

MINUTES - NORTH DAKOTA ATMOSPHERIC RESOURCE BOARD

APRIL 13, 2016

Chairman Henry Bodmer called a telephone conference call meeting of the Atmospheric Resource Board to order at 9:31 a.m., April 13, 2016.

ROLL CALL

Roll call was taken. Members present were Henry Bodmer, Monte Hininger, David Monson, Paul Myrdal, Casey Veil, Tom Tupa, and Kyle Wanner.

Others present were Darin Langerud, Director; Kelli Schroeder, Business Manager; Mark Schneider, Chief Meteorologist; and Hans Ahlness, Weather Modification, Inc. (WMI).

MINUTES

IT WAS MOVED BY MR. HININGER, SECONDED BY MR. TUPA, AND CARRIED ON A VOICE VOTE TO APPROVE THE MINUTES OF THE NOVEMBER 9, 2015 MEETING AS DISTRIBUTED.

Mr. Bodmer welcomed David Monson, our newest board member. Mr. Monson briefly introduced himself.

FINANCIAL STATUS REPORT

Ms. Schroeder reviewed the financial status report for the period ending February 29, 2016.

2016 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. Legal notices were published in participating and bordering counties.

The comment period ended Tuesday, April 12th with no public comment received. Mr. Langerud recommended that the board approve the permits for the 2016 project.

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

NORTH DAKOTA CLOUD MODIFICATION PROJECT

Mr. Langerud reported on meetings with the district weather modification authorities in January. Budget details were reviewed.

In response to a question from Mr. Monson, Mr. Langerud indicated that the flight hour cost which includes fuel has been reduced from last year. The base costs for having the aircraft available 24/7 and on station have increased. These combine to an overall cost increase of 4.8%. Going forward for 2017 and 2018, increases are a flat 3% across the board.

In response to a question from Mr. Bodmer, Mr. Ahlness indicated that their biggest cost is maintenance. They save a little money having Hans do the maintenance whenever they can and also being able to stock commonly used parts for the aircraft. However, there is also a lack of shops for aircraft in the communities that we work which means they have to fly the aircraft to other locations for service or WMI mechanics have to fly to the aircraft base, which adds to costs. Salaries will be down this year because he only has 2 returning PICs.

In response to a question from Mr. Bodmer, Mr. Ahlness indicated that the reason he doesn't have as many returning PICs is due to airlines hiring. As soon as the pilots get to 1,200 hours, most of them head out to airlines. Mr. Langerud noted that there are a lot of retirements in the airlines right now, which is the biggest reason for the extensive hiring in airlines lately.

Mr. Langerud reported on county contract preparations. We will also be working on the contract with WMI for aircraft services.

Mr. Schneider reported on meteorologist hiring. There are tentatively 3 returning radar meteorologists this year. He will be doing hiring for the intern meteorologists in the next week or so.

Ms. Schroeder reported on having 10 applicants for the 9 intern copilot positions. Efforts will continue towards recruiting, including attending the UND SAMA Career Fair at the end of April.

Mr. Schneider reported on housing issues for the 2016 project. This year we are in much better shape with additional options in most places. Mr. Bodmer reported that Mr. Schneider should have no trouble setting up reasonably priced housing in Kenmare this year.

In response to a question from Mr. Ahlness, Mr. Schneider noted that we do still have an apartment in Stanley. However, the plan is to end the lease after this season ends.

Mr. Schneider reported that we came in \$7,900 under budget for chemical this year. This was primarily due to very low bids for acetone. Last year the lowest bid for a 55-gallon acetone drum was \$550. This year the lowest bid came in at \$350 per drum.

Silver iodide has usually been purchased from a company in Spain, Laboratorios Argenol. Argenol typically has the lowest bid by a great amount. This year an American company, GFS Chemicals, came in with a bid of \$4 per bottle less than the Argenol bid. All 3 bids for silver iodide were within \$8 per bottle of each other, which is unusual.

Mr. Bodmer commented to Mr. Ahlness that he is concerned that we are not having success keeping pilots around for more than 1 season. Mr. Ahlness said that he is having some success by having pilots work on their winter season projects in California and Idaho. Mr. Ahlness indicated that the starting pay for airlines is also increasing, along with \$20,000 signing bonuses. WMI cannot compete with that.

