Introduction
At the call of the Designated Federal Officer (DFO), Captain Steven R. Barnum, National Oceanic and Atmospheric Administration (NOAA), and after public notice in the Federal Register (Volume 74, No. 169 / Wednesday, September 2, 2009), the Hydrographic Services Review Panel (HSRP) meeting was convened on September 23, 2009 at the Radisson Hotel Duluth Harborview, Duluth, Minnesota.

The following report summarizes the deliberation of this meeting. Presentations and documents available to and/or prepared by the HSRP are available for public inspection via the web at: http://www.nauticalcharts.noaa.gov/ocs/hsrp/meetings.htm. Copies can be requested by writing to the Director, Office of Coast Survey (OCS), 1315 East West Highway, SSMC3, N/CS Silver Spring, MD 20910. The Agenda is available via the web at: http://www.nauticalcharts.noaa.gov/ocs/hsrp/archive/sept2009/HSRP_Duluth_agenda_2009.pdf.

Call to Order at 8:33 am
Mr. Edmund Welch, Vice Chairman of the HSRP, called the meeting to order on Wednesday, September 23, 2009, at 8:33 a.m. He then turned the meeting over to Captain Barnum for opening comments.

Opening comments
Captain Steven R. Barnum, NOAA, Designated Federal Officer, began the meeting by providing emergency procedure logistics and a brief description of the HSRP Panel, its mission goals, and meeting protocols. He announced that the public meeting was being held in accordance with the HSRP mandates and reminded everyone of the goals, mission, and structure of the HSRP.

Welcoming remarks
Mr. Edmund Welch welcomed everyone to the HSRP public meeting and asked attendees to introduce themselves. A list of the HSRP members and other attendees is provided in the Appendix.

NOAA Administration Update
Mr. John (Jack) H. Dunnigan, National Ocean Service (NOS) Assistant Administrator, welcomed everyone and gave a briefing on what is going on in NOAA, including the budget and the National Ocean Service. The NOAA management team has grown some since the last HSRP meeting, with new staff including Margaret Spring, Chief of Staff for Dr. Lubchenco; Paul Sandifer on detail as the NOS Chief Scientist; and Justin Kenney as the Communications Director, but there are still
empty positions such as the General Counsel and Assistant Secretary. Two key issues for NOAA are 1) climate, the development of a climate services, and NOAA role in moving climate issues forward and 2) the Ocean policy Task Force. Mr. Dunnigan mentioned that Dr. Lubchenco was selected by the State Department to be the head of the U.S. delegation to Geneva discuss global approaches towards developing climate services NOAA is involved in the activities of the Ocean Policy Task Force and Mr. Dunnigan urged participants to review their copy of the Draft Ocean Policy and Governance Structure document, which was recently released to the public. The other task force item underway developing a framework for Coastal and Marine Spatial Planning, and NOAA is very involved in this effort. He reminded everyone that “marine” includes the Great Lakes.

At the Department level, Commerce now has a Deputy Secretary, James Hightower. Mr. Dunnigan next discussed his recent time spent with the Secretary of Commerce, Gary Locke, at Norfolk for the public announcement of the American Reinvestment Recovery Act funding for hydrographic services. Mr. Locke indicated that he is familiar with the HSRP Report “Five Most Wanted Hydrographic Services Improvement Report” when he met Ed Welch at the ARRA event. Mr. Dunnigan then reviewed the current position of Congress and the NOAA 2010 appropriations bill, as well as the status of the 2011 budget development and executing the 2009 budget. Finally, Mr. Dunnigan reviewed the current environment at the National Ocean Service (NOS) and recent personnel changes, as well as efforts to provide a stronger NOS focus on the people that work at NOS. Personnel changes include the current NOS Technical Director, Dr. Marie Colton, starting on October 11 as the Director of the Great Lakes Environmental Research Laboratory in Ann Arbor. He also announced this to be Captain Steve Barnum’s last official meeting as the Director of Office of Coast Survey. Captain Barnum will be retiring the end of the year and the new Director of Coast Survey will be Captain John Lowell.

