

**NOAA, National Geodetic Survey**  
**HEIGHT MODERNIZATION COORDINATION MEETING**  
**DRAFT NOTES**  
**SSMC3, Room 8836**

Date: Thursday, January 10, 2012  
Time: 2:00-3:30 pm East Coast time

**Attendees:**

*Call-ins from:* AK (Tom Heinrichs), AL (Ken Comeaux), CA (Kevin Kelly), CO (Jonathan Kobylarz), IL (Amy Eller), LA (Tony Cavell), MN (Nathan Anderson, Jeff Pittner), NC (Dave Zilkoski), NGS (Vicki Veilleux, Dan Winester), OR (Ken Bays, Randy Olberg), PA (Brad Foltz), TX (Greg Hauger), USACE (Mark Huber, Jim Garster), WI (Dave Moyer)

*Silver Spring:* NGS (Brett Howe, Christine Gallagher, Joe Evjen, Philippe Hensel, Zelda Lecoat, Steve Vogel); CO-OPS (Michael Michalski)

*Advisors/Coordinators:* Marti Ikehara (CA), Pam Fromhertz (CO), Dave Newcomer (FL), Dave Rigney (MI), Scott Lokken (NC), Dave Conner (OH), Bill Stone (SW region), Dan Prouty (TX), John Ellingson (WI)

**Note:**

It is NGS' habit to only capture names of attendees who speak up at the initial roll call or during the meeting. We respect those who may wish to attend anonymously. If you want your name captured in the recorded notes, and you do not see it listed here, email [Christine.Gallagher@noaa.gov](mailto:Christine.Gallagher@noaa.gov), or [ngs.htmod@noaa.gov](mailto:ngs.htmod@noaa.gov).

**1. NGS and Height Mod related announcements:**

**a. NGS retirements** (Brett Howe)

There have been a number of high profile retirements in the past few weeks including, but not limited to, Gilbert Mitchell (Chief, Geodetic Services Division), Renee Shields (Height Modernization Program Manager), Ronnie Taylor (Deputy Director, NGS), Dave Doyle (Chief Geodetic Surveyor, NGS). Brett will be Acting Chief of the Geodetic Services Division until Gilbert's position is formally filled (expected in the next 4-6 months). NGS will continue to build on all of the success of the Height Mod Program today, implementing the new strategic plan. Brett will be involved both with the monthly meetings and the broader Height Mod Program.

**b. Bluebooking** (Christine Gallagher on behalf of Michael Dennis):

-Information on Bluebooking, including the program Adjust, is still announced on the NGS home page, which points to [http://beta.ngs.noaa.gov/PC\\_PROD/ADJUST/](http://beta.ngs.noaa.gov/PC_PROD/ADJUST/). This includes the latest publically available version of Adjust, version 6.2.3 (released Dec 10). More details on the changes made to Adjust are given in a rather sad text document "adjust\_supplemental.txt"

also available through that web page (and attached). The five main changes for v6.2.3 are listed near the top of the text document, under “BBOOK Changes.”

-NGS began loading GPS projects adjusted using Adjust 6.2.3 to the production database on Dec 18. We are continuing to load new GPS projects to the NAD 83(2011) realization as we work through a modest backlog of about 30 projects. The time to get that done will depend on how many new projects we receive, but I expect we will be caught up with all new projects by the end of February. On the Adjust & Utilities page, note that the last paragraph in blue text under the Nov 27 announcement on the Adjust page that begins, “During the early phases...” should be removed. This says we are loading projects to a test database, which is no longer true. I’ll ask Sri to remove that paragraph.

-The National Adjustment of 2011 web page (<http://www.ngs.noaa.gov/web/surveys/NA2011/>) was also last updated on Dec 12. So all information on this page is current. The FAQs have not been updated, but the information they provide should still largely be correct.

-We are currently working on providing results of the entire National Adjustment of 2011 Project in GIS format via a web interface. It will include the adjusted stations and vectors with attributes such as station accuracies, coordinate change, vector residuals, dates of occupation, GPS baseline processing software, etc. The intent is to make the features user-selectable and downloadable.

**c. Geoid** (Christine Gallagher on behalf of Dan Roman):

Most of the recent work has focused on trying to clean the terrestrial data under regions where aerogravity has been collected. Still in the R&D mode but it moves us along the path towards GEOID22

**d. Geoid Slope Validation Survey of 2013** (Christine Gallagher on behalf of Yan Wnag):

-GSVS13 plan is in revision, Colin is refining the travel cost and soliciting QA/QC requirements for the GPS, leveling and gravity survey;

-GSVS13 plan is to be present at Iowa Surveyor Annual Meeting in Ames.

