

**NOTES FROM THE 12 JAN 2011 FEDERAL GEODETIC CONTROL  
SUBCOMMITTEE MEETING**

**Meeting Chair:** Ronnie Taylor, Alternate Chair, FGCS; Acting Director of the National Geodetic Survey

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**FGCS Membership and Attendance**

Department of Agriculture

*US Forest Service* - Everett Hinkley

Department of Commerce

*US Census Bureau* – Frederick Malkus

***National Institute of Standards and Technology*** – [absent, Judah Levine let me know in advance that he had nothing to contribute]

*National Geodetic Survey* – Joe Evjen, Christine Gallagher, Jake Griffiths, Bill Henning, Kendall Fancher, Jeremy McHugh, Chris Parrish, Giovanni Sella, Ajit Singh, Renee Shields, Dru Smith, Ronnie Taylor, Neil Weston

Department of Homeland Security

*US Coast Guard* – LCDR Guillermo Vega

***Federal Emergency Management Agency*** – [absent]

Department of Defense

*National Geospatial-Intelligence Agency* – Nathaniel Ovans [attended in person]

*US Army Corps of Engineers* - James Garster and Mark Huber

*US Naval Observatory* – Brian Luzum

Department of the Interior

*Bureau of Ocean Energy, Management, and Enforcement* – Steven Schwartz

*Office of Surface Mining, Reclamation, and Enforcement* – Robert Welsh and Thomas Mastaller

*US Bureau of Reclamation* – Alan Bell

*US Geological Survey* – Kari Craun, Larry Moore

*National Park Service* – Karl Brown

***Bureau of Land Management*** – [absent]

Department of State

*International Boundary Commission* – Kyle Hipsley

***International Water and Boundary Commission*** – [absent]

**Department of Transportation** – [absent]

Independent Agencies

***National Aeronautics and Space Administration*** – [absent]

***Environmental Protection Agency*** – [absent]

*National Executive Committee for Space Based Position, Navigation, and Timing* – Milo Robinson [attended in person]

*Tennessee Valley Authority* – Dallas Sluss

*Federal Communications Commission* - Don Campbell

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**Ronnie Taylor [reviewed the Charter: <http://www.fgdc.gov/participation/working-groups-subcommittees/fgcs/fgcs-charter> ]**

*Ajit Singh (NGS) – Does NGS need to seek approval from the FGCS to make changes to things like bluebooking and the Integrated Database?*

*Joe Evjen (NGS) – NGS is the author of the bluebooking standard and NGS manages the database. We are contemplating changes related to these items and can keep the FGCS apprised of our plans and seek input from FGCS members.*

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**Ronnie Taylor [ran through the slideshow presentation that he presented on 11 Jan 2011 to the FGDC Coordination group. It is the FGCS's annual update to the FGDC. At the end of the presentation he introduced the project managers for the two new datums that NGS plans to release in 2022: (1) Mark Eckl ([mark.eckl@noaa.gov](mailto:mark.eckl@noaa.gov)) – geopotential and (2) Joe Evjen ([joe.evjen@noaa.gov](mailto:joe.evjen@noaa.gov)) – Geometric]**

*Karl Brown (NPS) – I am not sure that the other four work groups are dormant. I have been a member of FGCS since 1996. At the Federal Geospatial Summit in May 2010, DOI said that we want to participate but the FGCS has not gotten any traction.*

*Ronnie Taylor (NGS) – The new FGCS secretariat, Jeremy McHugh, will be able to help FGCS be more active.*

*Karl Brown (NPS) – We need more advance notice of meetings. I am not sure that labeling the work groups as dormant is the way to go, as several members have been working on issues (e.g. Instrument WG invited to Denver).*

*Renee Shields (NGS) – I have confidence, that with the new secretariat on board, we will improve. The work groups are dormant because there were no specific work issues for them. The Vertical Reference Systems work group continues to meet regularly on a quarterly basis.*

*Dru Smith (NGS) – I thought we would revitalize FGCS at the Subcommittee level first and then pass issues down to the work group level.*

*Karl Brown (NPS) – There is important geodetic work and canopy testing being done, but it is not being captured by NGS/FGCS.*

*Ronnie Taylor (NGS) – We may need to revisit the membership composition of the work groups. We (NGS) can't do it alone; we need your (other Federal agencies) help.*

*Karl Brown (NPS) – I want to help and continue to support NGS.*

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Donald Campbell (FCC) – What is the Spectrum work group tasked with? ...things like the LightSquared issue which could potentially jam GPS signals?

Background on the LightSquared issue: On 15 December 2010, Robert D. Weller of the FCC's Office of Engineering and Technology emailed Kendall Fancher (NGS; FGCS chair of the Instrument Working Group) and Juliana Blackwell (NGS Director) requesting information on:

1. standards or specifications for rejection of out-of-band RF energy to GPS receivers
2. reports, test results, or other information relating to the susceptibility of GPS receivers to interference from out-of-band RF energy
3. the likely or possible impact on land survey and other activities requiring high-performance GPS receivers of interference to the L1 carrier from out-of-band RF energy
4. industry/multiplier contacts that may have proprietary information relating to any of the above topics.