Accelerating Data Integration into Charts

Mr. Jeffrey A. Ferguson, Chief Hydrographic Surveys Division (HSD), Office of Coast Survey, gave a presentation about accelerating data integration into charts, including the role of hydrographic certification. He started with an overview of how the ping to chart process works (i.e. from gathering data to getting it onto the charts). Step one is data collection by either NOAA or contractors, followed by some field processing to ready the data for delivery to the Hydrographic Surveys Division. In step two, HSD does data verification and quality assurance, and creates a compilation product that is delivered to the Marine Chart Division (MCD). The compilation product is the data that will end up on the chart (i.e. soundings, shoreline features, etc). The Marine Chart Division updates the chart products and delivers them to the public.

All data (except for Army Corps of Engineers channel survey data for those area where the Corp has liability and authority), including NOAA collected data, contractor data, and data from federal, state, or private partners, must go through HSD for validation and compilation before it can go on a chart. Prior to 2008, there were more surveys coming in to HSD than going out (due to factors including an increase in the number of hydrographic surveys and changes in technology), as HSD had a hard time keeping up with the data influx. HSD had to modernize processes, in and 2008, are now able to get more surveys out the door than are coming in, thus reducing the inventory and the resultant ping to chart times. In the next few years, the queue time before processing should go to basically zero. Even with the longer ping to chart times, dangers to navigation went directly to the MCD. Currently, the largest chunk of ping to chart time is actually the field time (including field processing). In summary, HSD has made significant improvements in their ping to chart times and is now at the point now where they should be able to handle all the data that comes in without the time lags as in the past. The ping to chart time issues goes beyond NOAA as it is a problem faced by NOAA’s international partners as well.
In terms of hydrographic certification, there is no legal or technical requirement for anyone to have hydrographic certification in the work NOAA does. The same is true for contractors. However, in terms of selection for government positions and contracts, this is something looked at in the qualifications review. However, in Mr. Ferguson’s viewpoint, certification does not remove the need for HSD to validate a hydrographic survey or produce the compilation product to deliver to MCD.

Next Mr. Ferguson discussed the various certification programs, including the American Congress on Surveying and Mapping Hydrographic Certification Program (of the individual) and the IHO Cat A and Cat B program (a course of study is certified, not an individual).

In summary, HSD has made significant improvements in their ping to chart times and is now at the point now where they should be able to handle all the data that comes in without the time lags as in the past. It’s not really a certification issue; it’s getting the data in the formats needed for quick and efficient processing. The key is getting clean, complete data that follows the specs and deliverables. While certification may play a role, it is not a cure all to the ping to chart process. Panel Discussion

- There was panel member discussion about the differences between land surveyors and hydrographers from the standpoint of certification and hydrography, as well as state regulations for surveying.

- In response to a question from Mr. Whiting, Mr. Ferguson explained why you cannot just accept a certified survey from a Registered Land Surveyor and put it on the charts, it is because there have been problems with the information in the past.

- There was discussion among the members about the International Board's development of a program based on an international set of standards for Cat A and Cat B certification, along with the purpose of having a certification from a business or personal perspective.

- Captain John Lowell provided additional information addressing the US Army Corps of Engineers (ACE) data collection framework and role in providing data about channels, as well as NOAA efforts to work with the USACE to get information delivered in a standard format

- Mr. Dasler encouraged NOAA to get some more representation on the Hydrographer Certification Board.

- In response to a question from Ms. Dickenson about the rate up updating information on paper charts vs. ENCs, Capt. Lowell discussed the current process and future process (this is for bulk changes to the charts).

- There was additional panel member discussion about the pool of hydrographers and the mean age of the current pool of hydrographers, including what could be done to have more courses provided in the career path at universities. Currently the two hydrography programs in the US are at the graduate level, but Mr. Jeffress described the efforts to develop an undergraduate program in Texas.

- The panel also discussed what hydrographic certification means, as well as the international and US perspectives.

