NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, DC 20594

April 22, 2009

AIR TRAFFIC CONTROL FACTUAL REPORT

WPR09MA159

A. AIRCRAFT ACCIDENT

Location: Butte, MT
Time/Date: March 22, 2009, 1433 Mountain Daylight Time (MDT)[1]/2033 Coordinated Universal Time (UTC)[2]
Aircraft: N128CM, a Pilatus PC12/45

B. AIR TRAFFIC CONTROL GROUP

Chairman: Mr. Daniel Bartlett.
National Transportation Safety Board (NTSB)
Washington, D.C. 20594

Members: Mr. Nathan Enders
Air Traffic Safety Oversight Service (AOV)
Federal Aviation Administration (FAA)
Dallas, Texas

C. SUMMARY

On March 22, 2009, at 1430 mountain daylight time, a Pilatus PC-12/45, N128CM, descended to ground impact near the approach end of runway 33 at the Bert Mooney Airport, Butte, Montana. The airplane was owned and operated by Eagle Cap Leasing, of Enterprise, Oregon, as a personal transportation flight under the provisions of 14 Code of Federal Regulations Part 91. The airplane was destroyed in the collision sequence and post crash fire. All 14 persons onboard the airplane were killed in the accident and there were no reported ground injuries. The flight departed Oroville, California, at 1210 mountain daylight time on an instrument flight rules (IFR) flight plan and clearance destined for Gallatin Field, Bozeman, Montana. The airplane was diverting to Butte at the time of the accident. Visual meteorological conditions prevailed at both the Bozeman and Butte airports.

[1] All times are expressed in Mountain Daylight Time (MDT) 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 also referred to a Zulu time.

The airplane impacted the Holy Cross cemetery west of runway 33 at Bert Mooney Airport, Butte, Montana. The wreckage was confined to the impact area and consumed by impact and fire. Portions of all major structural components were identified.

Interviews with family members indicated that seven adults and seven children were traveling to Bozeman, Montana, to meet other family members and friends for a ski vacation. The owner of the airplane drove from California with his wife and other family members. The airplane originally departed Redlands, California, flew to Nut Tree Airport, Vacaville, California, where passengers were picked up. The pilot then flew to Oroville, California, where additional passengers were picked up.

According to a preliminary briefing from the FAA regarding air traffic control, the pilot filed an instrument flight rules flight plan from Oroville, California (KOVE) to Bozeman, Montana (KBZN) with Butte, Montana (KBTM) as the alternate. The airplane departed at 1210 local. At 1359 the crew contacted the Salt Lake City Center. At 1403, the airplane was at FL250 and the pilot requested to change his destination to Butte and gave no reason for the diversion. He was cleared at pilot's discretion to descend to 14,000 feet, and at 1405 the pilot again requested to divert to Butte. At 1427 air traffic control asked the pilot if he had the airport in sight and the pilot indicated he had one more cloud to maneuver around. At 1428 the pilot reported the airport in sight and air traffic control terminated radar service. At 1429, air traffic control called the aircraft in the blind with no response. The accident was reported to local authorities at 1433.

Initial reports from ground witnesses indicate that the airplane was flying approximately 300 feet above ground level in a north-northwesterly direction. Shortly thereafter, the airplane's nose pitched to a nose-low attitude and it impacted the ground. One witness with aviation experience reported that the airplane was west of the runway centerline and appeared too high to land on the runway. The witness then saw the airplane bank to the left and fly farther west when it rolled, pitched down, and descended out of his view. Although there is no air traffic control tower at Butte, the local fixed base operator lineman was monitoring the radio as the airplane approached the airport. He heard the pilot transmit that he would be landing on runway 33.

Butte was reporting the following weather conditions at the time of the accident: at 1353 local, winds were from 320 degrees at 10 knots, visibility was 10 statute miles, clouds were 4,400 few, 8,000 overcast, temperature was 7 degrees C, dew point was -3 degrees C, altimeter was 29.57 inches of Mercury. At 1453 local, winds were from 300 degrees at 8 knots, visibility was 10 statute miles, clouds were broken at 6,500, temperature was 7 degrees C, dew point was -3 degrees C, altimeter was 29.56 inches of Mercury.

Bozeman was reporting the following weather conditions at 1356, approximately 3 minutes before the pilot requested to divert to Butte: the winds were from 290 degrees at 7 knots (240 variable to 320), visibility 10 statute miles, clear skies, temperature 14 degrees C, dew point -1 degree C, altimeter was 29.94 inches of Mercury.

