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STATEMENT

Center Weather Service Unit
National Weather Service
Cleveland Air Route Traffic Control Center
Oberlin, Ohio 44074
February 3, 1997

The following is a report concerning the accident involving Comair Flight 3272. The accident occurred 18 miles southwest of Detroit on January 9, 1997 at approximately 2100Z (4:00 p.m. EST).

My name is Dennis Bray. I am employed as a meteorologist at the Center Weather Service Unit at the Cleveland ARTCC, Oberlin, OH. I was on duty from 1:30 p.m. EST until 9:30 p.m. EST on January 9, 1997. My duties include issuing Center Weather Advisories (CWAs) for the Cleveland Center airspace which includes Detroit Metro Airport.

At 1735Z Christa Tucker (the day shift meteorologist) issued a CWA for "OCNL MOD-SEV RIME/MXD/CLR ICGICIP AOB 160" for the area 40N DTW to 60NW ERI to 50S CLE to FDY to 40N DTW valid until 1935Z. At 1935Z I issued a CWA for "MOD-SEV RIME/MXD/CLR ICGICIP AOB 160" for the area 60NW ERI to 50S CLE to 25N PIT to 45N ERI to 60NW ERI valid until 2135Z.

I issued the CWA for that particular area because there were several reports of freezing drizzle in northeast Ohio at the time. Also, there had been a pilot report (PIREP) of severe rime icing 10N Akron less than one hour before.

When I issued the 1935Z CWA there was a low south of Fort Wayne, IN with a warm front extending east to just north of Pittsburgh, PA. Freezing drizzle/rain had been reported through the day east of the low and north of the front. During the day, this area of freezing precipitation had been slowly moving east as the low tracked to the northeast. Most reports of severe icing that I was aware of had occurred in the vicinity of the area of freezing precipitation.

I did not cover the Detroit Metro Airport in the 1935Z CWA for two reasons. First, at the time of issuance, there had not been any reports of severe icing over Michigan or western Ohio for over two hours. Second, by 18Z all reporting stations west of Cleveland were reporting snow and not freezing or frozen precipitation.

When I made the forecast (CWA) I used the following tools: a hand analysis of the 18Z surface observations, the Meteorological Weather Processor 19Z surface analysis, 2 km mosaic of NEXRAD Doppler radars, the Detroit and Cleveland Doppler radars, Geostationary Operational Environmental Satellite (GOES) visual/IR/WV satellite data, the 12Z DTW upper air sounding,

Nested Grid Model (NGM) 00Z SFC/850/700/500 data, PIREPs, and current AIRMETs for the area. One note, the GOES east satellite data wasn't available due to mechanical problems with the satellite, so I used the data from GOES west.

At approximately 1945Z, the east forecaster from the Aviation Weather Center in Kansas City, MO called to discuss the current SIGMET for severe turbulence which covered the southeastern two-thirds of Cleveland Center airspace. Afterwards I informed him that I had issued a CWA for severe icing. He stated that he was aware of the situation, but felt that the severe icing was a localized phenomena which didn't cover a large enough area for him to issue a SIGMET.

At approximately 1955Z I briefed the FAA tower supervisor with my forecast for the Detroit Metro Airport which included...."MOD ISOL SEV RIME/MXD/CLR ICGICIP AOB 160."

At approximately 2005Z a PIREP for severe rime icing over Lima, OH was reported. Lima is in northwestern Ohio just south of our airspace. I didn't see that particular PIREP until approximately 2025Z. I double checked the surface observations over Ohio and Michigan for reports of freezing precipitation. I also checked for any additional reports of severe icing. There weren't any reports of freezing precipitation west of Akron and there hadn't been any other reports of severe icing. I decided that it was an isolated occurrence which was already covered by the BOS AIRMET ZULU UPDT 2, so I didn't extend my CWA further west to cover that area.

At approximately 2030Z I provided the ARTCC area supervisors with their afternoon weather briefing. The briefing lasted until approximately 2045Z at which time I double checked for any PIREPs for severe icing. At 2050Z I issued my Meteorological Impact Statement (MIS) and I passed them out to the supervisors at approximately 2055Z.

