

MINUTES - NORTH DAKOTA ATMOSPHERIC RESOURCE BOARD

APRIL 28, 2015

Chairman Henry Bodmer called a telephone conference call meeting of the Atmospheric Resource Board to order at 9:31 a.m., April 28, 2015.

ROLL CALL

Roll call was taken. Members present were Henry Bodmer, Paul Myrdal, Casey Veil, Tom Tupa, Michelle Klose, and Kyle Wanner.

Others present were Darin Langerud, Director; Kelli Schroeder, Business Manager; Mark Schneider, Chief Meteorologist; Daniel Brothers, Meteorologist; Hans Ahlness, Weather Modification, Inc. (WMI) and Corey Paryzek, Williams County Weather Modification Authority.

MINUTES

IT WAS MOVED BY MR. TUPA, SECONDED BY MR. WANNER, AND CARRIED ON A VOICE VOTE TO APPROVE THE MINUTES OF THE OCTOBER 29, 2014 MEETING AS DISTRIBUTED.

FINANCIAL STATUS REPORT

Ms. Schroeder reviewed the financial status report for the period ending February 28, 2015.

Rob White joined the call.

Mr. Langerud updated the Board on the recent Weather Modification Association conference in Fargo at the request of Mr. Bodmer.

LEGISLATIVE REPORT

Mr. Langerud reported on the status of the State Water Commission budget bill, SB 2020.

SB 2144 was the bill that the Governor's Property Tax Reform Committee submitted. This bill moves the taxing authority from a specific weather modification taxing authority to the county's general tax authority. The goal was to streamline property taxes in the counties to make the property taxes more understandable to the public.

In response to a question from Mr. Tupa, Mr. Langerud indicated that none of the counties participating in weather modification expressed concern about this change. There were concerns in other areas of government though.

SB 2217 requires a financial report be sent to the county auditor every fall for counties that are participating in weather modification if they have balances leftover in their accounts.

SB 2056 passed but was superseded by SB 2144.

HB 1055 would have replaced mills in the statute with a dollar value. This bill was defeated in the end.

HB 1096 had a small section in the bill that related to weather modification. The State Water Commission sponsored the bill. It cleans up language in one of our sections relating to pilot registration with the ND Aeronautics Commission, which Aeronautics no longer requires.

2015 WEATHER MODIFICATION PERMIT APPLICATIONS

Mr. Langerud informed the Board that permit applications and fees from Weather Modification, Inc. for District I and District II have been received, including the addition of Burke County for District II. Legal notices were published in participating and bordering counties.

The comment period ended Saturday, April 18th with one public comment received from Mr. Delvin Fannik in southern Ward County. He has had some overland flooding the last few years. They are concerned about additional rainfall enhancement because of this situation. Mr. Langerud responded and explained the program and long-term evaluations. He also explained that, in wet periods or exceedingly wet periods as it has been the last several years; the counties have the ability to suspend rain enhancement activities. He noted the times from 2014 in Ward County that rain enhancement activities were suspended. If similar wet conditions occur in 2015, it would be reasonable to expect the same response from the county.

Mr. Langerud recommended that the board approve the permits for the 2015 project.

In response to a question from Mr. Bodmer, Mr. Langerud noted that he did not receive a further comment or response from Mr. Fannik after Mr. Langerud's April 2nd letter to him.

MR. WANNER MOVED TO APPROVE WEATHER MODIFICATION PERMITS FOR DISTRICT I AND II FOR WEATHER MODIFICATION, INC., FARGO, ND. SECONDED BY MR. MYRDAL. ALL MEMBERS VOTED YEA. THERE WERE NO NAY OR ABSTAIN VOTES AND NO ABSENCES. MOTION CARRIED 6-0.

POLCAST HYGROSCOPIC SEEDING RESEARCH PROGRAM

Mr. Langerud reviewed the POLCAST5 progress on data analysis. University of North Dakota (UND) has been doing airborne and ground-based atmospheric sampling. At the WMA conference, they reported that Cloud Condensation Nuclei (CCN) characteristics are prevalent in an amount that would be suitable for hygroscopic seeding on almost

any day in North Dakota. He also reported on numerical modeling work that UND is doing for us.

The lead scientist at National Center for Atmospheric Research (NCAR) is working on radar data analysis from the UND Polarimetric Doppler Radar. We are attempting to find the change of drizzle and light rain formation in seeded clouds from hygroscopic flares versus an unseeded set of clouds chosen randomly. We are hoping to be able to find a change in the radar signature in seeded versus unseeded clouds at a very early timeframe in its life cycle and then follow it through the cloud. NCAR will also be doing parcel modeling, which will look at the cloud droplets and run out the cloud droplet formation over a 20-minute timeframe. We'll compare the radar observed data to the modeled data to see if they compare favorably. We expect to receive the final report from NCAR by May 31, 2016.

NORTH DAKOTA CLOUD MODIFICATION PROJECT

Mr. Langerud reported on meetings with the district weather modification authorities in January. Budget details were reviewed. Contracts with the counties have been sent out and we're waiting for their return.

