instrument flight rules (IFR) cross-country personal flight under the provisions of Title 14 Code of Federal Regulations (CFR) Part 91, when the accident occurred. The instrument rated private pilot, the sole occupant of the airplane, sustained fatal injuries. Instrument meteorological conditions (IMC) prevailed along the route of flight, and the airplane was operating on an IFR flight plan. The flight departed the Wasilla Airport (IYS), Wasilla, Alaska, about 1205, en route to the Valdez Pioneer Field Airport (VDZ), Valdez, Alaska. (See figure 1)

A post-accident review of archived Federal Aviation Administration (FAA) radar data and radio communication recordings revealed that, about 1315, the on-duty Anchorage Air Route Traffic Control Center (ZAN) radar controller cleared the airplane for the LDA/DME H instrument approach to the Valdez Airport. (See figure 2) At that time, the airplane was about 60 miles southwest of the Valdez Airport, at an altitude of about 10,000 feet above mean sea level (msl). Shortly after the pilot began a descent from 10,000 feet msl, he advised the ZAN controller of an engine problem. The pilot stated his intentions to descend below a cloud layer and land on a nearby island. Shortly after, radar contact with the airplane was lost. A radio communication for the accident airplane was relayed through another airplane in the area that he was at 5,500 feet msl and still in the clouds. No further radio transmissions were received from the pilot, and an emergency locator transmitter (ELT) signal was broadcasting shortly thereafter for approximately 20 seconds.

The area that the airplane descended into was a portion of the Prince William Sound, consisting of remote inland fjords, coastal waterways, and steep mountainous terrain.

The airplane was equipped with a Spidertracks flight tracking system, which provided real-time aircraft flight tracking data. The flight tracking information was transmitted at two minute intervals via Iridium satellites to an internet-based storage location. The airplane's last known location was near the eastern shoreline of Culross Island, at an altitude of 69 feet, traveling at 80 knots, on a heading of about 270 degrees.

An alert notice was issued by the FAA Kenai Flight Service Station (ENA FSS) at 1336 and a search was conducted by personnel from the U.S. Coast Guard, Alaska State Troopers, and Alaska Air National Guard, as well as a Good Samaritan vessel. On April 15, about 1700, searchers discovered the remains of the pilot along the eastern shoreline of Culross Island. Also recovered was the left main landing gear strut and tire belonging to the accident airplane. The rest of the airplane was not located, and was presumed to have sunk in the ocean waters of Prince William Sound.

The closest weather reporting facility was VDZ, about 60 miles northeast of the accident site. At 1256, the aviation routine weather report (METAR) from VDZ was wind calm, visibility 10 statute miles, few clouds at 6,000 feet above ground level(agl), broken clouds at 7,500 feet agl, overcast skies at 9,000 feet agl, temperature 3 degrees Celsius, dewpoint -10 degrees Celsius; altimeter 29.64 inches of mercury.

C. DETAILS OF THE INVESTIGATION

Information for this report was derived from radar, radio, and accident data provided by the Federal Aviation Administration. Radar data was derived from the Anchorage, Alaska (ANC) airport surveillance radar (ASR) located at 61:10:41.53N/150:00:58.97W and the Middleton Island (MDO) secondary surveillance radar (SSR) located at 59:25:45.59N/146:20:21.07W.