[redacted]

Dennis Bray
Meteorologist

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STATEMENT

Center Weather Service Unit
National Weather Service
Cleveland Air Route Traffic Control Center
Oberlin, OH 44074
February 3, 1997

The following is a report concerning the accident involving Comair Flight 3272. The accident occurred 18 miles southwest of Detroit on 9 January 1997 at approximately 2100Z.

My name is Christa Tucker. I am employed as a meteorologist at the Center Weather Service Unit at the Cleveland ARTCC, Oberlin, OH. I was on duty from 1100Z until 1900Z. My duties include issuing Center Weather Advisories (CWAs) for the Cleveland Center Airspace, which includes Detroit Metro Airport.

Between 1200Z and 1245Z, I provided a standup weather briefing for the major terminal conditions and aviation hazards expected in the Cleveland Center airspace. The Cleveland ARTCC area supervisors and traffic management controller in charge attended the briefing. I do not recall the exact time I called the Detroit Tracon supervisor. My forecast for Detroit was for IFR ceilings and visibilities in snow for the entire shift and surface winds 15-25 knots from the east and southeast. With respect to aviation hazards, I forecasted the following conditions for the Detroit area: moderate turbulence below 8000ft; low level windshear below 2000ft; moderate to isolated severe turbulence from 12000ft to FL350; and moderate to isolated severe rime, mixed and clear icing, at or below 16000ft. This information was included in the Meteorological Impact Statement (MIS) I issued at 1220Z.

The forecast for the day was based on from the following information: a 10Z hand analyzed surface plot and weather depiction, forecast guidance from the National Centers for Environmental Prediction (NCEP) models, Geostationary Operational Environmental Satellite (GOES) 8 satellite imagery, 2km and 4km Nexrad mosaics, and single site Nexrad Doppler radar reflectivity charts and the 00Z upper air soundings.

During my shift, a surface low moved northeast from south of Evansville, IN to a position between Indianapolis and Fort Wayne, IN. A warm front/trough extended east of the low as it tracked northeast. Periods of freezing rain and ice pellets were observed along the leading edge of the warm air. Subfreezing surface temperatures were reported north of the surface boundary, though warmer air was being advected northward both surface and aloft. At 18Z, this boundary extended northeast of the surface low along a Findlay, OH to a Buffalo, NY line.

At approximately 1330Z, the GOES 8 images failed. I do not recall the exact time at which I changed to GOES 9 images, but it was

shortly after an administrative message was issued by NCEP. I would estimate that GOES 9 images were being received by 1430Z.

The first CWA I issued was at 1433Z and it included Detroit Metro Airport. Pilot reports of severe icing had been reported in the previous 30 minutes south of my airspace. The first severe icing report was near Detroit at 1430Z. The 12Z soundings at Detroit and Wilmington, OH, and the synoptic and mesoscale conditions (particularly, warm air advection at mid levels, southeast flow off of Lake Erie, multiple freezing levels, and the track of the low) led me to the conclusion that the icing would continue and move northeast through the advisory period.

The second CWA I issued at 1525Z was associated with severe turbulence and affected an area east of Detroit.

The third CWA I issued was at 1735Z. This, again, was for an area of severe icing, based on pilot reports and radar, and the synoptic and mesoscale conditions. I also took into consideration the new guidance from the 12Z run of the NCEP models. I moved the area slightly east of the area covered by my first CWA. The CWA had an expiration time of 1935Z.

I was relieved from duty at 1900Z following a shift briefing to Dennis Bray. The briefing consisted of a synopsis of the current conditions and the weather phenomena which occurred on my shift, a brief discussion of the NCEP model forecasts, the status of and the meteorology associated with the CWA's I issued, a description of the GOES 8 outage and a general outlook for his shift.

Christa Tucker
Meteorologist

STATEMENT

National Weather Service
Indianapolis ARTCC
Indianapolis, IN 46241
February 11, 1997

The following is a report concerning weather events in the Indianapolis ARTCC during my shift on January 9, 1997.

