

RACC Meeting Minutes No. 164 (12/14/05)

1. Purpose: A regularly scheduled meeting of the RACC was held from 2:00 p.m. to 3:00 p.m. EST in Room 3246 on Wednesday, December 14, 2005, to discuss and address national and regional AWIPS issues, problems and concerns.
2. Regions In Attendance: The following regions (and other NWS organizations) participated in the conference call: **ERH**: Neal DiPasquale; **SRH**: Eric Howieson; **WRH**: Gar Nelson; **CRH**: Greg Noonan; **ARH**: Phil Mieczynski; **PRH**: Bill Ward; **GSD**: Joanne Edwards, Carl Bullock; **Warning Decision Training Branch**: Mike Magsig, Timm Decker; **ROC**: Tim Crum
3. Discussion Items: The following topics were discussed/briefed at the meeting:
 - a. Status of OB6: The delta upgrade of OB6 contains 54 patches. It was installed the other day at BCQ and on the NHDA system at WSH. Yesterday, it was installed on the NMTW and NHOR systems here at WSH. Phase 1 and 2 will be installed on the WNCF today and phase 3 on December 21. VUY will do phase 1 and 2 on December 20 and phase 3 in the first week of January. We plan on installing the full upgrade on a DVD (contains the NGIT version plus the 54 patches) at field sites after the New Year and have so far lined up site OUN and we are looking for another WFO and an RFC site.
 - b. Mesocyclone display failure when WSR-88D Build 8 beta test starts on sites still running AWIPS OB5: The following information was supplied by Mike Istok of the OS&T at WSH.

The SEC ran a compatibility test between WSR-88D Build 8 and AWIPS OB5 for the Digital Mesocyclone Detection Algorithm (DMD) Product displays and found good news and bad news. The good news is that the DMD product is displayable in D2D and SCAN for the following types of displays: plan-view, single parameter time trends, and attribute tables. The bad news is that the DMD time-height displays do not work with the RPG Build 8 version of the DMD product. SCAN reports a zero-divide error and the D2D volume browser display was blank. We also noted that the HandleGenericMessage log file received 4 lines of error messages for each 3D Mesocyclone feature per product. Given that DMD can be obtained every elevation scan, this could add up to a fair amount of messages during a widespread severe weather event.

This incompatibility is not surprising since changes were made to the DMD product in NEXRAD Build 8 to support an AWIPS OB6 enhancement. When this change was developed and tested, OB6 was scheduled to be in the final few weeks of deployment by the time Build 8 beta test would have begun. Build 8 is on schedule and the AWIPS OB6 schedule slip has greatly increased the likelihood that NEXRAD Build 8 will be loaded on radars before AWIPS OB6 is loaded.

The current plan is for the AWIPS OB6 beta test to continue and deployment will begin in early February which typically takes around 4 months to complete. NEXRAD Build 8 Beta test starts in late January and full scale deployment will begin in April. However, before Build 8 is loaded, the Open RDA (ORDA) system must be deployed at the radar. ORDA is operational on 5 sites

and deployment is scheduled to continue until late September 2006.

The following alternatives have been identified to address the impact of this incompatibility:

- 1) Accept the operational workaround of simply not using the Mesocyclone time-height displays. Additional options to this alternative follow:
 - a. Add sites to the AWIPS beta test so that OB6 is operational before NEXRAD Beta test starts at those radars. The NEXRAD Build 8 Beta Test plan includes the following WFOs: Atlanta, Birmingham, Morristown, Oklahoma City, Wichita, Phoenix, and Honolulu. These sites satisfy ROC beta test requirements related to the FAA FTI communications project; radar/AWIPS frame relay communications variations; redundant configurations; and the ORDA deployment plan. However, Eric Howieson had some reservation about the Southern Region sites chosen but was told by Mike Istok that the plan is not yet final.
 - b. Coordinate AWIPS OB6 deployment so that OB6 is operational before NEXRAD Build 8 is loaded at those radars.
- 2) Deploy a patch (i.e., the OB6 changes for DMD) to AWIPS OB5 sites to prevent the DMD product incompatibility. The feasibility of this depends on the modularity of the AWIPS DMD changes and would require testing.
- 3) Pull the DMD product change out of the NEXRAD Build 8. This alternative adds work to remove a portion of a change and retest and also delays availability of the AWIPS DMD enhancement.