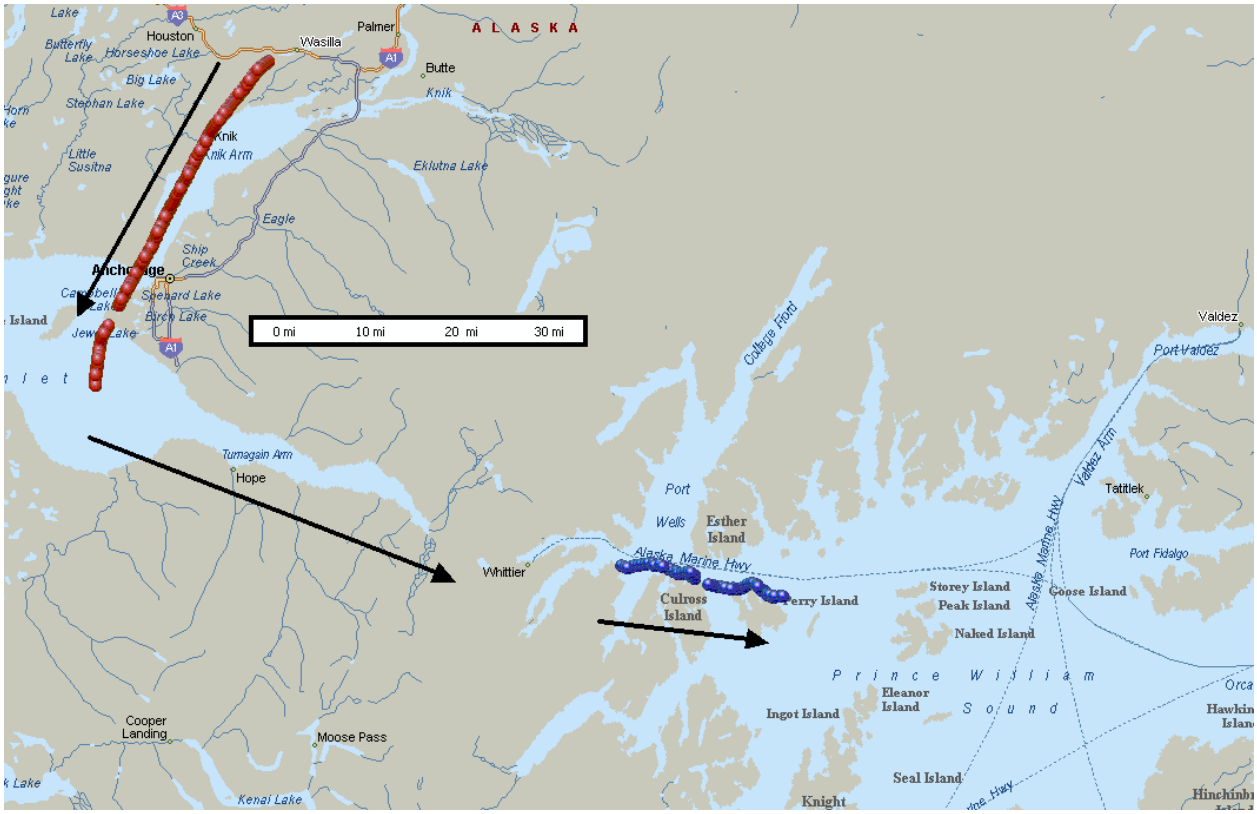

Figure 1 – Radar flight track of N9247C. Black arrows indicate direction of flight. Red dots indicate radar data from the ANC ASR and blue dots indicate radar data from the MDO SSR.