- One goal of certification could be to increase the general professional level of hydrographers, leading to a higher quality data. And since higher quality data flows through the system more quickly, that reduces the ping to chart time.
• Captain Barnum pointed out that a real key is to do the work to the NOAA specs and deliverables, so the data can be applied to charts with confidence. Just like in high school, you need to show your work (i.e. the supporting documentation) so it is clear how you got the answer.

• Mr. Welch posed the question for consideration to the panel members about whether there has been enough discussion on certification and education, or if it should be brought up at future meetings.

Public Comment Session
It was noted that there were two letters that had previously been sent to the panel on these topics as public comment. The main points were briefly verbally summarized. They can be viewed on the web here and here.

10:21 am BREAK

10:52 am Discussion on Updating the Panel's Five Most Wanted areas
Mr. Welch identified that a straw man had been prepared by Ms. Arenson for the panel to review and come up with a plan of action to complete an update of the Five Most Wanted list prior to new panel members being introduced. After some discussion, it was decided that this panel membership would make a goal to complete the update of the report. The straw man document was discussed in its entirety and panel members volunteered to work on each of the five areas to refresh and update the report by the end of the year, at least as far as the text is concerned. This would include an aggressive conference call strategy within the first half of October, following this meeting, with both panel member volunteers and the appropriate NOAA subject matter experts from the three offices. Specific items include:

• Mr. West suggested briefing the Science Advisory Board in the spring, as was done with the first report.

• Considering additional emphasis on VDatum, the Arctic, and climate change.

• Reviewing new policy documents.

• Updating facts and figures and providing an update of the status of actions/recommendations.

• Incorporating stakeholder information as appropriate on a chapter by chapter basis.

• A new cover for the report.

• Approving the text via conference call.

12:03 pm LUNCH RECESS
The meeting reconvened at 1:03 pm and Mr. Welch introduced the stakeholder panel.

Regional Stakeholder Panel Presentations
Richard Morey, Minnesota Department of Transportation
Mr. Richard Morey discussed how Minnesota Department of Transportation's (MNDOT's) uses both National Weather Service products and services to be more efficient and cost effective in their work,
and provide a safer place for both the public and their employees. An overview of the NGS CORS stations in MN was also provided. Uses of the CORS include construction, guiding snowplows in whiteout conditions, bus navigation, surveying, and precision agriculture. Mr. Morey reported on potential areas for partnership with NGS on various projects and systems.

**Morris Luke, Wisconsin Department of Transportation**

Mr. Morris Luke provided an update on the NOAA services that the Wisconsin DOT uses and also said there are opportunities for additional partnerships with needed services.

**Scudder Mackey, Habitat Solutions NA**

Mr. Scudder Mackey gave a briefing about the types of work he does, the study of habitat conditions in and around the Great Lakes on both the U.S. side and the Canadian side, and the products and services of NOAA that he uses to help identify problem areas or areas of concern related to natural resources, ecology, and the environmental impacts of climate change. Issues of concern include water quality and water level changes. A lot of his work focuses on nearshore habitat mapping (for fisheries and other wildlife). He is looking forward to updated shoreline data, as current shorelines can sometimes be far from the mapped positions. Mr. Mackey also discussed how he uses NOAA digital charts in his work.

Mr. Mackey inquired as to the possibility of NOAA supplying shallow water, near shore bathymetry charts for scientific, non-navigational use. This information is very much wanted and needed by various parties – including resource managers, scientists, and recreational boaters. In addition, he discussed the need for higher resolution data (high-resolution bathymetry) for biological purposes than is currently available on NOAA charts.