My name is Lyle Alexander. I am a meteorologist at the Center Weather Service Unit (CWSU) at the Indianapolis Air Route Traffic Control Center (ARTCC) in Indianapolis, IN. I was on duty for a supernumerary shift beginning at 1000 EST. Between 1000 and 1345 EST, I performed various administrative duties and assisted the duty CWSU meteorologist as needed.

I would describe the workload as heavy on this day.

The surface map showed a deep low pressure system over northwest Indiana at 1600 EST. Snow was falling over much of Indiana and portions of western Ohio. Warm air aloft pushed the temperature close to the freezing mark at 10,000 feet over eastern Ohio, eastern Kentucky and West Virginia.

Surface winds were gusty from the southwest over much of ZID airspace (the area includes much of Indiana, Ohio, Kentucky, and West Virginia) and there was some concern that if the winds became more westerly, arrival rates at Cincinnati/Covington Airport (CVG) might be diminished. In the snow areas, visibilities less than three statute miles were occurring.

Throughout my shift, moderate turbulence was common in the mid and high altitudes across ZID airspace. There were several pilot reports of severe turbulence. SIGMETS and Center Weather Advisories (CWAs) were issued for the turbulence. Most of the severe turbulence reports were in the mid levels, from 12,000-28,000 feet Mean Sea Level (MSL).

John Dumeyer arrived at the CWSU for duty at 1345 EST. I briefed him on current weather across ZID airspace. Included in the briefing was a discussion of icing and turbulence conditions. Due to the heavy workload occurring and expected to continue, we decided to share operational shift duties.

Pilot reports of moderate icing were received by the CWSU from time to time across ZID airspace prior to 1300 EST with most severe icing reports occurring north of ZID. Moderate icing reports increased over Indiana between 3,000 and 9,000 feet MSL between 1300 EST and 1500 EST. I attributed the icing to be associated with the leading edge of colder air moving in from the west below ten thousand feet. As this colder air reached northwest Ohio, there was a report of heavy icing at 1502 EST at

Allen County, near Findlay, OH.

At 1515 EST, I performed a stand-up briefing to the ARTCC Area Supervisors and I emphasized frequent moderate icing conditions across northern and western portions of ZID airspace. I also relayed the report of heavy icing, which occurred at 1502 near Findlay, OH.

Two reports of moderate to severe icing were received between 1515 and 1525 EST, one near CVG and the other near Bowman Field, KY (LOU). John Dumeyer and I analyzed weather radar imagery from Indianapolis, IN, Wilmington, OH, and Louisville, KY to see if we could correlate the severe icing reports to any radar patterns. We found some thin northeast-southwest bands over southwest Ohio and northeast of LOU. These bands appeared to correlate well with the locations of the moderate to severe icing reports.

At 1545 EST, we issued a CWA for an area across ZID airspace from western Ohio across southeast Indiana to central Kentucky. We didn't expect that the severe icing would be widespread but we felt that a CWA for severe icing was prudent to heighten controller and pilot awareness of the hazardous icing conditions. I felt this was especially important because of the higher concentration of air traffic around CVG.

We also noticed that AIRMET ZULU included isolated severe icing conditions for northeast portions of ZID airspace. This was the part of ZID airspace that we felt had the greatest potential for icing.

I left the CWSU operations office at 1630 EST to perform administrative duties. Mr. John Dumeyer remained in the office as duty meteorologist.

Lyle S. Alexander
Indianapolis CWSU

STATEMENT

Center Weather Service Unit
Indianapolis ARTCC (ZID)
Indianapolis IN 46241
February 2, 1997

The following is a report concerning my duties as Duty Meteorologist on January 9, 1997.

My name is John Dumeyer. I am employed as a meteorologist at the Center Weather Service Unit (CWSU) at the Indianapolis ARTCC(ZID). I was Duty Meteorologist from 1345 EST until 2145 EST on January 9, 1997.

When I arrived on station at 1340 EST, CWSU meteorologist Lyle Alexander was on duty. We decided to share operational duties due to the complexity of the workload. Mr. Alexander offered to do the regularly scheduled 1515 EST stand-up weather briefing to all ARTCC Area Supervisors.