Mr. Langerud mentioned that we've been hiring intern pilots for more than 40 years. It's also been hard to get the needed interns in recent years, not that the program isn't successful. The students come in with around 150-200 hours and get their experience flying right seat with our project. They still won't have enough hours by the next summer to fly as a PIC. Mr. Ahlness noted that the interns are graduating from UND with around 200 hours of flight time which is considerably low for WMI's PIC requirements.

In response to a question from Mr. Monson, Mr. Langerud indicated that dry ice is not used in District 1. The hybrid aircraft that can seed at cloud top does not have a dry ice bin. The aircraft isn't used very often for top seeding in District 1. This is due partially to budgetary constraints but also the small size of the district. Mr. Ahlness indicated that the Cessna 340s in Minot and Bowman used to have dry ice capabilities. However, with District 1 shrinking down to basically Bowman County and no buffer zones in Montana and South Dakota, you can't get to the feeders with a top seeder until the storm is half way across the target area. Due to this, there are so few good opportunities to top seed in District 1.

In response to a question from Mr. Tupa, Mr. Langerud noted that the expansion of the Powder River MOA was effective in September 2015. The low altitude portion is currently not active in section 3, where Bowman County is located. They are working on some radio communications issues before the low altitude portion is activated for that area. It has been made clear to us though that the Air Force will not be flying near thunderstorms, so that will de-conflict the vast majority of our operations when the MOA is active.

Mr. Wanner noted that he expects the low MOA to activate sometime this summer. If there are any reports or conflicts with the Powder River operations, please let him know so that he can make contact with the Air Force base to work out issues.

RESEARCH COLLABORATION WITH UNIVERSITY OF WYOMING

Mr. Langerud mentioned that he was contacted by scientists at the University of Wyoming about collaborating with them on a research proposal being submitted to the United Arab Emirates (UAE). The UAE has a \$5 million rain enhancement science grant program.

Discussions were held with scientists from University of Wyoming and the National Center for Atmospheric Research in Boulder, CO. They submitted a 4-page pre-proposal which outlines research work that would be done. The intent would be to work in collaboration with our POLCAST experiment. This project would target similar clouds as done on POLCAST. The Wyoming staff would use their King Air cloud physics aircraft to observe the differences in seeded versus non-seeded clouds with hygroscopic materials, fine tune seeding techniques and opportunities for rain enhancement through this technique. In May, we will learn if the pre-proposal has been approved for the next step.

The request is for about \$1.4 million for a 5-week field program and the remaining part of a year for support work.

In response to a question from Mr. Bodmer, Mr. Langerud noted that under this scenario, we would be responsible for working with WMI to have a seeding aircraft available and equipped to do the seeding of clouds. The rest of the research work will be done by the other partners.

RADAR OPERATIONS

Technical services contract

Mr. Langerud informed the Board that we have a new technical service contract with Clem Aadland. This year, he has hired 2 additional technicians that he will be training during the course of this contract. Provided that goes well, those technicians may be interested in bidding the following year, as Clem intends this to be his last year.

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.

In addition, a scientist at the National Severe Storms Laboratory (NSSL) in Norman, OK, would like to utilize the Bowman data real-time and plug it into their national radar mosaic product to fill the gap that exists in their network. Our IT staff members are working together to accomplish the data transfer.

Stanley Year-round Operations

Mr. Langerud noted that the Stanley radar has only been running part of the year, during the NDCMP program. There is interest however among some of the counties in the area and others to fund the year-round operation of Stanley, as is done in Bowman. The crew at the NSSL would be interested in the Stanley data feed as well.

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.

2016 COOPERATIVE OBSERVER NETWORK UPDATE

Mr. Schneider reported that we have 526 observers in our ARB Cooperative Observer Network doing summer observations and 231 signed up for snowfall observations. One hundred seventy are reporting online.

Being no further business the meeting adjourned at approximately 10:29 a.m.


HENRY BODMER
CHAIRMAN


PAUL MYRDAL
SECRETARY

Transcribed by Kelli Schroeder

