

Planning Meeting for the S-Pol Deployment at TiMREX

Wednesday, December 5, 2007 Meeting Notes

ATTENDEES

Maureen Donovan, Scott Ellis, Jonathan Emmett, Gordon Farquharson, Dennis Flanigan, John Hubbert, Al Phinney, Bob Rilling, Briesa St. Martin, Joe VanAndel, Tammy Weckwerth

GENERAL

- Next meeting will be held Wednesday, December 12, 2007 from 09:00-11:00 in the EOL Atrium.
- Passport Health will hold a follow up clinic for the JE shots on 12/6 and 12/13.
- Project overview meeting will be near the end of January.

OPERATIONS

- We need to determine the method by which sounding data will be transferred to S-Pol for use in the PID algorithm. Scott Ellis reported that he has been given the format of the data by a student of Ben Jou, but that we have not determined from where S-Pol will retrieve the data files. He suggested that an FTP site be set up by the Taiwanese so that a script could automatically download the data to the radar. Gordon Farquharson suggested that Bob Rilling be involved because of his knowledge of the network infrastructure in Taiwan.

K_A-BAND UPDATE

- Gordon Farquharson is visiting CPI (the manufacturer of the K_a-band magnetrons) in Massachusetts next week to oversee the magnetron testing and talk to the CPI engineers. Gordon reported that there is a very low chance that the Ka-band will operate at TiMREX. Bob Rilling suggested that we could ship the Ka-band with S-Pol in case a solution is found to the magnetron problem while S-Pol is in transit.

SITE PREPARATION

- Gordon Farquharson reported that the company that sells the lightning protection has recommended that we not use the lightning protection system without burying the cables. Because of this recommendation, Gordon has contacted site and safety services to review Jeff's plan for the site. The concern is that if we were to ignore the recommendation of the lightning company, we would be held liable if anybody was hurt due to a lightning strike.
- Bob Rilling asked whether there were any similar problems with burying lightning protection cables at the Ta Di Hill site.

OPS CENTER AND DATA ACCESS

- Niles at RAL told Dennis Flanigan that CIDD is used to automatically generate images from radar data. RAL said that they would be willing to answer any questions about how to use this functionality of CIDD.
- Bob Rilling asked whether CIDD was able to handle RHI scans, but nobody present was certain that it could.
- Gordon Farquharson reported that CDS has allocated 2.5 months FTE for TiMREX. Mike Daniels is checking on what tasks that time covers.
- Gordon Farquharson has also asked Frank Ling to investigate the time required to set up a data server machine and a display machine at the operations center for the use of S-Pol scientists.

S-POL FREQUENCY ALLOCATION

- George Stringe sent Gordon Farquharson a copy of the information used to apply for the frequency license for S-Pol at the Marshall field site. This information was sent to Wen-Chau Lee to start the frequency license process in Taiwan.
- Gordon Farquharson reported that Vidal thinks that we do not need to obtain a license to use a commercial satellite link at S-Pol.
- Gordon Farquharson reported that Wen-Chau Lee had sent scan of the frequency spectrum measured using one of the weather radars in Taiwan. There did not appear to be interference at near 2786 MHz (the alternate operating frequency for S-Pol), but Gordon has asked Wen-Chau to confirm the operating frequency of the weather radar to ensure that it will not conflict with S-Pol.

SHIPPING

- Jonathan Emmett prepared information about S-Pol with some photographs of the containers and S-Pol electronics. This information was to Wen-Chau Lee in response to a request from the Taiwanese about how S-Pol is shipped.
- Jonathan Emmett is finding out whether we need to fumigated wood in S-Pol. He reported that generators, fuel tanks, and various chemicals are all deemed as hazardous materials. Needs to talk to Kerry Slaven about shipping the hazardous materials.

ACTION ITEMS

- **Wen-Chau Lee** will identify a Taiwanese counterpart to work with NCAR staff on shipping.
- **Jeff Bobka** will prepare a site preparation plan and cost estimate for both proposed sites. The estimate should be done using costs that would be incurred if the work was done in the U.S.
- **Jim Wilson** will send a draft of the science needs (variables, displays, etc.) to Joe VanAndel.

- **Gordon Farquharson** will designate one of the TiMREX meetings as a project overview meeting in which Wen-Chau will provide an overview of the experiment, and UCAR Site and Safety services will present their project safety review of TiMREX.
- **Wen-Chau Lee** will translate and send the email about the packing list to the TiMREX mailing list.
- **Brigitte Baeuerle** will send the CARNET forms to Jonathan Emmett.
- **Wen-Chau Lee** will contact the Science & Technology Officer at the American Institute in Taiwan regarding Diplomatic issues.
- **Scott Ellis** will try to find out from where the sounding profiles can be obtained.
- **Dennis Flanigan** will test the image generation capabilities of CIDD at S-Pol, and write a script to transfer the image to the EOL FTP server.
- **Dennis Flanigan** will find out whether CIDD can handle RHI scans.
- **Gordon Farquharson** will ask Jeff Bobka whether we can bury lightning protection cables at the Ta Di Hill site.
- **Bob Rilling** will send Frank Ling a copy of the diagram showing the CWB network infrastructure.
- **Gordon Farquharson** will find out the operating frequency of the S-band vertical profiler from Sandra Yuter.
- **Gordon Farquharson** will send Jonathan Emmett an example of the TECRO form.
- **Jonathan Emmett** will find out whether we need to have wood in S-Pol fumigated.
- **Jonathan Emmett** will talk to Kerry Slaven about shipping hazardous materials.
- **Gordon Farquharson** will draft a letter for the CWB to sign stating that S-Pol has been invited to TiMREX. The letter will be written on CWB letterhead paper in both English and Mandarin. **Briesa St. Martin** will add the letter to the Project Manual.
- **Bob Rilling, John Hubbert, Mike Dixon, and Gordon Farquharson** will determine which variables from the HAWK processor to archive.
- **Scott Ellis will show Gordon Farquharson, Jim Wilson, and Bob Rilling** how to set up the refractivity processing at S-Pol.