D. DETAILS OF THE INVESTIGATION

The air traffic control group convened at the Salt Lake ARTCC on March 24, 2009, where the

group met with Ms. Sherry Butler, the Salt Lake ARTCC Air Traffic Manager (ATM). Also in attendance were Mr. Todd Luepker, FAA Air Traffic Safety Oversight Service (AOV); Mr. Jeff Rich, FAA ATO-Safety; and Mr. Kevin Schmid, FAA Western Pacific Region Service Center. Participating by telephone was Mr. Mark Tomacich from the FAA General Counsel's office in Washington DC. After receiving an initial briefing on the sequence of events, the group toured the radar room. The group reviewed data provided by the facility including a Satori playback and a Falcon playback. The group interviewed two certified professional controllers (CPCs) who had provided ATC services to N128CM, and the front line manager (FLM) on duty at the time of the accident. On the morning of March 25, 2009, the group completed an out-briefing with the ATM and completed field notes, completing the field portion of the investigation.

1.0 History of Flight

On the evening of March 21, 2009 at 1946 Pacific Daylight Time (PDT), the pilot of N128CM filed three flight plans by telephone with Lockheed Martin automated flight service station (AFSS). The first single leg instrument flight rules (IFR) flight plan showed N128CM departing Redlands Municipal Airport (REI) Redlands, California, on March 22, 2009 at 0900 MDT/1500 UTC with a destination of the Nut Tree Airport (VCB), Vacaville, California, with one person on board. The second single leg IFR flight plan showed N128CM departing VCB on March 22, 2009 at 1130 MDT/1730 UTC with a destination of Oroville Municipal Airport (OVE), Oroville, California, with 5 people on board. The third single leg IFR flight plan showed N128CM departing OVE on March 22, 2009 at 1230 MDT/1830 UTC with a destination of Gallatin Field Airport (BZN), Bozeman, Montana, with 9 people on board. The requested route of flight from OVE to BZN was OVE direct to the Mustang VORTAC at Reno, NV (FMG) to Jet route 7 (J7) to the VOR/DME at Salmon, ID (LKT) to BZN. The enroute altitude request was FL250. The estimated time of arrival at BZN was March 22, 2009 at 1500 MDT/2100 UTC. The Bert Mooney Airport, (BTM) Butte, Montana, was listed as the alternate airport.[3]

REI, VCB, OVE and BTM were uncontrolled airports.[4]

N128CM departed OVE at 1210 MDT under visual flight rule conditions (VFR) and contacted Oakland Air Route Traffic Control Center (ARTCC) to activate his IFR flight plan to Gallatin Field Airport (BZN), Bozeman, Montana. N128CM was radar identified by Oakland ARTCC 4 miles northwest of OVE and directed to maintain VFR until reaching 9,000 feet msl[5]. At 1213, ATC activated N128CM's IFR flight plan and cleared him to BZN via radar vectors heading 250 [degrees] and a climb to 11,000 feet msl. N128CM was advised to expect direct routing to the Mustang NAVAID fix, (FMG), momentarily. ATC directed N128CM to stop his turn on a heading of 290 degrees followed by a radar vector heading of 340 degrees. At 1217, ATC cleared N128CM direct Mustang via a right turn and advised N128CM that after Mustang, the pilot was cleared to BZN as filed. This was followed with a shortcut in routing to the GASSI intersection located on J7 with a climb to FL230 and then to FL250. At 1228 N128CM was cleared to proceed direct to BZN by Oakland ARTCC. (See figure 1)

[3] Alternate airport - An airport at which an aircraft may land if a landing at the intended airport becomes inadvisable.
[4] Airports with no control towers are generally referred to as uncontrolled airports.
[5] msl – mean sea level

N128CM proceeded on course and checked in with Salt Lake ARTCC at FL250 at 1244.

N128CM requested to leave Salt Lake ATRCC's frequency at 1307 and contacted Salt Lake Flight Watch for the current weather observation at the Bozeman airport, a forecast for the next hour and to provide a weather PIREP[6]. Salt Lake Flight Watch advised N128CM that the current report at Bozeman [airport] was wind 070 [degrees] at 5 [knots], visibility 10. Few clouds at 7,000. Temperature 14 [degrees Celsius]. Altimeter 29.57 [inches of mercury]. Salt Lake Flight Watch provided the terminal forecast for Bozeman through 2100 Zulu [1500 MDT] as wind 330 at 6 visibility more than 6. Showers in the vicinity. 4,000 scattered, 6,000 broken with occasional light rain showers. Salt Lake Flight Watch advised N128CM of light areas of visible rain showers displayed on radar from the Montana border southward across southeastern Idaho for the convective SIGMET and advised that N128CM should pass to the west of the cloud coverage. Salt Lake Flight Watch advised of scattered clouds around the Bozeman Valley and possible showers in the Dillon area that was not showing up on radar. After N128CM provided his PIREP, Salt Lake Flight Watch advised of AIRMETS[7] along the route of flight for turbulence and icing as well as IFR and mountain obscuration. Salt Lake Flight Watch offered to provide additional details if requested. N128CM acknowledged the weather update and forecast and returned to Salt Lake ARTCC's frequency at 1312. N128CM did not request weather information for the Butte airport.