**e. Hawaii Height Mod** (Christine Gallagher on behalf of Ed Carlson):

In Hawaii, a state-wide height modernization project is about to finally get underway. An RFP for work on Oahu is out and will close before the end of January.

**f. Training** (Christine Gallagher on behalf of Erika Little):

There is a GRAV-D webinar scheduled for Feb 28th from 1-3pm ET. They can go to <http://www.ngs.noaa.gov/corbin> and navigate to upcoming classes to learn more and to register. If you want to go into more detail, you can tell them a little more what it's about:

This webinar will provide:

- a status update of the Gravity for the Redefinition of the American Vertical Datum (GRAV-D) project and activities,
- a recap of the Geoid Slope Validation Survey of 2011 (GSVS11),
- a status update of the Geoid Slope Validation Survey of 2013 (GSVS13).

In addition, the webinar will address the future of GRAV-D, including how this work will affect the determination of the Geoid model and the scheduled replacement of NAVD 88 in 2022.

**g. National Height Modernization Program** (Christine Gallagher):

-The Height Mod National Plan was finalized by the NGS Executive Steering Committee in Dec. It is available online on About page, should get an announcement on HMOD home page.

-The Height Mod Partner meeting is still planned for Apr 30-May 1, location soon to be finalized, and partner engagement / leadership on building agenda

**2. Other announcements / questions** (Open to all callers):

None

**1. Monthly presentation**

**Improvements to OPUS**

Joe Evjen, National Geodetic Survey

The Online Positioning User Service (OPUS) provides simplified access to high-accuracy National Spatial Reference System (NSRS) coordinates. This presentation will cover OPUS improvements including a discussion about the newest reference frame, GEOID 12A, and enhanced datasheets for published solutions with composite results for multiply-observed marks and automated reprocessing to "adjust" everything to NAD83(2011).

Joe Evjen works with OPUS, emerging geodetic standards and applications, and plans for the National Geodetic Survey's new datums.

**2. Other Business**

**Important Links:** Previous months' meeting notes and a list of future meeting presentations can be found at: <http://www.ngs.noaa.gov/heightmod/MeetingNotes.shtml>

**Next meeting: February 14, 2013**

**Guest Speaker: GRAV-D update, Dr. Vicki Childers, National Geodetic Survey**

### **Recent Past Events**

**Dec 3-7, 2012, San Francisco, CA** – American Geophysical Union Fall Meeting

### **Upcoming Events**

**Jan 9-11, 2013, Saratoga Springs, NY** – New York State Association of Land Surveyors

**Jan 22-25, 2013, Ellensburg, WA** – 2013 Washington Council of County Surveyor (WCCS) Survey Camp

**Jan 23-25, 2013, Salem, OR** – 2013 Professional Land Surveyors of Oregon Conference

**January 25-26, 2013, Clovis, CA** – CSU Fresno Geomatics Engineering Conference

**Jan 27-31, 2013, Miami Beach, FL** - MAPPS 2013 Winter Conference

**Jan 31-Feb 1, 2013, Bangor, ME** – Maine Society of Land Surveyors Annual Conference

**Feb 7-8, 2013, Corvallis, OR** – 2013 Oregon State University – Geomatics Workshops – Basic GNSS and Using the ORGN

**Feb 11-13, 2013, Denver, CO** - International LiDAR Mapping Forum

**Feb 19-22, 2013, Bellaire, MI** – 72<sup>nd</sup> Annual Meeting of the Michigan Society of Professional Surveyors

**Feb 20-21, 2013, Missoula, MT** – 2013 Montana Association of Registered Land Surveyors (MARLS) Conference

**Feb 25-27, 2013, Washington, DC** - Esri Federal GIS Conference

**Feb 26-28, 2013, Sandy, UT** – Utah Council of land Surveyors Annual Convention

**Feb 28-Mar 3, 2013, Arvada, CO** - Annual Rocky Mountain Surveyors Summit

**Mar 12-13, 2013, Washington, DC** - MAPPS Federal Programs Conference

**Mar 15-17, 2013, Albuquerque, NM** - New Mexico Professional Surveyors Conference

**Mar 24-28, 2013, Baltimore, MD** - ASPRS Annual Conference

**Sept 16-19, 2013, Providence, Rhode Island** – GIS-PRO '13 (URISA Annual Conference)