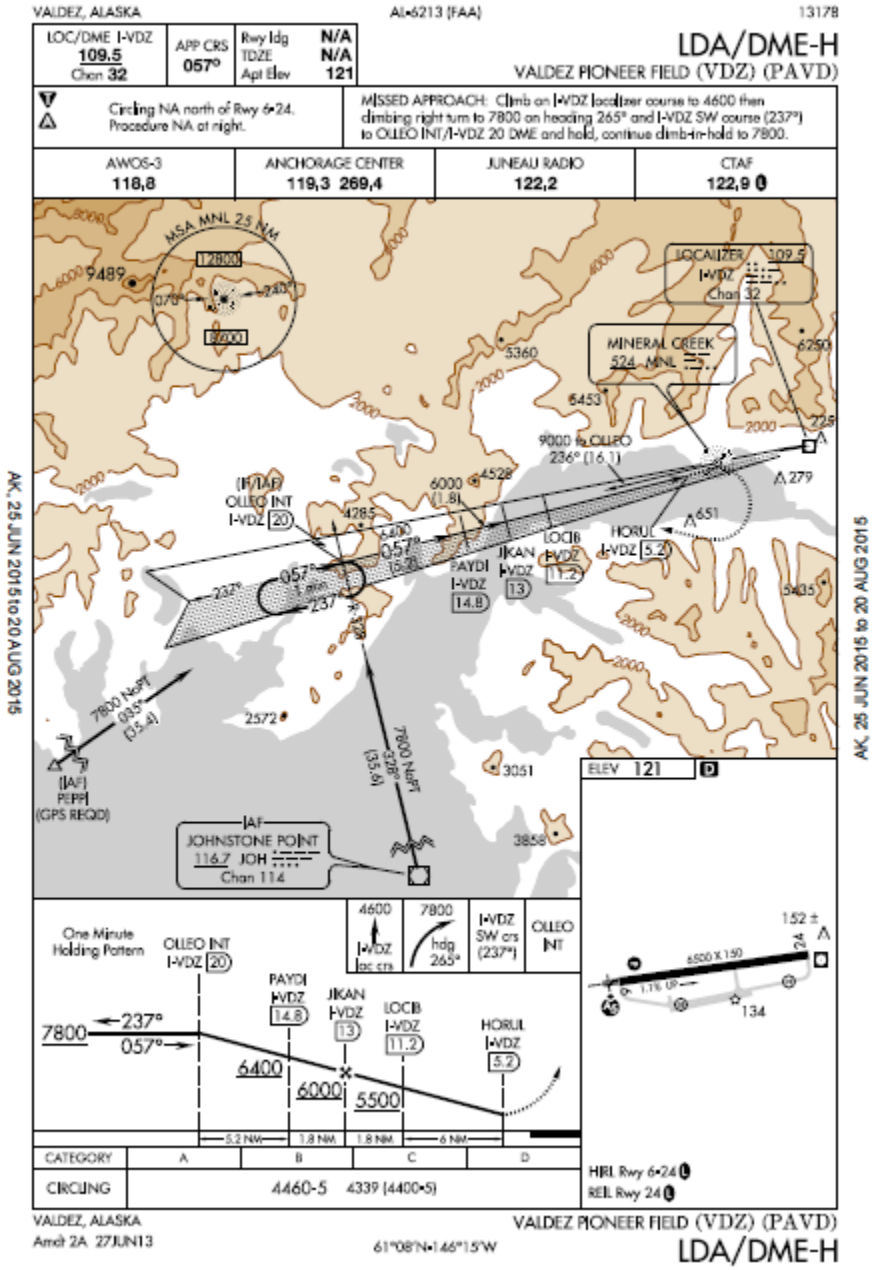

Figure 2 – VDZ LDA/DMA-H approach procedure

D. FACTUAL INFORMATION

1. History of Flight

At 1141, the pilot of N9247C called ENA FSS and requested an IFR clearance from IYS to VDZ. The IFR clearance was relayed from Anchorage terminal radar approach control (A11) to the

pilot of N9247C via the ENA FSS with a clearance void time[2] of 1205. At 1204, after departing IYS, N9247C contacted A11 at 1900 feet msl. The A11 controller radar identified the aircraft and, one minute later, verified N9247C's altitude. At 1210, N9247C was directed by A11 to turn left heading 190 degrees.

At 1214, the pilot reported level at 9000 feet msl. At 1224, N9247C was directed to turn left heading 170 degrees. Two minutes later, the controller directed the pilot to turn left heading 120 degrees and to contact ZAN.

N9247C checked in with ZAN at 1227. The pilot requested and was issued an altitude of 10,000 feet. Nine minutes later, at 1236, the ZAN controller cleared N9247C to proceed direct to the PEPPI initial approach fix for the LDA/DME-H approach to VDZ.