At 1403, N128CM changed course and turned in a northerly direction toward BTN and requested a "divert to Butte, Montana" with ATC. Salt Lake ARTCC cleared N128CM "to the Butte airport via direct, maintain FL250." N128CM acknowledged with "okay Butte direct two five zero, charlie mike." The Salt Lake ARTCC air traffic controller did not question N128CM's reason for the divert request nor did N128CM provide an explanation for his divert request. The Salt Lake ARTCC air traffic controller did not notice that N128CM had changed his heading prior to requesting to divert to the Butte airport. At 1404:09, N128CM began descending out of his assigned altitude of FL250. At 1404:34, N128CM requested a lower altitude from ATC. The Salt Lake ARTCC air traffic controller noted that N128CM had descended prior to requesting a lower altitude and, noting that there were no traffic conflicts in the way, authorized N128CM to descend, at pilots discretion, to 14,000 feet msl and issued the Butte altimeter of 29.58. At 1405:03 N128CM acknowledged with "two niner five eight, one four thousand, leaving two five zero eight Charlie mike". N128CM was given a descent to the minimum IFR altitude[8] (MIA) for

[6] PIREP – Pilot Weather Report

[7] AIRMET-In-flight weather advisories issued only to amend the area forecast concerning weather phenomena which are of operational interest to all aircraft and potentially hazardous to aircraft having limited capability because of lack of equipment, instrumentation, or pilot qualifications. AIRMETs concern weather of less severity than that covered by SIGMETs or Convective SIGMETs. AIRMETs cover moderate icing, moderate turbulence, sustained winds of 30 knots or more at the surface, widespread areas of ceilings less than 1,000 feet and/or visibility less than 3 miles, and extensive mountain obscurement.

[8] MINIMUM IFR ALTITUDES (MIA) - Minimum altitudes for IFR operations as prescribed in 14 CFR Part 91. These altitudes are published on aeronautical charts and prescribed in 14 CFR Part 95 for airways and routes, and in 14 CFR Part 97 for standard instrument approach procedures. If no applicable minimum altitude is prescribed in 14 CFR Part 95 or 14 CFR Part 97, the following minimum IFR altitude applies:

a. In designated mountainous areas, 2,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from the course to be flown; or

b. Other than mountainous areas, 1,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from the course to be flown; or

the area he was flying over.

N128CM's failure to comply with ATC clearances regarding assigned altitudes and heading may have resulted in a pilot deviation.[9] Per FAA Order 7110.65, Air Traffic Control, Chapter 2, General Control, Paragraph 2-1-26, Pilot Deviation Notification, "When it appears the action of a pilot constitute a pilot deviation, notify the pilot, workload permitting". Salt Lake ARTCC air traffic controllers did not advise N128CM of a possible flight deviation.

Fourteen seconds later N128CM called Salt Lake ARTCC and requested a revised destination to Butte. The Salt Lake ARTCC air traffic controller asked N128CM to repeat his request and when N128CM again requested a revised destination to Butte, Montana, the air traffic controller advised "yeah eight charlie mike I cleared you to the Butte Airport via direct and to maintain flight level two five zero I thought you read that back". N128CM responded with "descending to one four thousand at this time eight charlie mike thank you".

At 1406, the Salt Lake ARTCC air traffic controller directed N128CM to advise receipt of the Butte, Montana weather and NOTAMs. N128CM responded with "eight charlie mike wilco". N128CM did not report receipt of the Butte, Montana weather and NOTAMS and air traffic control did not question the pilot regarding the Butte weather during the remainder of the time that ATC was in communication with N128CM.

At 1422, the Salt Lake ARTCC air traffic controller directed N128CM to descend and maintain 13,000 feet msl and advised N128CM that the Butte airport was 12 o'clock, 13 miles and requested N128CM to report the airport in sight for the visual approach[10]. Radar data indicates that at 1422, N128CM was actually 32 miles from the Butte airport. N128CM reported that he was out of 14,000 for one 13,000. At 1424, N128CM requested to descend to a lower altitude and ATC cleared him to descend to the MIA of 12,200 feet msl. N128CM acknowledged the new altitude assignment and descended immediately out of 13,000 feet.

At 1427, the Salt Lake ARTCC air traffic controller advised N128CM that the airport was 12 o'clock 12 miles and asked if N128CM would be able to get the field in sight.

