

**NOTES FROM THE 10 JAN 2012 FEDERAL GEODETIC CONTROL
SUBCOMMITTEE MEETING (SILVER SPRING, MD)**

Meeting Chair: Juliana Blackwell, Chair, FGCS; Director of the National Geodetic Survey

FGCS Membership and Attendance

Department of Agriculture

US Forest Service – [absent]

Farm Service Agency – David Davis

Department of Commerce

US Census Bureau – Frederick Malkus

National Institute of Standards and Technology – [absent]

*National Geodetic Survey – Juliana Blackwell, Ed Carlson, Michael Dennis, Marti Ikehara,
Lucy Hall, Joe Evjen, Kendall Fancher, Pam Fromhertz, Christine Gallagher, Bill
Henning, Jeremy McHugh, Renee Shields, Dru Smith, Bill Stone, Ronnie Taylor,
Yan Ming Wang, Monica Youngman*

Department of Homeland Security

US Coast Guard – [absent]

Federal Emergency Management Agency – Paul Rooney

Department of Defense

National Geospatial-Intelligence Agency – Nathaniel Ovans

US Army Corps of Engineers - James Garster, Mark Huber

US Naval Observatory – Brian Luzum

Department of the Interior

Bureau of Indian Affairs – [absent]

Bureau of Land Management – Mike Londe

Bureau of Ocean Energy, Management – [absent]

Fish and Wildlife Service – Sean Killen

National Park Service – Tim Smith, Karl Brown

Office of Surface Mining, Reclamation, and Enforcement – [absent]

US Bureau of Reclamation – Cory Stolsig

US Geological Survey – Larry Hothem

Department of State

International Boundary Commission – [absent]

International Water and Boundary Commission – [absent]

Department of Transportation – Timothy Klein

Independent Agencies

National Aeronautics and Space Administration – [absent]

Environmental Protection Agency – [absent]

National Executive Committee for Space Based Position, Navigation, and Timing – Knute Berstis (DOC rep.)

Tennessee Valley Authority – [absent]

Federal Communications Commission - [absent]

Others

California Department of Transportation – Curtis Burfield , Mark Turner
Orange County, CA Department of Public Works – Art Andrew

Juliana Blackwell (Chair, NGS) – Welcome, Introductions

Michael Dennis (NGS), Dr. Neil Weston (NGS) - Update on the National Adjustment of 2011 + Multi-Year CORS Solution; status of transformation models to go from 2007-2011

Ronnie Taylor (NGS) – We should emphasize that the name will be called NAD 83 (2011) epoch 2010.00

Paul Rooney (FEMA) – What is this? Is this a datum?

Michael Dennis – This is still NAD 83, but it is a better realization of that datum with updates to the coordinates for all GPS-based positions.

Juliana Blackwell (Chair, NGS) – All old coordinates will be archived. We are developing tools to allow for the transformation between this NAD 83 (2011) epoch 2010.00 and previous realizations.

Mike Londe (BLM) – For how long do you think this will be a stable realization?

Juliana (Chair, NGS) – We are not planning to do another realization until around 2022.

Neil Weston (NGS) – In the short term, there will not be another adjustment. We are considering the next go-around of the processing for the international reference frame, but that is separate from what we are talking about here.

Jim Garster (USACE)– All NAD 83 coordinates will be saved and accessible?

Neil Weston – Yes, that is correct.

Dr. Yan Ming Wang (NGS) – Status of the new GEOID model (GEOID 12)

Renee Shields (NGS) – Do you think that the W_0 that we pick this spring will stay the same for a while?

Yan Ming Wang – I think the final choice will be a political decision because it is related to the global climate system.

Dr. Vicki Childers (NGS) – GRAV-D update

Larry Hothem (USGS) - Is the long term monitoring of change from repeat airborne surveys? That issue is of interest to the USGS because motion from volcanoes and earthquakes will affect the geoid.