At 1316, after determining from the pilot that he did not have the VDZ weather, the ZAN controller issued the 1256 weather observation. One minute later, he cleared N9247C for the LDA/DME-H approach to VDZ with a restriction to cross PEPPI at or above 8000 feet. At 1318, the pilot reported leaving 10,000 feet for 8,000 feet.

At 1319, the pilot of N9247C stated that he was having trouble with his engine, but the transmission was blocked by other aircraft on the frequency. The controller acknowledged N9247C's descent from 10,000 to 8,000 feet, but did not acknowledge the pilot's report of engine trouble.

At 1321, the pilot transmitted, "Four seven charlie is declaring an emergency I'm having a problem with my engine I think I've been going through the light stuff (unintelligible) descending for PEPPI for four thousand." The controller acknowledged the emergency call, then asked the pilot for the number of souls on board and if his engine was out or if he was able to continue. The pilot responded, "…I have ah windmilling power and (unintelligible) I'm in pretty poor shape. I'm still maintaining forward airspeed. Descending for PEPPI at four thousand."

[2] ***CLEARANCE VOID IF NOT OFF BY (TIME)***−Used by ATC to advise an aircraft that the departure clearance is automatically canceled if takeoff is not made prior to a specified time. The pilot must obtain a new clearance or cancel his/her IFR flight plan if not off by the specified time.