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c. As otherwise authorized by the Administrator or assigned by ATC.

[9] Pilot Deviation – the actions of a pilot that result in the violation of a Federal Aviation Regulation or a North American Aerospace Defense (Command Air Defense Identification Zone) tolerance.

[10] VISUAL APPROACH- An approach conducted on an instrument flight rules (IFR) flight plan which authorizes the pilot to proceed visually and clear of clouds to the airport. The pilot must, at all times, have either the airport or the preceding aircraft in sight. This approach must be authorized and under the control of the appropriate air traffic control facility. Reported weather at the airport must be ceiling at or above 1,000 feet and visibility of 3 miles or greater.

Figure 1

Radar flight track of N128CM from northern California to the Burt Mooney Airport (BTN) is indicated by the red dots. The white line indicates the proposed route of flight based on the filed flight plan: OVE to FMG via J7 to LKT to BZN.

N128CM replied “ah yeah, as soon as we get past one more cloud thank you”. At the same time N128CM descended below his assigned altitude of 12,200 and continued descending. The Salt Lake ARTCC controller did not receive a low altitude alert. The Salt Lake ARTCC controller stated that he did not observe N128CM descend below his assigned altitude of 12,200 feet msl.

At 1428:43, N128CM advised ATC “ah one two eight Charlie Mike has the airport cancel instruments”. The Salt Lake ARTCC air traffic controller responded with “November eight charlie mike ah roger ah copy your cancellation squawk VFR no known or observed traffic between you and the airport talk to you later”.

Per FAA order 7110.65, Air traffic Control, Chapter 5, Radar, paragraph 5-1-13, Radar Service Termination:

> “a. Inform aircraft when radar service is terminated.
>
> PHRASEOLOGY
>
> RADAR SERVICE TERMINATED (nonradar routing if required).
>
> b. Radar service is automatically terminated and the aircraft needs not be advised of termination when:
>
> 1. An aircraft cancels its IFR flight plan, except within Class B airspace, Class C airspace, TRSA, or where basic radar service is provided.
>
> 2. An aircraft conducting an instrument, visual, or contact approach has landed or has been instructed to change to advisory frequency.
>
> 3. At tower-controlled airports where radar coverage does not exist to within 1/2 mile of the end of the runway, arriving aircraft shall be informed when radar service is terminated.”

Noting that N128CM did not reset his transponder from the assigned discreet code of 3620 to the VFR code of 1200, he queried N128CM at 1429:32 without response. The last recorded radar return on N128CM was at 1428:49 at 11,100 feet msl. There was no further communications between Salt Lake ARTCC ATC and N128CM.

The Denver Flight Service Station (FSS) notified Salt Lake ARTCC that N128CM had crashed at 1433. (See figure 2)