Summary of needs/concerns:

- Improving data access and quality
- Higher resolution bathymetry
- Updated coastlines
- Need for shallow water, near-shore bathymetry

**Panel Discussion**

- Ms. Juliana Blackwell, Director NGS, elaborated on concerns raised in the three presentations.
- Mr. Jon Dasler brought up other states that are using a virtual reference system through the CORS network and the benefits to mapping and hydrography.
- Discussion about the issue of charging customers for datum access.
- There was discussion about using data across state lines.
- There was discussion about the available resources to help bring more CORS stations online.
- There was discussion about ways to notify NOAA to report data missing from current NOAA charts.
- Additional member discussion on shallow water bathymetry.
12:27 pm BREAK

2:48 pm Regional Stakeholder Panel Presentations, continued

**Lieutenant Doug Jannusch, U.S. Coast Guard**

Lieutenant Jannusch gave a brief overview of his time with the USCG as well as USCG activities in the Great Lakes. He detailed the NOAA products and services used by the USCG and the benefits to the USCG of those services. He mentioned they would like to have a downloadable portfolio charts for when they are underway as bandwidth to the Internet is limited, rather than having to go through the internet for online charts.

**Don Goltz, Army Corps of Engineers**

Mr. Don Goltz provided a brief overview of the NOAA products and services he uses in the course of his work with the Army Corps of Engineers (ACE) and the importance of those products. Most important are the gauges on the lakes. Mr. Goltz posed the question of whether it might be possible to provide cross-referencing between NOAA charts and ACE charts to display a complete chart perhaps on the web pages.

**Panel Discussion**

- Comment from Mr. Goltz about cross referencing federal channel information between NOAA and Corps of Engineers charts.
- There was discussion about the USCG's requirement for having paper charts, and also about their past experience in transmitting correction of data to NOAA for updates.
- There were recommendations for improvements of the web site offered and discussed.
- There was panel discussion about the USCG's timing of retrieval of weather buoys on Lake Superior and how to coordinate that better between NOAA and the USCG. Also about when the shipping lanes close for the winter and the USCG icebreaker ships.

**NOAA Tri-Office updates**

**Juliana Blackwell, Director, National Geodetic Survey**

Ms. Juliana Blackwell provided information about what NGS is currently doing and how it relates to the aggressively map recommendation of the panel. She announced that GEOID09 has been released and provided an update on GRAV-D. A new vertical datum is planned for release in 2018. She also discussed some of the results of a socioeconomic scoping study and benefits of the NSRS (National Spatial Referencing System), CORS (Continually Operating Reference System), and GRAV-D. Ms. Blackwell covered the accomplishments of NGS for this past year. She briefly touched on why an IGLD update is needed. Other topics briefed included: CORS network, OPUS, height modernization, and a new service, LOCUS, as well as the budget.

The two NOS/NGS state advisors in attendance were introduced by Ms. Blackwell as she recognized the value of the state advisor program. Personnel changes within NGS were highlighted as well.

**Panel Discussion**

- There was brief discussion by the panel of shoreline mapping responsibility and the national map.
• There was discussion on a request to clarify a possible confusion about the ability to obtain accurate differential height measurements now using GPS and what will be provided in the future NGS products.

**Michael Szabados, Director, Center for Operational Oceanographic Products and Services**

Mr. Mike Szabados summarized his presentation toward the Five Most Wanted list providing an update on each area and where CO-OPS has made improvements and achieved its goals. CO-OPS increased the number of full-time water level stations and also completed a national survey. Mr. Szabados discussed the budget, and also plans in FY10 for updating tidal current tables and installing more real-time meteorological sensors. He gave an example of the usefulness of an air gap sensor for moving the U.S.S. New York under the Huey Long Bridge. He also discussed the role of CO-OPS in getting out information about tide level anomalies, as well as explaining the anomalies.

**Panel Discussion**

• A question was posed as to why there was no O&M for PORTS® showing on the FY10 budget when the panel has continuously asked NOAA to request more for that. Discussion was presented about the budget process.

• There was discussion on datum references and the differences in the variations that the ACE is using even between their own districts and NOAA.

**Captain Steven R. Barnum, Director, Office of Coast Survey**

Captain Steve Barnum provided an update on the Coast Survey activities over the past year and those for the future. Included were the FY09 performance metrics, NOAA in the news, getting ARRA funds out the door, launching of the Hassler, port security discussions with the Navy, partnership achievements, VDatum next steps, success stories, electronic navigational charts, S100 as the future data standard, and 2010 budget request. Most notably was the ratification of a treaty of the U.S. as a member of the IHO which was several years in the making.