Confidence in adhering to current schedules is important to consider. Full scale deployment of the ORDA has just begun and delays can cause slips to Build 8 deployments and lessen the likelihood of the incompatibility if alternative 1 is chosen. However, the schedule lag between ORDA and RPG deployment provides some cushion and therefore minor ORDA slips may have no impact to Build 8. Further delays in the AWIPS OB6 schedule increases the likelihood of the incompatibility if alternative 1 is chosen.

Recommendations:

- 1) Obtain field input to determine the degree of impact if the Mesocyclone time-height trend does not work for the period of time between when RPG Build 8 is loaded and when AWIPS OB6 is loaded.
- 2) Analyze and scope the effort and risks of developing a patch to AWIPS OB5 to prevent the incompatibility.
- 3) If the patch is not feasible, coordinate schedules to minimize the duration of the period of incompatibility.

ACTION ITEM Min164-1: The RACC moderator will send the above information ASAP with

its recommendation out to the regional AWIPS and radar focal points for their review and comments. These comments are due to Mike Istok by COB on December 23. -Action Closed.

c. Continuation of Discussion of Software Development Process: This was a continuation of the discussion that occurred at the last RACC. Most of the talking points that Bill Ward of the Pacific Region brought up at the last RACC were covered in that discussion. What is needed is to discuss the different types of releases. In the past, we've had a major release followed by several maintenance releases. Certain software pieces were evolving so quickly that they were taken out of the major/maintenance release schedule and were deployed via Rapid Proto-typing Release Processes (RPP and RAP). Now that we're in a new contract with Raytheon/Keene, the contractors are examining closely the issue of release type and frequency. Russ Ingraham (Release Manager at Keene) is considering going with several small major releases per year versus the one large release per year which can take a site 6-8 hours to install new software. Russ stated that they are still doing some in-house discussions on this and may invite the regions to participate in further discussions.

d. All Tilts OB7 Proposal: A proposal to change the up/down arrow key functionality for OB7 would be a great benefit for easy "All-tilts" manipulation. The proposed changes were put together by a working group headed up by Steve Keighton (the SOO at WFO RNK). The detailed changes are included in the attachment to these minutes titled "AllTiltsforOB7_final.doc". The Western and Eastern Region focal points had some technical comments to the proposal.

ACTION ITEM Min164-2: Mike Magsig of the Warning Decision Training Branch will consolidate any regional comments and ask Steve Keighton to incorporate the comments into the document so it can be discussed at the next RACC on January 4. Whatever is decided should be enough time for Carl Bullock of GSD to get in the proposal for the OB7 check in date.

e. Focal Point/Participants Reports, Problems and Concerns:

Alaska Region: nothing significant to report.

Central Region: nothing significant to report.

Eastern Region: What is the situation with the trouble ticket devoted to the lightning data display problem? The GSD folks said it was originally assigned to them but was later switched over to the SEC to investigate.

ACTION ITEM Min164-3: Edwin Welles took the action item to find out the status of the problem. [Editor's note: Fred Branski distributed to the RACC mailing list after the RACC that this was a comms issue and that the problem has been resolved.] - Action Closed.

Also, what is the status of the document about proposed definitions for operationally critical, critical, major, and minor software defects? Jamie Varva replied that all comments have been

reviewed in-house and the document will be finalized soon for field distribution.

Pacific Region: nothing significant to report.

Southern Region: Will the LDAD firewalls be going out soon? Mary Buckingham replied that she will be working with Raytheon to get their expert up to speed in January. She wants to do another test system here at WSH next month and add a few more sites to the OAT and to travel to a few WFOs in February.

Western Region: What is the status of the Postgres help in relation to the RFC at Portland, OR? Andy Nappi replied that the Postgres expert that used to work at WSH in OHD has been hired by Raytheon and will be on board soon. The Raytheon folks have been invited to visit the RFC and Raytheon plans to visit the site in January.

GSD: nothing significant to report.

Warning Decision Training Branch: We are working on the WES 6.0 and it is a major effort since we go to Postgres instead of flat files for warnings. So far, preliminary testing has gone okay and we expect to beta test in mid January. We will need a new OB6 DVD with all the patches and will request this via an e-mail to WSH.

Review of Action Items:

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The next RACC is scheduled for Wednesday, January 4, 2006. If you know of any agenda items you wish to be discussed at this RACC, please e-mail them to Jim Stenpeck and cc Wayne Martin. This is to ensure that all of the appropriate WSH personnel attend this RACC to address your issues.