His in-briefing to me included a discussion of icing and turbulence. The icing was expected to be of light to moderate intensity across ZID airspace (a large part of Indiana, Kentucky, Ohio, West Virginia, and small parts of adjacent states) at and below 18,000 feet Mean Sea Level (MSL) and as high as 24,000 feet MSL over Ohio, West Virginia and the eastern half of Kentucky. Turbulence was expected to be of light to moderate intensity across ZID airspace at and below 31,000 feet MSL with isolated severe turbulence between 12,000-28,000 feet MSL. He explained that quite a few severe icing pilot reports had been received before 1100 EST in northern ZID airspace and to the north of ZID airspace, from approximately Detroit to Cleveland. He also said that since 1100 EST, icing pilot reports in ZID airspace had been from light to moderate intensity; a few severe icing pilot reports had been received from southern Lower Michigan and northern Ohio north of ZID airspace. He explained that a surface cold front was moving across ZID airspace from west to east. Colder, drier air along and behind the front was displacing slightly warmer and more moist air ahead of it. The icing in our airspace was expected to be more prevalent, i.e., frequently moderate, along and just ahead of the frontal boundary.

We proceeded to prepare for the briefing. At approximately 1510 EST, a report of heavy rime ice was reported to the CWSU from a C310 at 9,000 feet MSL during climb off Allen County Airport in northwest Ohio. The report was received from the sector controller working the Rosewood low altitude sector at ZID ARTCC. Mr. Alexander and I left the CWSU operations area at 1513 EST for the stand-up briefing. I briefed the Traffic Management Specialists on the hazardous icing and turbulence conditions while Mr. Alexander performed the stand-up briefing to Area Supervisors.

We returned to the CWSU operations area at approximately 1525

EST. I noticed two new pilot reports on the Leased Service A teletype; both were icing pilot reports of moderate-severe intensity. One occurred at 1520 EST at a location 20 miles north of Cincinnati, OH (CVG) by a B737 between 4,000 and 5,000 feet MSL, while the other occurred at 1516 EST over the Louisville, KY VOR (IIU) by a BE18 from 4,000 to 8,000 feet MSL. Doppler radar images showed bands of convective snow forming in this area near the surface cold front. Both icing reports came from the vicinity of such bands. We agreed a Center Weather Advisory (CWA) was in order and issued ZID1 103 at 1545 EST.

Once issued, I took a hard copy of the CWA to the ARTCC Flight Data Control Specialist for dissemination through the ARTCC computer system. I then proceeded to brief all of the Area Supervisors of the severe icing potential before returning to the CWSU operations area at approximately 1605 EST.

I took sole control of CWSU operational duties at 1630 EST. I updated the Meteorological Impact Statement at 1635 EST for the potential of severe icing between 3,000 and 10,000 feet MSL over the eastern three-quarters of ZID airspace.

Subsequent pilot reports indicated light to moderate icing conditions in the Center Weather Advisory area. I also directed low altitude sector controllers in the Cincinnati and Columbus, OH areas and the Lexington and London, KY areas to request pilot reports from aircraft climbing out of various terminals. I did not receive any reports of severe icing during the remainder of the Center Weather Advisory and earlier radar banding signatures were less pronounced. I therefore decided to allow the CWA to expire at 1745 EST.

I continued asking the various low altitude sector controllers for pilot reports during the remainder of the shift. One report of heavy ice was received at the Columbus low altitude sector at 1845 EST, but when I questioned him, the sector controller reported that the pilot experienced moderate intensity icing that accrued rapidly.

John R. Dumeyer
CWSU Indianapolis

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STATEMENT

Aviation Weather Center
National Weather Service
Kansas City, Missouri
February 6,1997

The following report concerns the icing forecast valid over Ohio at the time of the accident of Comair Flight 3272. The accident occurred at approximately 2050 GMT on January 9, 1997 in extreme southeastern Michigan south of Detroit, about 6 miles west of Monroe.