**Panel Discussion**

• There was panel discussion about: not meeting the survey goal for 2008 due to issues with the NOAA ship Fairweather; the budget for coastal mapping; yearly mapping goals; survey backlog, better explaining critical needs and showing progress; survey prioritization; and the long term plan for meeting the hydrographic survey needs of the US.

**Ms. Ashley Chappell, Office of Coast Survey**

Ms. Ashley Chappell provided an update on NOAA's strategic plan for the Arctic. NOAA interests include navigation, extended continental shelf, and threats to coastal communities. The strategic plan includes the interests of NOAA goal teams – ecosystems, climate, navigation, weather, etc. Ms. Chappell discussed two areas in more details, coastal community resilience and marine transportation. NOAA roles in the Arctic include sea ice forecasts, improving the geospatial infrastructure, and providing support for hazardous materials response. The plan is currently in the NOAA clearance process.

**Panel Discussion**

• There was discussion about the budgeting of work in the Arctic and prioritizing carefully the work that needs to be done in the Arctic with the rest of the contiguous U.S.
• Also discussion of the age of the survey data in the Arctic and what resources make the most sense to deploy in that region, as well as recreational boaters in the region.

Public Comment Session

There was no public comment offered during this session.

The meeting adjourned for the day at 5:37 pm.
September 24, 2009 - Thursday

Call to Order at 8:46 am

Mr. Edmund Welch welcomed everyone back for the second day of the HSRP meeting. Mr. Welch provided a brief recap of the day one session and announced that the status of the Five Most Wanted session would be presented in today's session immediately following lunch. Additionally, time allowing, Mr. Armstrong would be giving a short presentation about his Arctic adventure.

Contracting Policy Revisions

Mr. Roger Parsons, Integrated Ocean to Coastal Mapping Coordinator, NOAA

Mr. Roger Parsons provided a review of the recommendations that have been prepared by IOCM (Integrated Ocean Coastal Mapping) for changes to the existing Hydrographic Services Contracting Policy that will be submitted to Congress and the President for enactment. He first reviewed the input from the HSRP given in 2005 to the last revision of the contracting policy and that were incorporated into the 2006 policy. Mr. Parsons then discussed the main differences between the draft and current policy. Changes include broadening the scope of the policy beyond hydrographic services, a stronger acknowledgment that contracting will be done in accordance with the Brooks Act, additional activities that might not be subject to contracting, and updating definitions as defined in the Hydrographic Services Improvement Act.

During the discussion the draft policy was put up the screen to facilitate discussion about specific aspects/wording in the draft.

Panel Discussion

- Ms. Rebecca Arenson indicated that all the documents for the Panel’s review regarding this topic were included in their packets: Mr. Parson's presentation, the draft revised policy, the document summarizing the changes, the current policy, and copies of all the public comment letters (June and September) received to date.

- It was noted that the changes were related to the congressional directive to expand the types of services to be covered by the policy from hydrographic services to ocean and coastal mapping.

- There was considerable discussion on the use of specific wording in the changes, including the term “inherently governmental” and items number six and seven in the list of activities which may not be contracted out.

Public Comment Session

Mr. Tom Newman, President of TerraSond Limited was recognized and addressed the panel. He stated that the proposed changes are not necessary and some are not in the contractor's best interest. He was in agreement with the changes meeting the Congressional directive for an expanded role from just hydrographic services to ocean and coastal mapping. He noted the advantages and benefits of contracting, including geographic diversity in the location of assets for responding to emergencies, the ability to marshal resources in short time frame, and flexibility in the type of platforms for survey work. Mr. Newman also discussed the budget requests for contracting. He thanked the Panel for requesting an additional forum for discuss of the proposed changes and for requesting more time for review. There was no other public comment during the session.
Panel Deliberations

- Rather than making edits to the draft policy, it was suggested that a statement be drafted by the panel to convey their feeling that the current policy is satisfactory and edits needs are only those directed by the new law. The members discussed this approach.