Since it was related to spectrum, Jeremy McHugh forwarded the email to the FGCS Spectrum work group chair, Larry Hothem on 16 December 2010. Larry said the potential interference might be a serious concern and sent a message to the National Coordination Office for Space Based Position, Navigation, and Timing to see if anyone is serving as a liaison to the FCC on this matter.

Neil Weston (NGS) – [described the LightSquared issue]

Donald Campbell (FCC) – This should be brought up at an Interdepartment Radio Advisory Committee (IRAC) meeting.

Dru Smith (NGS) – This issue is being taken care of above our heads. The Spectrum work group stems from an earlier time when GPS was being set up. The Spectrum work group could have a discussion about LightSquared.

Joe Evjen (NGS) – The historic purpose of the Spectrum work group was GPS modernization.

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Renee (NGS) – here is an action to address Karl's concerns: (1) find people in agencies who can participate and (2) poll them about their specific interests/concerns. Jeremy can have each work group chair write up 1-2 sentences describing their goals. Jeremy can then send out those descriptions of the work group's goals to the full subcommittee to poll all the members for their interests.

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**Neil Weston (NGS) – [presented Bill Henning's (NGS) Real-Time Networks report]** NGS is cleaning the report up and then it will need to be approved by NGS's Products and Services Committee before we can share it with the subcommittee for a 30d review and comment period.

Bill Henning (NGS) – Soon, we will need to make a decision about how to validate or approve real-time access to the National Spatial Reference System.

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**Joe Evjen (NGS) – [provided an update on NGS's Online User Positioning Service (OPUS) and demonstrated some of the new features on the beta Web site]** OPUS is used ~1200 times a day! With the new beta version of OPUS, you can submit your own solution. This beta OPUS represents an end run around the traditional bluebooking process. We are contemplating the possibility of ending the old bluebooking method in lieu of the OPUS method.

NEWS item: In association with the celebration of National Surveyors Week, the National Society of Professional Surveyors is planning a simultaneous nationwide GPS observance of as many monuments as possible on Saturday, 19 March 2011.

OPUS Projects Beta allows you to submit your data to a project

OPUS Net is changing how OPUS solves your position. Now it takes data from three surrounding CORS. OPUS Net first uses IGS stations to solve, but it decouples the solution from the CORS coordinates.

The backbone behind all of OPUS is OPUS XML. We use that XML internally, but it is offered as an output format. We may try to incorporate our XML into GML and or KML.

*Renee Shields (NGS) – Can you explain our hopes for getting orthometric heights from OPUS?*

*Joe – OPUS is based on GPS and a geoid model. It is accurate to 5-10 cm depending on location. With OPUS Database we hope to harvest more GPS on benchmarks. OPUS Projects allows you to constrain coordinates to particular versions (eg, just NAVD 88).*

*Milo Robinson (FGDC) – I applaud the use of XML. Just try to keep it in line with GML since GML is moving towards ISO (international) standards.*

*Jim Garster (USACE) - Are there any plans to update and republish marks when big changes happen?*

*Joe – The database stores the solution at the time when it was run.*

*Jim Garster (USACE) – We want to flag data to know what we need to go and resurvey.*

*Joe – The email of the surveyor who submitted the data is part of the data sheet.*

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**Jake Griffiths (NGS) – [provided shared some slides to update everyone on the status of the NGS Multi-Year CORS reprocessing effort]**

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**Ronnie Taylor (NGS) –** We are planning to hold another Federal Geospatial Summit. The last one was in May 2010 and was very successful with great participation! We are also planning a 4-hour FGCS meeting in July, 2011 in San Diego along with the ACSM/Esri Survey Summit.

*Karl Brown (NPS) – I recommend alternating between ACSM/Esri and ION to reach more and different people. If possible, plan the Federal Geospatial Summit with FGCS to maximize travel dollars since there is a lot of overlap in the membership of those groups. [Karl recommends ACSM/Esri in 2011 and ION in 2012.]*

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**Renee Shields (NGS) – [an update on the Vertical Reference Systems work group]** We have started quarterly meetings on the first Thursday of the month. Recently, I have put together a list of the things that will be of interest to the work group. People have added to the list. Feel free to send me any items you may have.

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**Kendall Fancher (NGS) – [an update on the Instruments work group]** This group has not been active, but we are prepared to act on anything that the subcommittee passes along.

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**Ronnie Taylor (NGS) – [Ronnie opened it up for discussion on any guidance or leadership that the members would like to see come out of the subcommittee] ...silence**

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*Karl Brown (NPS) – Is the GIAC dormant? Should the FGCS serve in a coordinating role there? In the past a letter of support for GPS issues was valued and, if so, what is its pathway upward?*

*Dru Smith (NGS) – I don't know. I can ask the PNT members.*

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**Ronnie Taylor (NGS) – Thank you for your participation. Please send any suggestions to Jeremy.**