My name is Jeff Behrens. I am employed as a National Weather Service Meteorologist at the Aviation Weather Center located in Kansas City, Missouri. I was on duty as the meteorologist monitoring and forecasting aviation weather for the eastern quarter of the continental United States (including Ohio and Lake Erie, but not Michigan) during the time period from 1300 GMT to 2100 GMT. My duties included the development and transmission of the 1445Z Boston AIRMET ZULU depicting icing potential throughout the northeastern United States for the forecast time 1500Z to 2100Z.

I use the following general forecast routine to construct and transmit in a timely manner AIRMET ZULU icing forecast data for my area of responsibility. While the basic routine stays the same, the specific products and/or observational data that I use will vary from case to case and day to day as conditions warrant.

A. After receiving the shift change briefing, I begin the shift with a review of the current synoptic pattern for the eastern United States and the resulting weather conditions as they affect aviation. This includes looking at current upper air and surface weather observations, radar displays, satellite imagery, and pilot reports. Next, aviation weather forecast products valid for my area of responsibility are reviewed to insure that they accurately reflect the current and forecast conditions. I am required to maintain a meteorological watch over my forecast area of responsibility throughout my duty shift, and thus these forecasts are amended at this time if necessary, or at any other time throughout my shift as needed.

B. I then look at forecast model output of moisture, wind, and temperature, and use that data in combination with my interpretation of satellite imagery, radar, pilot reports, surface observations, etc. to develop a three dimensional view of icing potential across my area of responsibility and then project that three dimensional view through the six hours following the forecast valid time of AIRMET ZULU, as well as the subsequent six hour "outlook" period. Experimental icing forecast products are also reviewed and their output interpreted and integrated into this procedure.

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C. The required icing forecast, in the correct format, is then composed on a word-processing computer. A similar routine is used in preparing AIRMETS for turbulence, mountain obscuration, and IFR clouds and weather forecasts for the eastern United States. At the scheduled transmission time, these AIRMETS are sent through our communications lines to aviation users.

Using the procedure described above, I determined that the potential for icing up to and including moderate intensity existed over a relatively large area on the 9th of January, and additionally there was a possibility of isolated severe icing over a somewhat more limited area. AIRMET ZULU valid for the forecast period 1445Z through 2100Z indicated moderate rime and/or mixed icing in clouds and in precipitation from the surface to flight level 25,000 feet from Ohio, Lake Erie, West Virginia and Virginia eastward through most of New York and into the Atlantic coastal waters south of New England, between Providence, Rhode Isand and Norfolk, Virginia. Additionally, the possibility of isolated severe icing from the surface to 15,000 feet was forecast from Ohio and Lake Erie into western Pennsylvania, West Virginia, and the western portion of Virginia. These icing conditions were forecast to continue for the outlook period from 2100Z through 0300Z.

Preparation of this AIRMET also included coordination with the forecaster preparing the AIRMET for the adjoining region to the north and west of my forecast area. Specifically, icing up to and including moderate intensity was forecast for Michigan, Indiana, and Kentucky through the same forecast period, with an area of "enhanced" potential for significant icing in areas of freezing drizzle aloft across Indiana and Kentucky. The forecaster for the adjoining portion of the Great Lakes and Ohio river valley area and I are located within the same work space, a few feet from each other, which allows/promotes an ongoing coordination and sharing of meteorological information regarding weather systems and conditions that encompass both of our areas of responsibility.

On this shift there were a number of other meteorological concerns, including widespread areas of significant turbulence, IFR conditions, and mountain obscuration, all of which required AIRMET issuances in my area of responsibility, and in the case of turbulence issuance of a SIGMET.

During the course of the AIRMET ZULU valid time (1445Z through 2100Z) there were several icing reports over Ohio, Indiana, and southern Michigan. These were primarily rime icing, with some reports of mixed icing also included. A large percentage of the reported icing was between 3000 and 14,000 feet. Almost all icing pilot reports (PIREPS) received over this area during the valid time of AIRMET ZULU were of light, light to moderate, or moderate intensity, as forecast. The only exception over the primary area of concern (western Ohio)

during the entire 6 hour forecast period was a single report at 2002Z of heavy rime icing (interpreted as severe rime) by a C310 at 9000 feet over Lima, Ohio, which is about 25 nautical miles southwest of Findlay, Ohio. The only other reports received of icing greater than moderate intensity over the entire state of Ohio during the valid time of AIRMET ZULU were farther east in northeastern Ohio. One was over Mansfield, Ohio at 1727Z at 13,000 feet and the other near Akron, Ohio at 1902Z between 12,000 and 13,000 feet. The possibility of isolated reports such as these was likewise indicated by the text of the AIRMET ZULU icing forecast in effect at that time.