- A statement was drafted up to present to NOAA for the contracting policy, motion to adopt given by Mr. Matt Wells, and seconded by Mr. Larry Whiting. All members were in favor, there were none opposed.

10:05 am BREAK

10:41 am Discussion of Five Most Wanted revisions

Mr. Edmund Welch reviewed the teams that were created during the previous day’s discussion for each of the "chapters" of the Five Most Wanted updates to be made by the panel before the end of the term. The Five Most Wanted items were reviewed and notes were made about additional items to have inserted into the report to refresh it for the new Administration. The introduction letter will be revised by the chair. The current report was reviewed for changes of photos to be made as well.

NOAA will set up calls for each chapter and will have subject matter experts as appropriate participate in the calls. Text will be edited real-time in the calls. Members should review the Annual Guidance Memo. The HSRP members have primary responsibility for text revisions.

Administrative Update

Lunch will be with the attendees for the Great Lakes Maritime Research Institute meeting. Ideally folks will sit with some of these attendees during lunch.

Arctic Seafloor Mapping with Andrew Armstrong

Andrew Armstrong, Co-director, NOAA/ University of New Hampshire Joint Hydrographic Center

Mr. Andy Armstrong gave a presentation about his recent Arctic seafloor mapping trip and the discoveries that were made during that trip relative to the extended continental shelf. He explained the reason for mapping the extended continental shelf issue, and discussed science done on the trip, ice conditions, equipment used, and interesting discoveries, such as a new sea mount.

11:35 am LUNCH BREAK

1:06 pm Arctic Seafloor Mapping with Andrew Armstrong, continued

Mr. Armstrong continued his presentation.

Great Lakes Shoreline Mapping

Mr. Mike Aslaksen, Chief, Sensing Division, NGS, provided an overview of what is entailed in shoreline mapping just generally, and also the various multi uses of the data that is made available to other agencies and the public mostly via the Internet. The number one customer for the shoreline data is the Office of Coast Survey to support chart updates. The program collects two shorelines – the mean low water and the mean high water, so has to plan flights around the two tidal stages. Multiple tools are used to collect this data. He contrasted the old products using vector data against the new GIS ready digital data, which is available through the Coastal Services Center's Digital Coastal tool.
Mr. Aslasken then discussed the ARRA funded Great Lakes shoreline mapping project. This funding will allow NGS to collect shoreline data from images recently collected by the National Geospatial Intelligence Agency. The work was split between six contractors. As the imagery does not include Lake Michigan, NGS hopes to be able to collect this information within the next two years. The ARRA funding allowed NOAA to take advantage of an existing data set to meet a need for updated shoreline in the Great Lakes, and also helped the contractors processing that data keep some positions funded, rather than laying staff off.

**Administrative**

Mr. Edmund Welch advised the panel that the agreed upon language for the contracting policy recommendation to NOAA did not get saved and was redrafted at this point. The language now being recommended was recorded as:

“The HSRP finds that NOAA’s existing Hydrographic Services Contracting Policy is fairly and adequately constructed. The HSRP recommends that NOAA limit revisions to the policy making only those precise language changes required to conform to the Ocean and Coastal Mapping Integration Act.”

There was a motion by Mr. Matt Wellslager and a second by Mr. Larry Whiting to adopt this recommendation for submission to NOAA. All members present voted in favor, there were none opposed to the motion.

**Preview of State Geodetic Advisor Study Findings**

Mr. Doug Brown, Geodesy Program Manager, NGS, gave a presentation on the findings and recommendations from the State Advisor Program Study that he led. This report will be submitted to NGS's Executive Steering Committee in October for vetting. The study is part of the NGS 10-year plan for modernization. Mr. Brown explained the current make-up of the State Advisor Program.