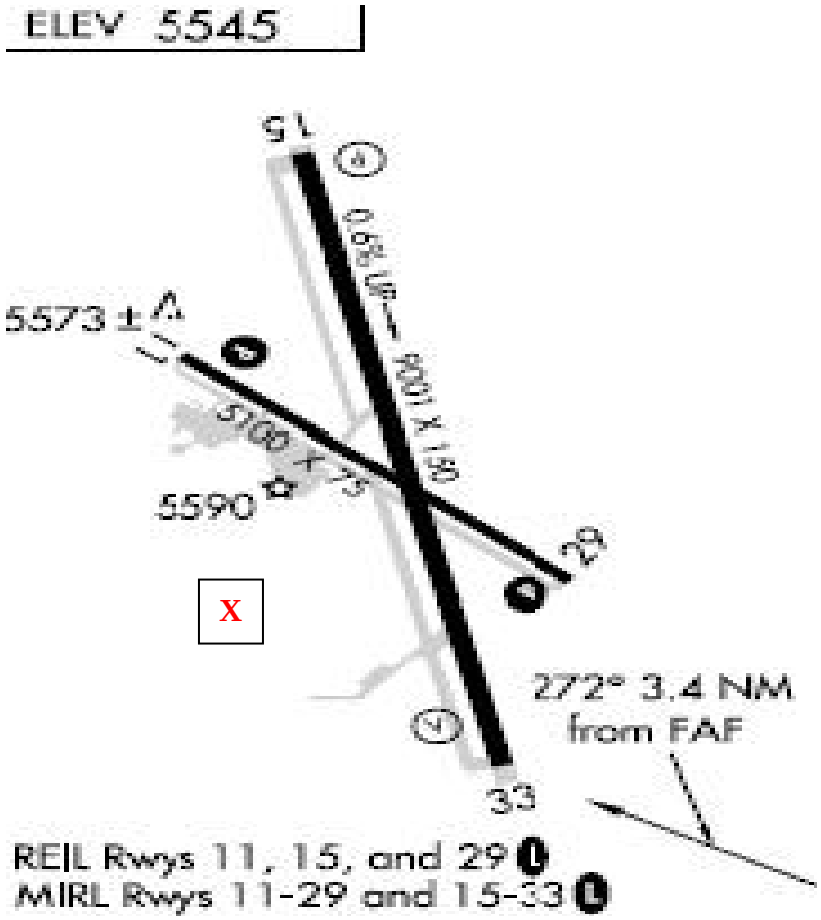

Figure 2

The Bert Mooney Airport at Butte, Montana. The approximate accident site of N128CM indicated by the red X.

2.0 Air Traffic Control Facility

Salt Lake ARTCC (ZLC) was a level 10 ATC facility responsible for ATC services over a 365,000 square mile area encompassing numerous airports including Salt Lake City International Airport. ZLC averaged 1.4 million operations per year. ZLC staffing included 162 CPC's, 28 FLM's, 6 Operations Managers (OM), 60 developmentals and 9 staff support personnel.

3.0 ATC Weather Radar Information

The Salt Lake ARTCC radar system display reflected precipitation information as detected by the numerous air route surveillance radars (ARSR) and next generation weather radar known as the WSR-88 Next Generation Weather Radar (NEXRAD). The weather displayed was a result

of mosaic presentations from any of the systems at any given time, therefore the controller does not know the source of the presented weather radar. Weather radar echo intensity (reflectivity) was measured in dBZ (decibels). While existing radar systems could not detect turbulence, there was a direct correlation between the degree of turbulence and other weather features associated with thunderstorms and the weather radar precipitation intensity. Controllers will issue (where capable) precipitation intensity as observed by radar when using weather and radar processor (WARP) or ground based digital radars with weather capabilities. When precipitation intensity information was not available, the intensity will be described as UNKNOWN. When intensity levels could be determined, they shall be described as:

a. LIGHT (< 30 dBZ)
b. MODERATE (30 to 40 dBZ)
c. HEAVY (> 40 to 50 dBZ)
d. EXTREME (> 50 dBZ)

The WSR-88 NEXRAD can measure both precipitation and wind. However, only precipitation is displayed on a controller radar presentation. In the case of en route radar displays, only three intensities are displayed. The WSR-88 NEXRAD displays 16 levels of precipitation intensity or reflectivity. These intensities are displayed in increments of 5 dBZ to a maximum intensity of 75dBZ.

Weather radar was presented on en-route radar systems in three intensities only. These intensities were moderate, heavy, and extreme. Accordingly, per FAA Order 7110.65, Air Traffic Control, paragraph 2-6-4, Weather and Chaff Information, en route controllers described the lowest displayable precipitation intensity as moderate and the highest displayable precipitation intensity as heavy to extreme.

The NEXRAD weather depicted at 1430 MDT displayed no reflections greater than 30dBZ along the route of flight for N128CM. Accordingly, no weather information was issued by Salt Lake ARTCC ATC to N128CM. (See figure 3)