Ms. Schroeder reported on having 12 applicants for the 9 intern copilot positions. Mr. Schneider reported on meteorologist hiring. There are no returning radar meteorologists this year. Our Stanley radar intern wanted to return as an intern again and will be based in Stanley. He will be able to train in the new radar meteorologists. The individual who will be the intern meteorologist in Bowman has taken UND's weather modification course, so she will also be a valuable asset to the team. The only position remaining to be hired is the forecast intern based in Bismarck.

In response to a question from Mr. Bodmer, Mr. Ahlness reported on the status of hiring pilots-in-command (PIC). He lost 3 PICs that were signed up because they received full time employment offers. He has 4 hired and thinks 3 of the remaining 4 are pretty certain. The King Air PIC is the hardest to find right now.

Mr. Schneider reported on housing issues for the 2015 project. This year we are in much better shape with additional options in most places.

Mr. Schneider reported that all dry chemicals have been delivered with the exception of silver iodide, which is enroute from Spain. He noted that we would also be purchasing some additional flares with state funds.

Mr. Langerud reported on the progress of the Bowman airport move. It is scheduled to be open at the end of May. Our pilots will be based out of the new airport. Since we are moving the radar after the NDCMP is over, our meteorology staff will be based out of the old airport location this year.

POWDER RIVER TRAINING COMPLEX EXPANSION

Mr. Langerud noted that the Federal Aviation Administration's Record of Decision for approval of the Powder River Training Complex expansion has been published. PR-3 is the subset of the training area that will impact our District I operations area eventually. It sounds like PR-3 will not be running until this fall. They are planning to install ground communication equipment that will improve radio contact in the area first.

The Ellsworth staff indicated that they like to keep their bomber aircraft 20 miles from convective storms. That eased a great majority of our concerns. However, we are asking for a direct line of communication.

Mr. Wanner noted that the FAA approval is conditional in PR-3 in that those mitigations need to be in place prior to the airspace being granted for official use. The mitigations include the communications equipment. The Air Force needs to have the ability to recall their aircraft at a moments notice. We need to be able to get IFR traffic into and out of Bowman and Baker and other airports in that area. We've been given the agreement from the Air Force that that is what they are working towards. As a part of the issuance of approval, they need to do outreach to all the affected areas of this airspace. Mr. Wanner expects multiple meetings to be arranged before this goes live. If the Board has any concerns, he asks that you bring them to him so that he can continue to represent aviation across the state to ensure that this airspace is integrated safely and that there aren't any concerns that we cannot handle with the Air Force.

In response to a question from Mr. Bodmer, Mr. Ahlness indicated that what we need is a way to communicate with Ellsworth. He is working with the Ellsworth airspace manager. They are going to work on procedures to make sure we are all working communications the same way and we all know what the expectations will be.

RADAR OPERATIONS

Bowman Year-round Operations

Mr. Langerud noted that Bowman radar continues to operate year-round. We have agreements with 8 counties to fund these operations.

Bowman Radar Move

Mr. Langerud mentioned that we would be putting up a new building at the new airport site to house the transmitter, computer equipment, test equipment and spare parts. We will be taking down and re-erecting the tower at the new location in the fall. Dirt work for our portion has been done. We are in the process of bidding the building and concrete work.

In response to a question from Mr. Paryzek, Mr. Langerud indicated that there would be a possible advantage from the Williston airport perspective for moving the Stanley radar to Williston. However, from an operational perspective, the radar coverage for Ward County would not be very good due to the limitations of radar range.

Mr. Paryzek asked about this option due to the lack of National Weather Service radar coverage. Mr. Langerud mentioned that Maurice Foley, a member on the State Water Commission, lives in Ward County and would like to get county funding to run the Stanley radar year-round. He has already secured some funding from Ward County. If this could be accomplished with agreements of more counties, then Williston would be covered better with the Stanley radar during the non-summer months.

Procurement of NOAA NWS surplus WSR-74C spare parts

Mr. Langerud noted that we are still waiting for the federal government to release their 74-C radar parts. We are in line to acquire some of those parts.

In response to a question from Mr. Bodmer, Mr. Langerud noted that we are in decent shape with regard to spare parts. Over a period of time, we will need to use the spares we have. So, when we can get the excess parts from the federal government, they will be acquired at a much lower cost than buying commercially. Some parts you cannot get commercially.

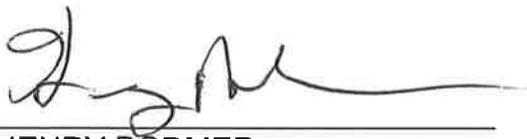
2015 COOPERATIVE OBSERVER NETWORK UPDATE

Mr. Brothers reported that we have 536 observers in our ARB Cooperative Observer Network doing summer observations and 230 signed up for snowfall observations. One hundred seventy are reporting online.

Other Business

Mr. Langerud introduced Casey Veil, our new board member from District V.

Being no further business the meeting adjourned at approximately 10:39 a.m.



HENRY BODMER
CHAIRMAN



PAUL MYRDAL
SECRETARY

Transcribed by Kelli Schroeder