The three findings from the study are: 1) advisors are critical to implementing the 10-year plan; 2) the growth of GIS has resulted in increasing attention to the management of spatial information; and 3) advisors must have the skills and tools to successfully meet the challenges in the 1-year plan.

The three recommendations to the ESC are: 1) expand the State Advisor Program where there are interested states who can support an advisor; 2) build skills and provide needed tools for the expanded role of state advisors from data gathering to include spatial information management; and 3) build capacity to enable customers to better address needs at the regional level.

Mr. Brown also discussed some of the eight options for restructuring the State Advisory Program. Options include having an advisor in each state or using a mix of regional and state advisors.

**Panel Discussion**

- There was discussion about other agencies that are using the NAV advisors beyond the Department of Transportation.
- There was discussion about there no longer being a state advisor in Alaska and the plan for filling that vacancy.
- There was discussion that state budget shortfalls may hinder the expansion of the program in the near term.
Hydrographic Services Review Panel Public Meeting, September 23-24, 2009

Summary

• The two State Advisors in attendance were acknowledged again: Mr. Dave Zenk and Mr. John Ellingson.

• It was requested that the panel be provided a copy of the vetted report and make any comments or suggestions, informally, that they may have prior to the report being released externally.

NOAA's Update on the Progress on The Most Wanted list

Captain Steve Barnum went through each of the recommendations from HSRP to NOAA and the status of each. An updated document will be distributed to the panel.

Administrative Details

• Future Meetings Planning - After panel discussion, the proposal was to have a meeting in the New England area in March, and in mid-September in Hawaii or the Pacific Islands, then possibly the Pacific Northwest in spring of 2011. The gist is to try to have meetings in regional areas in which there has not been a meeting or it has been some time since a meeting. There was some discussion of having a meeting in DC and the reasons for that location.

• Interim Chair Selection - After some discussion the determination was made to allow the Vice-Chair to act in the place of the Chair until the replacement for the Chair is made. Mr. Skinner will continue as Chair until the first of January 2010. Mr. Welch will be the Acting Chair after that time.

• Mr. Jon Dasler asked that a future meeting agenda item be added to discuss the possibility of having somebody from MMS attend to talk about funding for Chukchi Sea and exploration.

• Mr. Edmund Welch was tasked to draft the follow-up letter to the NOAA Administrator about the meeting.

• It was acknowledged that this was Captain Steve Barnum's last official meeting in his capacity at DFO for the HSRP. Additionally, it was noted that some of the current panel members may be rotating off and not be at another future meeting.

• The work of the NOAA staff in putting the meeting together was also acknowledged.