In addition to maintaining a continual monitoring of current and forecast meteorological conditions throughout the shift (including observed reports of icing as indicated above), I also called the CWSU at Cleveland just prior to 16Z regarding issuance of a SIGMET for severe turbulence, and again at approximately 1930Z regarding reissuance of the severe turbulence SIGMET. At the time of the second call we discussed the potential for severe icing, specifically the two icing reports received over northeastern Ohio. Based on the latest information available, as well as data received through the course of the day, it appeared to me that the focus for the threat of isolated severe icing had shifted from northeastern Indiana, southeastern Michigan, and western Ohio earlier that morning (roughly prior to 16Z) into northeastern Ohio and Lake Erie at the present time. Since the threat of severe icing appeared to be isolated in nature and over a rather limited area, it was decided that a Center Weather Advisory (CWA) message (in conjunction with the current AIRMET ZULU for isolated severe icing) would most accurately reflect the current and anticipated icing conditions. It was my understanding that the CWSU Meteorologist would issue a CWA for severe icing for northeastern Ohio and Lake Erie at that time.

During the course of the shift, and upon reviewing all available PIREPS after the fact, it was and is my opinion that the 1445Z AIRMET ZULU forecast for icing accurately reflected icing conditions that actually occurred over Ohio (as well as the remainder of my area of responsibility) during the period 1445Z through 2100Z on January 9, 1997.

Jeffrey B. Behrens
Meteorologist, National Weather Service

STATEMENT

Aviation Weather Center
National Weather Service
Kansas City, Missouri
February 7, 1997

The following report concerns the icing forecast valid over Michigan, Indiana, and Kentucky at the time of the accident of COMAIR Flight 3272. The accident occurred at approximately 2050 GMT on January 9, 1997 in extreme southeastern Michigan south of Detroit, some six miles west of Monroe, Michigan.

My name is Richard G. Cundy. I am employed as a National Weather Service meteorologist at the Aviation Weather Center (AWC) located in Kansas City, Missouri. I was on duty as the meteorologist covering the central one-third of the contiguous United States (including the states of Michigan, Indiana, and Kentucky) from 1900 GMT to 2100 GMT on January ninth. I was working the forecast desk because Mr. Carl Aldridge, the scheduled meteorologist working the position, became ill during the early afternoon hours and could not complete his shift. My duties included the monitoring of the current Chicago AIRMET ZULU forecast for icing (issued at 1445 GMT) for accuracy, and the development and transmission of an updated Chicago AIRMET ZULU forecast for icing over the central United States (scheduled to be issued at 2045 GMT and valid for the time 2100-0300 GMT).

I received a briefing from Mr. Aldridge concerning potential problem areas across the central United States. He informed me of the icing conditions over the Great Lakes region as described in the 1445 GMT AIRMET ZULU, which included the forecast of the possibility of enhanced icing conditions over Indiana during the period 1500-2100 GMT. He also informed me that in monitoring the situation through the morning hours, he felt that the meteorological conditions that led him to mention the possibility of enhanced icing over the region was moving east of Indiana and into the area of responsibility of Mr. Jeff Behrens, the forecaster covering the eastern United States.