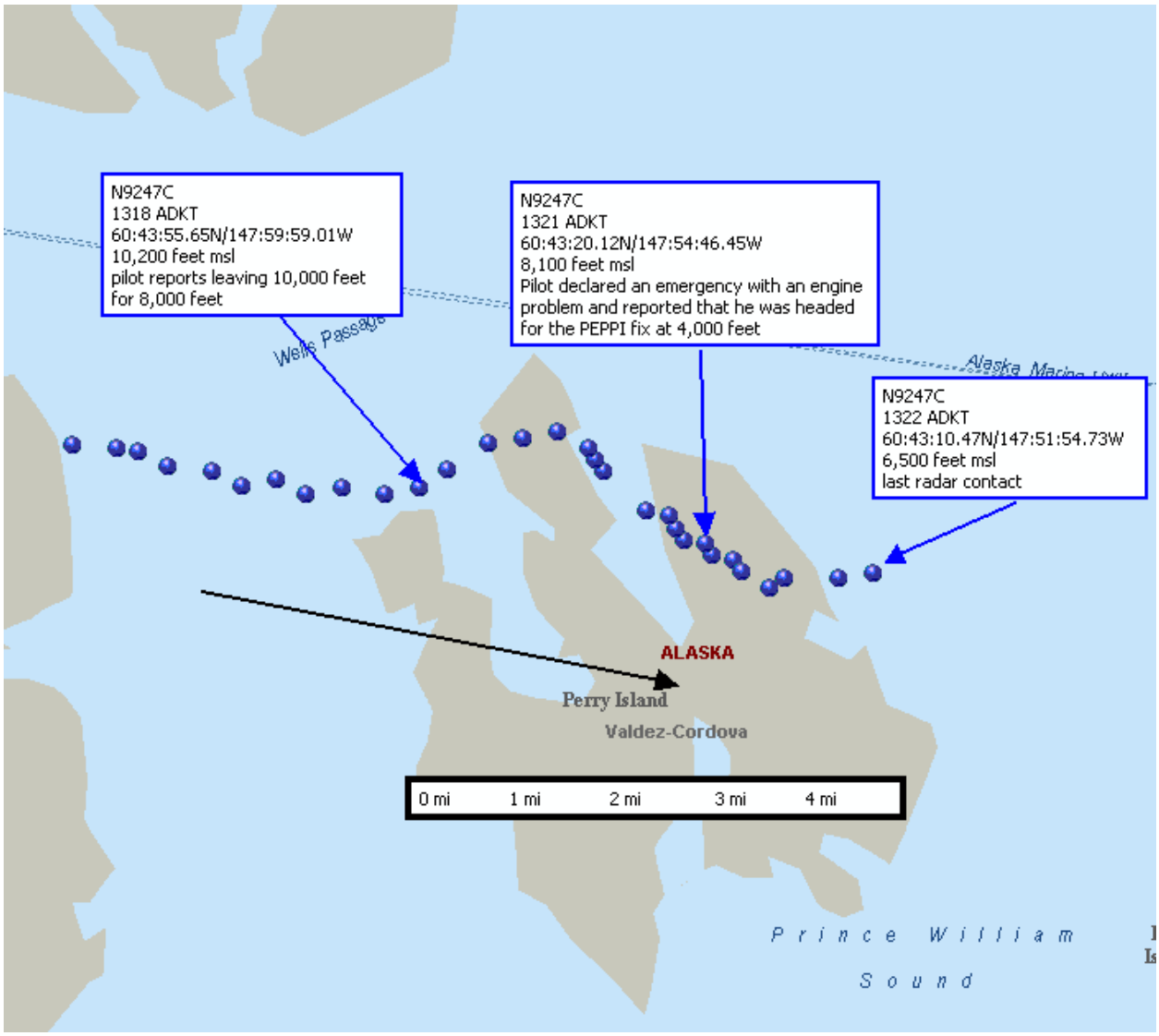

Figure 3 – Final radar track of N9247C. Radar returns are indicated by blue dots. Direction of flight indicated by black arrows.

The controller replied, "…Roger, you're coming in a little bit scratchy right now. I am showing you over an island you're about to head out over a little bit of water uh are you going to try to continue to Valdez or somewhere else along your route?" The pilot responded that he was going to try to get below the cloud deck at his current location, circle over the island, and see if he had room to land on the beach. The controller acknowledged and asked again how many souls were on board the aircraft. The pilot responded that one soul was on board.

At 1323, the controller advised the pilot that he was no longer in radar contact but that he was last observed northeast bound with the island behind him. The pilot acknowledged with "four seven charlie copy." There were no further communications between N9247C and air traffic control (ATC).

At 1325, Empire 922, an ATR-42-300, heard transmissions from N9247C. They relayed to the ZAN controller that, "…the aircraft I think it was nine two Charlie ah at 5500 they haven't

broken out yet and the ah prop is windmilling it has not fired yet." The controller advised Empire 922 that he could not hear N9247C and asked the crew to continue relaying N9247C's transmissions. They agreed to do so.

At 1325, the ZAN controller asked Yukla 02, an E3 airborne early warning and control system (AWACS) aircraft, if they could help locate a mode 3 code of 2221, the transponder code assigned to N9247C, at their 4 o'clock position and 40 miles at low level. Yukla 02 advised that they would help out.

At 1330, the pilot of Empire 922 advised the controller that he was receiving a strong emergency locator transmitter (ELT) signal on frequency 121.5. The ZAN controller acknowledged Empire 922 and relayed to Juneau (JNU) FSS that N9247C had "crash landed." The ZAN controller asked the JNU controller if JNU was in contact with any other aircraft or helicopters in the area that could assist, but there were none.

At 1331, the controller asked Empire 922 to attempt to establish communications with the pilot of N9247C via the emergency frequency [121.5]. At 1332, Empire 922 advised ATC that they had not re-established communications with N9247C and that they were no longer hearing the ELT. Two minutes later, Empire 922 advised ATC that they had tried to reach N9247C on frequency 121.5 without success.

An ALNOT[3] was issued at 1336.

Dan Bartlett
AS-30

[3] ALNOT - ALERT NOTICE− A request originated by a flight service station (FSS) or an air route traffic control center (ARTCC) for an extensive communication search for overdue, unreported, or missing aircraft.