Minutes from CHPS Meeting Thursday March 11, 2010

Attendees:
ABRFC – Billy Olsen, Eric Jones
CNRFC – Scott Staggs
NERFC – Rob Shedd, Ron Horwood
NWRFC – Joe Intermill
NOHRSC – John Halquist
Deltares – Edwin Welles
OCWWS HSD – Randy Rieman, Xioabiao Fan, Dave Riley
OHD – Jon Roe, Chris Dietz

Pre-reading:

- Support Log distributed via chps_ops on March 10

1. Health check on Support Log

   ABRFC: same issues as before. Frederik is working on a software fix for the CM issue. This might be the same issue as at NWRFC – the workaround is the same – but why hasn't everyone seen the same thing?

   FYI ABRFC is trying out the new AWIPS workstations – this is the first RFC; OST/Jim Lane has made a lot of changes. Normally this gets tested on the NHOR but Randy's been out. AB is running the CHPS OC on them – it seems to run a little faster

   NERFC's main issue is #189 ("frequent occurrences with abrupt inconsistencies between the initial state period of the run and the first modeled time step"). They're still trying to narrow down what's going on. It seems to be at the heart of 90% of all problems they've been seeing over the past few months. There's a discontinuity with run versus display period. For example, when they plot the table for a particular SWE, in the 1st time period there's 0 SWE but in the 18Z time step the SWE is 2.8 with no precip input. They apply a mod to get it back to 0 but the mod isn't holding. ABRFC reported doing numerous SWE changes but they aren't having a problem getting them to stick. NWRFC is also not seeing this particular problem.

   NWRFC has had issues with the latest migration scripts. Bruce sent a recent email on the unit conversion problems. Peter has apparently just (right before this meeting) issued a new script.

   Action: none.

2. Training: what should be the role of NWSTC vs. Deltares?

   Last year Chris attempted to include the NWSTC in CHPS training (Dave Cokely attended User Training at ABRFC last October) but the notion of NWSTC taking the initiative and proactively developing a training module has stalled.

   The biggest problem with the NWSTC is that they are not involved on a daily basis with duties at an RFC, so they don't understand RFC training needs. If they don't have a real/continuous job to do there's no point involving them in training.

   Deltares' role is to provide the basis for future CHPS training. This could be accomplished in one of 2 ways:

- Deltares could "train the trainer" – hold specific training sessions for the NWSTC so they can pass along the knowledge to others
- Deltares could deliver remote training modules (e.g., web-based) – these would be at an introductory level, with no extensive knowledge needed. They could be used as-is, or re-packaged by the NWSTC.

Remote/web-based training allows new RFC forecasters to make progress at their own pace. The old model of sending people out to the NWSTC never worked – training was never available at the right time when it was needed. We don't want to go back to that.

We must get management at the NWSTC to commit to developing some sort of training. Chris has spoken with Scott Tessmer in the past. Who is head of the NWSTC (OS61) now that Donna Layton has gone? John Ogren is currently acting. Leroy Spayd is acting director of OS6 (Training Division), but he is more focused on COMET. Mike Dion works in OS6 – he might be a good resource. Jason Tuell's name was mentioned, but he is head of OS2.

What training is done locally at the RFC? Forecaster/user training is seen as being local OJT. RobS suggested that training needs not covered locally might include configuration training, advanced configuration training, and how to write local applications. The NWSTC could focus on these areas. Remote training could be a useful tool to provide a basic introduction to CHPS. NWSTC should take responsibility for development and maintenance of web-based modules for CHPS.

Action: Chris to find out who should be included in a management-level discussion addressing future CHPS training. She will then set up a meeting to discuss the topic.

3. Other items

- Jon reported on an AWIP-II meeting yesterday with OS&T and Raytheon to discuss whether/how to proceed with the System OT&E Readiness Review. The group heard about the status of software functionality, outstanding DRs, documentation, local applications, etc. Raytheon requested an extension to complete T.O.11 – the original date was March 15, they would like to request May 3. Negotiations between Raytheon and the NWS CO were to continue today (Thurs). There was no discussion of Field OT&E at the meeting.
- Update from Lee: the FFH code has been handed off to Deltares, but it won't be in the March release. Edwin confirmed that Deltares' focus on performance has impacted their ability to work their side of FFH. A patch sooner than June might be possible. NERFC said any further delay would impact their switching off RFS and going operational with CHPS. Phase 2 (FFH) work has not yet begun in OHD.
- OHD would like to know the relative priority (versus FFH and Calibration) for getting a full SHEF parser into CHPS. Lee is trying to schedule developer resources. Although we previously agreed that changing FEWS to ingest the shefout file would be a preferred approach (rather than expanding FEWS SHEF import capabilities), Deltares prefers that such NWS-specific functionality not be added to FEWS at all; instead it would be better done outside of FEWS so FEWS can focus on XML. The need for SHEF into CHPS covers (e.g.) forecast tide information, and reservoir regulations. This need won't go away any time soon. Perhaps RFCs could run their own version of the SHEF decoder? We probably don't want 13 different versions of this. Perhaps the SHEF data could be pushed through the IHFS_DB? Remember that the long-term vision is to move away from the IHFS_DB. A problem with the IHFS_DB approach is the significant lag times introduced into the stream as the product is decoded, put into the IHFS_DB, pulled out by ofsde, deposited into the FEWS ingest

directory, and ingested by FEWS. Some offices (e.g. MARFC) don't even use ofsde. NE recalled having problems pumping the forecast tide info through the IHFS_DB into CHPS and found it easier to run it in directly as SHEF. There was a complication involving handing off flows from MBRFC to LMRFC– the IHFS_DB needed one parameter code, but RFS needed a different code so that the new data didn't overwrite the actual forecast. Another alternative might be for AWIPS-II to generate XML from SHEF for CHPS? So do we want a local RFC decoder solution, a national (OHD) CHPS solution, or an AWIPS-II solution? We can probably revisit at the next workshop. OHD will present an AWIPS-based option. Regarding relative priority…. NERFC says an expanded SHEF capability is less important than HWG (a critical path item for NE). CNRFC doesn't care about HWG, but they are surviving OK with the current SHEF ingest; they don't need anything immediately but would like something eventually. NWRFC runs most of their SHEF data through the IHFS_DB – there may be some tide info that comes in as SHEF; but they don't have a particular pressing need for anything more robust just yet. Conclusion: a more capable SHEF decoder is required but is not a top priority at the moment.

- Randy will begin working on the new directory structure for NERFC, CNRFC, and ABRFC (NW already has it, as do all the CAT-IIs). He prefers not to make directory changes at the same time as the March build installations. The CHPS software is not yet installed on chps4/5/6 (chps7/8/9 for CNRFC); Randy will put the new directory structure in place as part of these installations, then he'll go back and change the structures on chps1/2/3. Randy is currently scheduling the installation with CNRFC. He hopes to have all directory changes completed by the end of March.
- JohnH wanted to know if OHD did a sole source justification for the chps hardware purchase last time? He'd like to use the same example when purchasing hardware for the archive prototype. John will contact Larry Cedrone.
- Jon has received a forwarded email from Gary, originally from David Maidment concerning the need to be more proactive on WaterML. Jon will forward the email to JohnH to see if he can help provide Gary with an answer.

Action: Chris to add agenda item to CAT workshop on potential AWIPS solutions for decoding SHEF/generating XML for CHPS ingest. HSEB to prepare a design concept for such a solution for presentation at the workshop.

Next meeting: Thursday March 18, 2010