UASRCC MEETING MINUTES

Wednesday, December 16, 2015. Tech Accelerator-Training Room


Others Present: Chris Theisen, (Northern Plains UAS Test Site) Sarah Lovas (Trail County Ad hoc member), Doug Olsen (ESSP), John Nowatzki (NDSU)

ABSENT: C. Juntunen, K. Porter, F. Matejcek, A. Frazier, M. Nelson, M. Bowles,

T. Heitkamp called the meeting to order at 8:30 a.m. T. Heitkamp thanked Julie for her work with the committee.


2. Applications for Review.
   a. NASA Task Order1: UAS Traffic Management- D. Olsen introduced himself and the project he will be proposing. UTM (UAS traffic management) is using radar for air traffic control for UASs which will be under what usual radars scan at. Will be testing a NASA new server system. The test is only reporting where the UAS if flying. Four different airframes will be used. Two are from UND and the other two are owned by a private sector. Will also be collecting sensor data? The flights will be west of town and flying at the S Ranch. B. Milavetz said the main question is regarding the sensors. C. Theisen stated they are not planning on keeping video data. The flights will be in April. Would like to do test flights in January and February. B. Huschle asked about the data. D. Olsen stated he will be contacting the neighbors about the flights. S. Lovas discussed images may have benefit to precision ag. Would like approval to fly now. P. Haga motion to approve now to have the test flights but to come back in April with amendments and notifications that were sent to neighbors. D. Harsell seconded the motion. Mission approved for test flights.

   b. Large Scale UAS Data Collection, Processing & Management for Field Crop Management- J. Nowatzki presented that he will be using large aircraft and will be monitoring 100,000 acres in one week. Will be monitoring both crops and livestock. B. Huschle asked if same information will be collected in the same area. He stated he has sent letters out to 518 land owners in the area. Will also have public meetings focused on the growers and landowners. He discussed imagery and storage. G. Lloyd asked about if he will be helping farmers analyze the data. Also asked when the operation will be completed. J. Nowatzki said should end in August 2016. B. Milavetz asked since it is on a Research ND grant if the data is open. A. Palmer said there is many flights that are already taking place out of Hillsboro, will this project interfere. G. Lloyd motion to approve. B. Huschle seconded the motion. Application approved.

   c. Cooperative Airspace Techniques & Visualization-C. Theisen reported that this is part of his research, not the test site. It is to increase cooperative airspace with UAS. Will be
working with the ADSB (automatic dependent surveillance broadcast) network. Is looking for subcontracted flights and crews. The test site will be overseeing flight operations. This will allow other UAS to communicate with another. P. Haga motion to approve. D. Harsell seconded the motion. Motion passed for approval.

3. **Amazon.com Request** - A. Palmer was contacted by Amazon who wants to do urban research for package delivery. They are looking at North Dakota since already has a hub to do so.

4. Other Matters Arising-
   - T. Heitkamp reported that she contacted Prakash Raganathan along with A. Palmer to assist him with his project.
   - Committee members who terms were up in September will continue for another three years.

Meeting adjourned at 10:15 a.m.

Next Meeting-January 20, 2016 at 8:30-10:30 a.m.-Tech Accelerator -Training Room

UAS Public Perceptions as discussed at meeting from Sarah Lovas:

To address your questions:

“Do you feel that the public has had adequate notice of this project?”

- With the large scope of this project, communication of just letting landowners and renters (within the flight corridor) becoming aware of the UAS project can present a challenge. However, John Nowatzki received the addresses of the landowners and sent out personal letters informing them about: the UAS project, the public meeting in Hillsboro to discuss the UAS project, and his contact information to individually answer any questions a landowner may have had. John also conducted a brief meeting with me in Steele County that involved three Steele County commissioners and two landowners/private pilots from the flight corridor.

In addition to the public UAS meeting that was held in Hillsboro, I incorporated the UAS project into the agenda of our local Township Officers Meeting. This again, allowed me the opportunity to personally send out letters from the Steele County Extension Office to the landowners within the corridor. Within this letter, landowners were stressed to contact their renters (if they do not farm their own land) and inform them about the project. This resulted in a well-attended meeting, a few more phone calls, and office visits, which resulted in positive feedback towards the project.

In hindsight: three meetings were held, two mailings were issued, and the press and myself have discussed on the project within the local newspaper. Since the Extension Service has no way of knowing who rents the land, besides making quite a few phone calls and visits, I can honestly say I had success in the letter I sent to owners to have them inform their renters. I just had a gentleman stop by my office today and ask about the project, as his landlord received the letter and called him to discuss the project. I also asked another landowner who lives in the project corridor if he received the initial letter from John. He indicated that he received the letter, read through it, thought it sounded great, asked me a couple questions, and was excited to be a part of it.

Overall, I feel the participants within the corridor have been well notified about the UAS project from the communication measures we implemented.
“Have there been any objections to this project? If so, have those objections been handled properly?”
- As the Extension Agent for Steele County, my role in this project is to make sure that the landowners within the corridor are aware of what will be occurring in 2016, as well as allowing their voice to be heard and making note of their concerns. This project would not work without the cooperation of the landowners, and by having an open discussion at meetings along with addressing valid concerns, I can confidently say that I have not had any objections to this project yet. When the difficult questions regarding safety and privacy were addressed, no rejections were received. I think that if we keep up with the conversations and not just forget about them until take off time, that when Summer 2016 rolls around, we will have nearly eliminated any confusion and opposition (if any).

“Have there been any positive reactions to this research project? If so, what?”
- Based upon the conversations had at meetings or in my office, producers already realize and know that there are satellites in space that are currently capturing imagery. They are excited for the intentions and purpose of what this UAV is envisioned to do. The thought of capturing herbicide resistant weeds and stand counts is quite remarkable. They are excited for the applications that can be applied to the data, as long as it is used as intended. Precision agriculture is quite remarkable, and producers know the true value of it when it helps them save input costs.