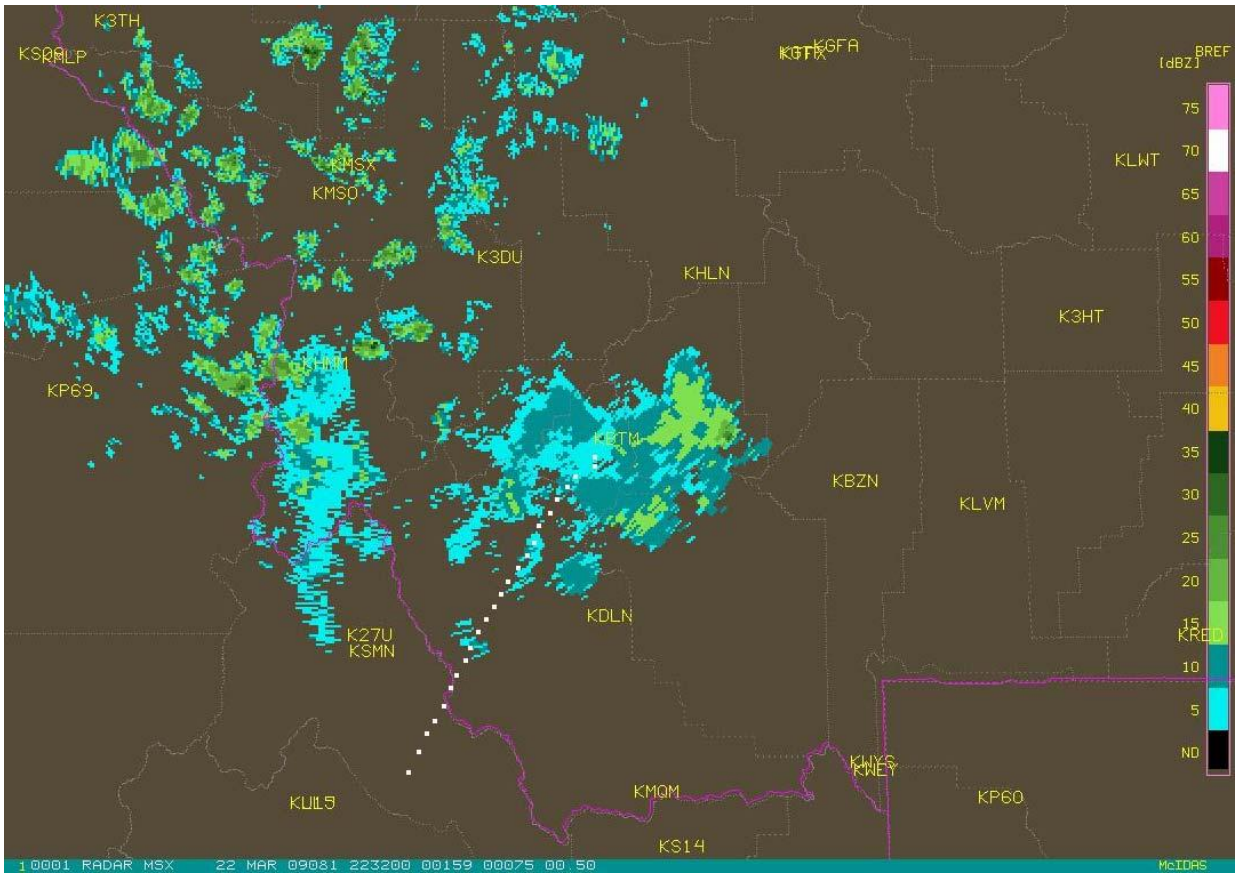

Figure 3.
Reflected precipitation as displayed by the WSR-88 NEXAD radar in the vicinity of BZN and BTM on March 22, 2009 at 1430 MDT. The white dots indicate the flight path of N128CM.

4.0 Personnel Interviews

4.1 Candice Larson (CL) Front Line Manager

The ATC Group interviewed Ms. Larson on March 24, 2009. Ms. Larson was represented by Mr. Troy Decker, Sector NATCA representative and acting facility NATCA representative. In response to questions presented by the group, Ms. Larson provided the following information:

Ms. Larson was working the Area A FLM position at the time of the accident. She was in the process of providing a position relief briefing prior to the end of her shift when N128CM was on final approach to the Butte airport and was not aware of the accident until advised by telephone on the evening of March 22.

Ms. Larson's EOD with the FAA was March 11, 2001 where she was a CPC at Albuquerque ARTCC (ZAB) until August of 2005 after which she transferred to ZLC. She qualified as CPC

at ZLC and was assigned an FLM position in December 2008. Ms. Larson had no collateral duties and held no other FAA ratings. Mr. Larson's supervisor had been Mr. Jim Thayer since December 2008. Ms. Larson's work schedule consisted of regular days off (RDO) on Thursday and Friday, 1430-2200 on Saturdays, 1400-2200 on Sundays, 0730-1530 on Mondays, 0700-1500 on Tuesdays and 0630-1430 on Wednesdays. On the day of the accident, Sunday, March 22, Ms. Larson worked the 0630-1430 shift.

Ms. Larson did not recall the specific staffing in Area A on the afternoon of March 22 but did recall that traffic was at a medium level busy, that positions D19 and D20 were combined with controller training being conducted on the R19 and D19 position. Ms. Larson recalled the weather at the beginning of the shift was VFR but deteriorated as the shift progressed. Ms. Larson did not recall observing radar displayed precipitation on the NEXRAD during her shift.

Ms. Larson was qualified on the R/D19 and R/D20 positions and maintained currency by working the positions a minimum of 8 hours per month.

Ms. Larson did not recall what her preferential weather radar display settings were.

When asked to discuss procedures for controller notification of a pilot experiencing difficulty, Ms. Larson stated that if a pilot is having a problem such as failure to comply with a clearance or some other deviation from an anticipated course of action, she would advise the controller to solicit additional information from the pilot and notify the OM that a problem existed. Ms. Larson stated that she does not monitor controller frequencies in her sector but observes controller workload by walking the aisle.