Upon relieving Mr. Aldridge, I reviewed the valid forecasts of icing, turbulence, and IFR conditions and compared them with current surface weather observations and recent pilot reports (PIREPS). In my review, I do not remember seeing anything in the data which would have prompted me to amend the valid Chicago AIRMET ZULU or to issue a SIGMET for severe icing conditions. Once I had checked to ensure that the current icing forecasts accurately described the icing potential across the region, I began to develop the updated SIERRA, TANGO and ZULU AIRMETS covering the Chicago and Fort Worth forecast areas. These are scheduled updates that are issued at 2045Z. The 2045 GMT Chicago AIRMET ZULU described the potential for occasional moderate rime and/or mixed icing conditions over Michigan, Indiana, and Kentucky though 0300 GMT. I coordinated my forecast with Mr. Behrens, who included a description of the

possibility of isolated severe icing potential to the east of my forecast area in Boston AIRMET ZULU issued at 2045 GMT. While I do not recall the specific model data or guidance products I used in developing the updated AIRMET ZULU, there was nothing in the model data I utilized in my icing forecast which would have prompted me to issue a SIGMET for severe icing or to mention the possibility of isolated severe icing conditions over the eastern portions of my forecast area.

During the two hours I covered the forecast desk for Mr. Aldridge, I received no telephone calls from the Indianapolis or Cleveland CWSUs concerning information they might have had concerning the possibility of severe icing conditions over Indiana, Michigan, Or Kentucky. At 2100 GMT, a new forecaster took over the central forecast desk as scheduled.

It is my opinion that the 1445 GMT and the 2045 GMT Chicago AIRMET ZULU forecasts for icing over Michigan, Indiana, and Kentucky accurately reflected the icing conditions that occurred over the region on January ninth.

[redacted]

Richard G. Cundy
Meteorologist, National Weather Service

STATEMENT

AVIATION WEATHER CENTER
NATIONAL WEATHER SERVICE
KANSAS CITY, MISSOURI
FEBRUARY 7, 1997

The following is a report concerning the icing forecast valid over lower Michigan, Indiana, and Kentucky at the time of the aircraft accident. The accident occurred in the vicinity of Detroit, Michigan on January the 9th at approximately 2055 UTC.

My name is Carl R. Aldridge. I am employed as a National Weather Service meteorologist at the Aviation Weather Center located in Kansas City, MO. I was on duty as a meteorologist covering the central third of the United States from 1300 UTC till 1900 UTC at which time I was taken ill and was replaced by Mr. Richard Cundy. He completed the shift from 1900 UTC to 2100 UTC. During transmission of the 1445Z Chicago airmet zulu showing icing potential across lower Michigan, Indiana, and Kentucky for the forecast time 1500 UTC-2100 UTC.

I began my shift with a briefing from the midnight meteorologist, giving me a overview of the synoptic pattern of the central U.S. using surface data, upper air charts, and satellite displays. A review of the current forecasts then took place.

After the briefing, I began collecting the information necessary to compile the 1445Z airmets for icing in the Chicago forecast area. I used the ETA forecast atmospheric model to determine the areal coverage and height of the icing level for the area in question. I then turned to the rapid update cycle (RUC) model to determine if this model had forecast any super cooled liquid droplets (SLD). After viewing the model output, I then turned my attention to the pilot weather reports and current weather conditions over the forecast area.

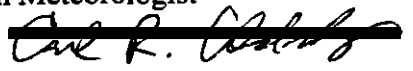
After gathering all the pertinent information, I then made my icing forecast for lower Michigan, Indiana, and Kentucky by putting occasional light to moderate rime/mixed icing in cloud and in precipitation below eighteen thousand feet. The airmet also incorporated an enhanced area of icing over Indiana and Kentucky below twelve thousand feet. The airmet was then issued around 1435Z and was expected to continue beyond 21Z through 03Z.

After the airmets were issued, it was then my job to monitor the weather and amend if necessary. Between 1500 UTC and 1600 UTC, I consulted with the meteorologist at the Center Weather Service Unit in Cleveland to discuss the center weather advisory (CWA) that had been issued in the morning hours for reported isolated severe icing conditions in the Detroit area. We decided that a CWA was handling the situation.

By early afternoon the icing potential still existed across much of the central U.S. including lower Michigan. The scheduled airmet issuance at 2045Z reflected this.

I believe the airmet for icing accurately depicted the weather conditions at the time of the aircraft accident.

Carl R. Aldridge
Aviation Meteorologist



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