Meeting Adjourned at 3:00 pm
### Appendix

#### List of Attendees

<table>
<thead>
<tr>
<th>Name</th>
<th>Group/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Voting Members HSRP</strong></td>
<td></td>
</tr>
<tr>
<td>Edmund B. Welch, Deputy Chair</td>
<td>Independent Consultant, Passenger Vessel Assoc.</td>
</tr>
<tr>
<td>Jonathan L. Dasler</td>
<td>Vice President, Director of Marine Services, David Evans and Assoc, Inc.</td>
</tr>
<tr>
<td>Elaine L. Dickinson</td>
<td>Assistant Vice President, BoatU.S.</td>
</tr>
<tr>
<td>Gary Alan Jeffress</td>
<td>Professor of Geographic Information Science and Director, Conrad Blucher Institute, Texas A&amp;M University - Corpus Christi</td>
</tr>
<tr>
<td>R. Adam McBride</td>
<td>Port Director, Lake Charles Harbor and Terminal District</td>
</tr>
<tr>
<td>Minas Myrtidis</td>
<td>VP, Env &amp; Reg Compliance, Norwegian Cruise Line</td>
</tr>
<tr>
<td>Matthew Wellslager</td>
<td>Program Manager, South Carolina Geodetic Survey</td>
</tr>
<tr>
<td>Richard D. West (Rear Admiral, Retired US Navy)</td>
<td>(Past President, Consortium for Oceanographic Research and Education &amp; Former Oceanographer/Navigator of the Navy (retired)</td>
</tr>
<tr>
<td>Larry Whiting</td>
<td>Terra Surveys LLC (Retired)</td>
</tr>
<tr>
<td><strong>Non-voting HSRP Members and Designated Federal Official</strong></td>
<td></td>
</tr>
<tr>
<td>Capt. Steven Barnum</td>
<td>Designated Federal Official and Director, Office of Coast Survey, NOAA</td>
</tr>
<tr>
<td>Juliana Blackwell</td>
<td>Director, National Geodetic Survey, NOAA</td>
</tr>
<tr>
<td>Mike Szabados</td>
<td>Director, Center for Operational Oceanographic Products and Services, NOAA</td>
</tr>
<tr>
<td>Andrew Armstrong</td>
<td>Co-director, NOAA/ University of New Hampshire Joint Hydrographic Center</td>
</tr>
</tbody>
</table>
NOAA Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Group/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>John (Jack) H. Dunnigan</td>
<td>Assistant Administrator, National Ocean Service</td>
</tr>
<tr>
<td>John Lowell</td>
<td>Chief, Marine Chart Division, Office of Coast Survey</td>
</tr>
<tr>
<td>Jeffrey Ferguson</td>
<td>Chief Hydrographic Surveys Division, Office of Coast Survey</td>
</tr>
<tr>
<td>Roger Parsons</td>
<td>Office of Coast Survey</td>
</tr>
<tr>
<td>Ashley Chappell</td>
<td>Office of Coast Survey</td>
</tr>
<tr>
<td>Rebecca Arenson</td>
<td>Office of Coast Survey</td>
</tr>
<tr>
<td>Brian Link</td>
<td>Great Lakes Navigation Manager, Office of Coast Survey</td>
</tr>
<tr>
<td>Doug Brown</td>
<td>National Geodetic Survey</td>
</tr>
<tr>
<td>Mike Aslaksen</td>
<td>Remote Sensing Division Chief, National Geodetic Survey</td>
</tr>
<tr>
<td>Tiffany House</td>
<td>National Geodetic Survey</td>
</tr>
<tr>
<td>John Ellingson</td>
<td>Wisconsin State Geodetic Advisor, National Geodetic Survey</td>
</tr>
<tr>
<td>Dave Zenk</td>
<td>Minnesota State Geodetic Advisor, National Geodetic Survey</td>
</tr>
<tr>
<td>Virginia Dentler</td>
<td>Center for Operational Oceanographic Products and Services</td>
</tr>
</tbody>
</table>

Stakeholder Panel Speakers

<table>
<thead>
<tr>
<th>Name</th>
<th>Group/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richard Morey</td>
<td>Land Surveyor, Minnesota Department of Transportation</td>
</tr>
<tr>
<td>Morris Luke</td>
<td>Land Surveyor, Wisconsin Department of Transportation</td>
</tr>
<tr>
<td>Scudder Mackey</td>
<td>Principal and Owner, Habitat Solutions NA</td>
</tr>
<tr>
<td>Lt. Doug Jannusch</td>
<td>United States Coast Guard</td>
</tr>
<tr>
<td>Don Goltz</td>
<td>U.S. Army Corps of Engineers</td>
</tr>
</tbody>
</table>

Other attendees

<table>
<thead>
<tr>
<th>Name</th>
<th>Group/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steve Chiles</td>
<td>Compass Data, Inc.</td>
</tr>
<tr>
<td>Tom Newman</td>
<td>TerraSond LLC</td>
</tr>
<tr>
<td>Katie Mildon</td>
<td>TerraSond LLC</td>
</tr>
<tr>
<td>Karl Wm. Keininger</td>
<td>MAPONY (Maritime Association Port of New York)</td>
</tr>
<tr>
<td>Chris Fretheim</td>
<td>OceanGrafix</td>
</tr>
<tr>
<td>Tim Alarosus</td>
<td></td>
</tr>
</tbody>
</table>