4.2 Chris Smith (CX) Certified Professional Controller (CPC)

Mr. Smith's ATC career began with the Air Force in 1997 at Canon ATCT in Canon, NM. He then worked at the Osan ATCT in Osan, South Korea. After he left the Air Force active duty he continued military service with the Air National Guard as an air traffic controller at Klamath Falls ATCT in Klamath, OR. He remained in the Air National Guard, however was employed full time with a contract tower service provider, Serco, at Medford ATCT in Medford, OR. Mr. Smith was still serving in Air National Guard Reserve. Mr. Smith had no collateral duties. Mr. Smith's first FAA facility was Salt Lake Center and he became a CPC in May of 2008. His medical was current with the requirement to wear corrective lenses while performing ATC duties. Mr. Smith was wearing corrective lenses while performing ATC duties on March 22, 2009, the date of the accident. Mr. Smith's work week consisted of an evening shift Thursday through Saturday, a dayshift on Sunday the day of the accident, and a day Monday. Mr. Smith worked an with an overtime shift on Tuesday for training on En Route Automation Modernization (ERAM), normally his first RDO of the workweek, and an RDO on Wednesday.

Mr. Smith's immediate supervisor was Mark Whitney. On the day of the accident his supervisor on duty was Candice Larson. He had reviewed the repay of the accident aircraft flight sequence on Falcon prior to our interview.

Mr. Smith stated that he was working the R06 position. He described the area of which he was responsible for reached from Montana to Wyoming and to parts of Iowa. He said he was responsible for the airspace from the surface all the way up to 60,000 feet.

When asked to describe the events leading up to the accident of N128CM as he recalled them, Mr. Smith said he had relieved the previous controller and got a briefing that N128CK was en route to Bozeman, MT (BZM) and was already on frequency level at FL250. The pilot soon after requested to change his destination to Butte, MT (BTN.) Mr. Smith stated that he then cleared N128CM direct to BTN and the pilot read back the clearance. The pilot then requested a lower altitude. Mr. Smith stated he observed that N128CM had already begun descending and had vacated FL250 prior to his request to divert to Butte. Mr. Smith stated that he observed no other aircraft or terrain that would present a safety issue, therefore he elected not to reprimand the pilot for descending prior to receiving his clearance. Mr. Smith decided to instead issue a descent at pilot's discretion so that the pilot could do whatever he wanted on the way down to 14,000 feet. Mr. Smith stated that due to the pilot beginning a descent without a clearance he watched the aircraft a lot closer. He felt that due to the initial deviation even though safety was not compromised he would need to more closely monitor the flight. When asked if he had noticed that N128CM had begun a turn prior to requesting a clearance to change his destination to BTN Mr. Smith stated he did not observe that.

Mr. Smith stated that while he was communicating on the land-line with another controller he heard N128CM call and make a request. He did not hear the request and asked the aircraft to say again. N128CM responded that he wanted a destination change to Butte, MT. Mr. Smith stated that he responded to N128CM, "Yes I gave you direct Butte and flight level two five zero." He stated the pilot responded with "Direct to Butte and down to fourteen thousand." Mr. Smith added that the pilot did not seem confused or disoriented in any way or he would have informed his supervisor. When asked why Mr. Smith issued 14,000 feet to N128CM he responded that there was an area of MIA that was 13,300 feet on his route of flight, so the lowest even altitude available was 14,000 feet. When he reviewed the MIA chart he found the area he was referring to and noted that the MIA was 13,100 feet rather than 13,300 feet.

Mr. Smith stated that he then gave a complete briefing to the next controller. He stated that he forgot to advise the next controller that he had asked N128CM to report when he had the weather; however it would have been the next controller's responsibility to verify that. When asked where he could get the weather and NOTAMs for Butte Mr. Smith stated that the pilot must obtain the weather via the Automated Weather Observation System (AWOS). Mr. Smith stated that if he needed to get the frequency he could via the En Route Information Display (ERID) system. When asked how Mr. Smith denotes that a pilot has obtained the weather he said that he can usually remember it, but he uses a system where he places a check mark on the

strip to indicate to him that the aircraft has responded with the weather. He advised this was a personal method and not a facility directive. Mr. Smith was asked if the Lifeguard flight he was working created additional workload for him. Mr. Smith responded that the Lifeguard flight requested weather for several airports in the area and that he was a regular locally based aircraft that always seemed a "bit needy".

Mr. Smith was asked if he broadcasted Sigmet Yankee 4. He advised that he did. When asked when he was notified about the accident he stated he was at home the evening of March 22, 2009 and the Operations Manager called him.