Vicki Childers – No, because most changes in gravity that we need to detect would not be detected that way. We will need to make absolute gravity measurements on the ground and, more significantly, we need to partner with others who acquire gravity data. Also, we will use the monthly gravity changes from the GRACE satellites to remove the seasonal component of gravity changes.

Dr. Dru Smith (NGS) – Texas Geoid Slope Validation Survey results

Tim Smith (NPS) – What did you do with the lidar data collected during this survey?

Dru Smith – We gave it to the geoid and the deflections of the vertical teams and we are planning a massive research effort to determine the best way to use lidar data to get orthometric heights.

[break]

Lucy Hall (NGS) - Update on plans and preparations for the JUL 2012 Geospatial Summit in San Diego

This will coincide with the Esri UC and will be targeted to the GIS community. We want to make them aware of our products and services. On Sunday July 22, we will have a 6-hour meeting probably at a local hotel and then on Tuesday July 24 we will have a 2-hour meeting at the conference facility. Esri will do email announcements about it.

Marti Ikehara (NGS) – Will the surveying community be welcome to attend too?

Juliana Blackwell (Chair, NGS) – Absolutely!

Bill Henning (NGS) – There will likely be a survey summit that overlaps between the ACSM and ESRI meetings.

Knute Berstis (NGS and PNT coordination office) – Update on PNT's involvement in testing of the potential interference to GPS from LightSquared's terrestrial network

Tim Smith (NPS) – I don't know why Javad's filter makes any practical difference in this discussion.

Knute Berstis – For the surveying community, they could actually use the Javad filter as a replacement for external antennae. For those receivers that have internal, non-replaceable antennae, Javad's filter will not help.

Bill Henning (NGS) – Do they need that bandwidth shown in your Javad slide by the purple line?

Larry Hothem (USGS) – Do we see any degradation in carrier phase measurements? We don't know that yet, but that will need to be looked at in dynamic tests. These would have to be live sky tests.

Juliana Blackwell (Chair, NGS) – What does the future look like on this topic?

Knute Berstis – They need to report the results in an agreed way. Then, they will be concerned with doing more high performance tests.

David Davis (USDA FSA) – Sprint has also put their agreement with LSQ on hold.

Larry Hothem (USGS) – I remember the DEC 15 2010 email- beginning of LSQ email controversy – calling for input on JAN 6 2011 – a very quick turnaround with holidays approaching! That might not have been noticed if not for the action of FGCS members and NGS.

Bill Henning (NGS) – Real Time Networks: validation tool, symposium plans

Marti Ikehara (NGS) – What do you think OMB meant when they wrote about 'public networks' in the circular A-130 document?

Tim Klein (DOT) – That was simply meant to encourage openness and sharing with the public.

Paul Rooney (FEMA) – What is the difference between operating S-CORS and increasing the sampling frequency for a real time GNSS station?

Bill Henning – That depends on several things.

Juliana Blackwell (Chair, NGS) – We need to ensure that we are not competing with other private networks.

Jim Garster (USACE) – I see it as a nice complement to their networks.

Bill Henning – Yes, that is true, but we have to also worry about the perception issues surrounding what Juliana just mentioned.

Timothy Klein (DOT) – NDGPS Real-Time Data Streaming

Marti Ikehara (NGS) - What did you mean by 'reduced USCG requirements'?

Timothy Klein - NDGPS is no longer required by the International Maritime Organization (IMO) for harbor safety and access, just for buoy placement.

Renee Shields (NGS) and Monica Youngman (NGS) – Vertical Reference Systems Work Group: activities, outreach, and education; FEMA Floodplain Mapping Pilot Project

Juliana Blackwell (NGS) – Wrap up and thank you!

Thank you all for the productive meeting. Please send any general questions to Jeremy and send specific questions to the appropriate work group(s). Also, Jeremy will be in touch with you all to get a sense for what day will work best for the next meeting in FGCS meeting which will be in July in San Diego, CA.

Tim Smith (NPS) – Thank you for the Web meeting and teleconference. It all worked well.