Mr. Smith stated he did not notice any erratic descent rates by N128CM. Mr. Smith stated that he was not aware of any minimum vectoring altitude (MVA) changes in the recent past in Area A. Mr. Smith stated that it is not normal for aircraft to descend below the MVA without a clearance when arriving at Butte. He advised that the lowest assignable altitude in the local Butte area was 12,200 feet. Mr. Smith did not check any NOTAMs at the Butte airport around the time of the accident. When asked about weather in the area Mr. Smith stated that he knew the area was generally VFR at all airports, and that he had one report of some weather from a Golden Eagle aircraft (N520BG).

4.3 David McLaughlin (DP) Certified Professional Controller (CPC)

The ATC Group interviewed Mr. McLaughlin on March 24, 2009. Mr. McLaughlin was represented by the ZLC NATCA ATC representative, Mr. Troy Decker. In response to questions presented by the group, Mr. McLaughlin provided the following information:

Mr. McLaughlin's ATC career began at the FAA Academy in July of 2005. He had been a controller at ZLC ARTCC since October 2005 and was a facility rated CPC. He held a private pilot license that had lapsed. Mr. McLaughlin had no collateral duties and was not an OJTI at ZLC. His medical certificate was current with the requirement to wear corrective lenses while performing ATC duties. Mr. McLaughlin was wearing corrective lenses while performing ATC duties on March 22, 2009, the date of the accident. Mr. McLaughlin's work week consisted of an evening shift on Thursday and Friday, a day shift on Saturday, Sunday and Monday. He worked an overtime dayshift on Tuesday with a regular day off (RDO) on Wednesday. On the day of the accident Mr. McLaughlin was working the day shift from 0630 to 1430 on the fourth shift of regularly assigned five day work week. Mr. McLaughlin's immediate supervisor was Mr. Mark Whitney. He was able to review the radar data prior to and during the interview.

When asked the weather on the shift that day, he did not recall any overall briefing of weather conditions. His first position on that day was R07. That is where he started to gather weather information for the area. His method of position relief included a quick glance at the scope,

followed by individual position relief briefing. When asked if the accident time period was the first time he had worked R06, he responded “Yes.”

When asked to describe the events leading up to the accident of N128CM as he recalled them. Mr. McLaughlin’s stated that during the relief briefing, N128CM was already on the frequency descending to 14,000 and landing at Butte. When asked about why this altitude was issued, he responded the aircraft was over a 13,300 foot MIA polygon. He stated that he did a WR (weather request) at Butte, and the weather was VFR. Ceilings were reported at 5,000 – 6,000 foot broken and overcast at 10,000. He gave a lower altitude of 13,000 to clear a 12,600 foot polygon MIA. When asked if he recalled anything unusual when he issued the altitude, Mr. McLaughlin responded “No”. He mentioned that there was a Lifeguard aircraft requesting a weather deviation and recalled approving that request. When questioned about the Lifeguard and another aircraft, N520BG, a C421, deviating around weather, he responded there may have been something [weather] out there. He did not recall seeing any precipitation depicted on his radar display. Mr. McLaughlin recalled N128CM requesting a lower altitude. He brought up the MVA map for the area and issued 12,200. The pilot read back “twelve two”. He later gave the pilot a position report of 12 miles from the field, and asked if he had the field in sight. N128CM responded that he had to get around one more cloud. Shortly thereafter N128CM cancelled his IFR flight plan. He responded to the cancellation of the IFR and told the aircraft to squawk 1200. He called the aircraft a minute later when he noticed that the aircraft had not changed the squawk code and to verify that the aircraft had copied his cancellation. N128CM did not respond to this request. Mr. McLaughlin stated that he believed the aircraft had changed to advisory frequency.

Mr. McLaughlin was asked if he had the opportunity to review the Satori recording, he responded “Yes”. He was asked if he had reviewed the Falcon recording and he responded “Yes”. He was again shown the Falcon replay of the sector. He was asked if he was aware that N128CM had descended below his assigned altitude. Mr. McLaughlin stated “I should have noticed the descent.”

When questioned about the Lifeguard’s icing report Mr. McLaughlin stated he was getting busy and about ready to call for a D-side and did not report the PIREP. Mr. McLaughlin was asked about the ESIS display that was located above his position. He stated that the location of the sector and the rate at which the screen cycles weather information made it difficult for him to gather any weather information from that system.

Mr. McLaughlin was questioned about whether he was aware of any map or chart changes. He stated that the charts were changed last year. When asked if he recalled a Minimum Safe Altitude Warning (MSAW) alert, he stated that he did not see one.

Mr. McLaughlin was asked if he had any personal strip marking to ensure that weather information at an aircrafts destination airport had been issued. He stated that he did not. In this case he had assumed that N128CM had the current weather at Butte.

He was asked if any other aircraft landed or departed at the Butte airport after N128CM and he stated that he was not aware of any.

Dan Bartlett

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