

# UNITED STATES OF AMERICA

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## National Report

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**11<sup>th</sup> Meeting of the South-West Pacific Hydrographic Commission  
(SWPHC)**

**Brisbane, Australia**

**February 13-16, 2012**

NOAA, Office of Coast Survey  
National Geospatial-Intelligence Agency  
Naval Meteorology and Oceanography Command

<http://www.nauticalcharts.noaa.gov>  
<https://www1.nga.mil>  
<http://www.navmetoccom.navy.mil>

## 1 Hydrographic Office/Service

This document provides information specific information pertaining to individual products and services of primary interest to the Southwest Pacific Hydrographic Commission (SWPHC) region, as shown in Figure 1.

U.S. domestic and international hydrographic services are primarily conducted by three government agencies: The National Oceanic and Atmospheric Administration’s (NOAA) Office of Coast Survey (OCS), the National Geospatial-Intelligence Agency (NGA), and the Naval Meteorology and Oceanography Command(U.S. Navy). A national-level overview of the services, mandates, activities and priorities of these three agencies is provided in Appendix A of this report.

Please consult both the National Report and the Appendix for complete information about national programs and specific regional information. Any specific questions should be directed to U. S. Hydrographic Office representatives or the relevant hydrographic component.

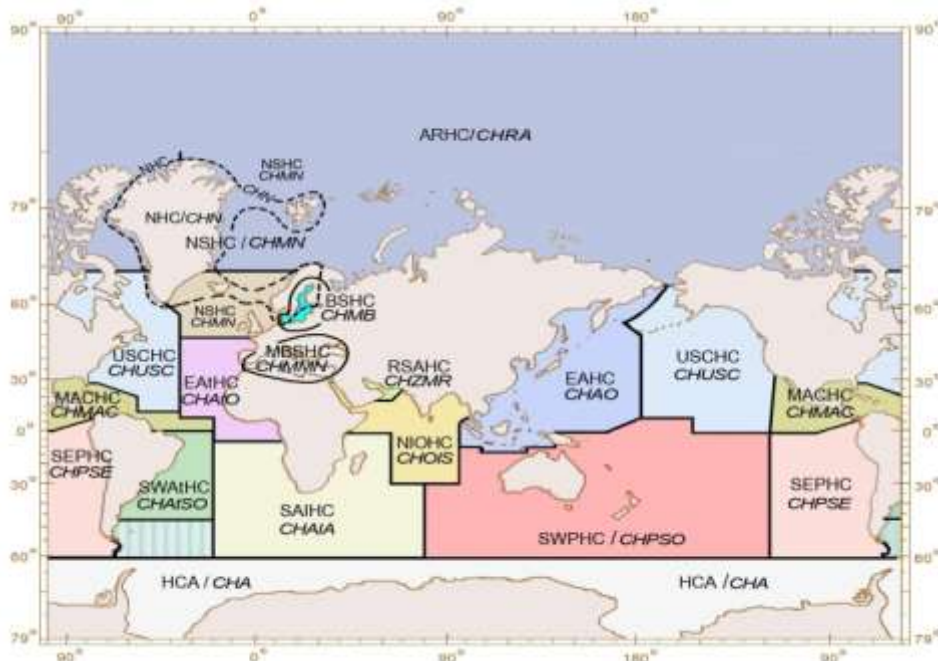


Figure 1: Regional Hydrographic Commission Regions

## 2 Surveys

A statutory mandate authorizes NOAA to provide nautical charts and related hydrographic information for the safe navigation of maritime commerce as well as providing basic data for engineering, scientific, and other commercial and industrial activities within the nation's 3.4 million square nautical mile EEZ.

This U.S. Pacific Island Region is bounded by the Hawaiian Archipelago in the north, American Samoa and U.S. Pacific remote island areas (PRIAs) in the south, and the Mariana's Archipelago, including Guam in the west. This region encompasses a large geographical management area of more than 1.5 million square nautical miles, roughly equal to all the remaining U.S. EEZ waters surrounding the continental U.S., including Alaska<sup>1</sup>.



**Figure 2: U.S. EEZ in the Pacific Region**

(NOTE: This is not entirely aligned exclusively to the area of interest of the SWHPC)

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<sup>1</sup> Source: [http://www.fpir.noaa.gov/DIR/dir\\_index.html](http://www.fpir.noaa.gov/DIR/dir_index.html)

NOAA Hydrographic Survey Priorities (2011 edition) identifies survey priorities across the U.S. EEZ and can be found at [http://www.nauticalcharts.noaa.gov/hsd/docs/NHSP\\_2011.pdf](http://www.nauticalcharts.noaa.gov/hsd/docs/NHSP_2011.pdf).

NOAA survey priorities for the SWPHC region are summarized in square nautical miles in Table 1 and shown graphically in Figure 3.

	Navig. Significant	Critical Areas	Emerging Critical	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Completed (post 1993 survey)
Hawaii and Pacific Islands	0	0	0	0	138	0	15	0	0
National Total (8 regions)	511,323	14,976	5,751	47,145	117,416	99,121	58,439	131,930	36,545

**Table 1: NOAA Survey Priorities in the Hawaii and Pacific Islands Region**

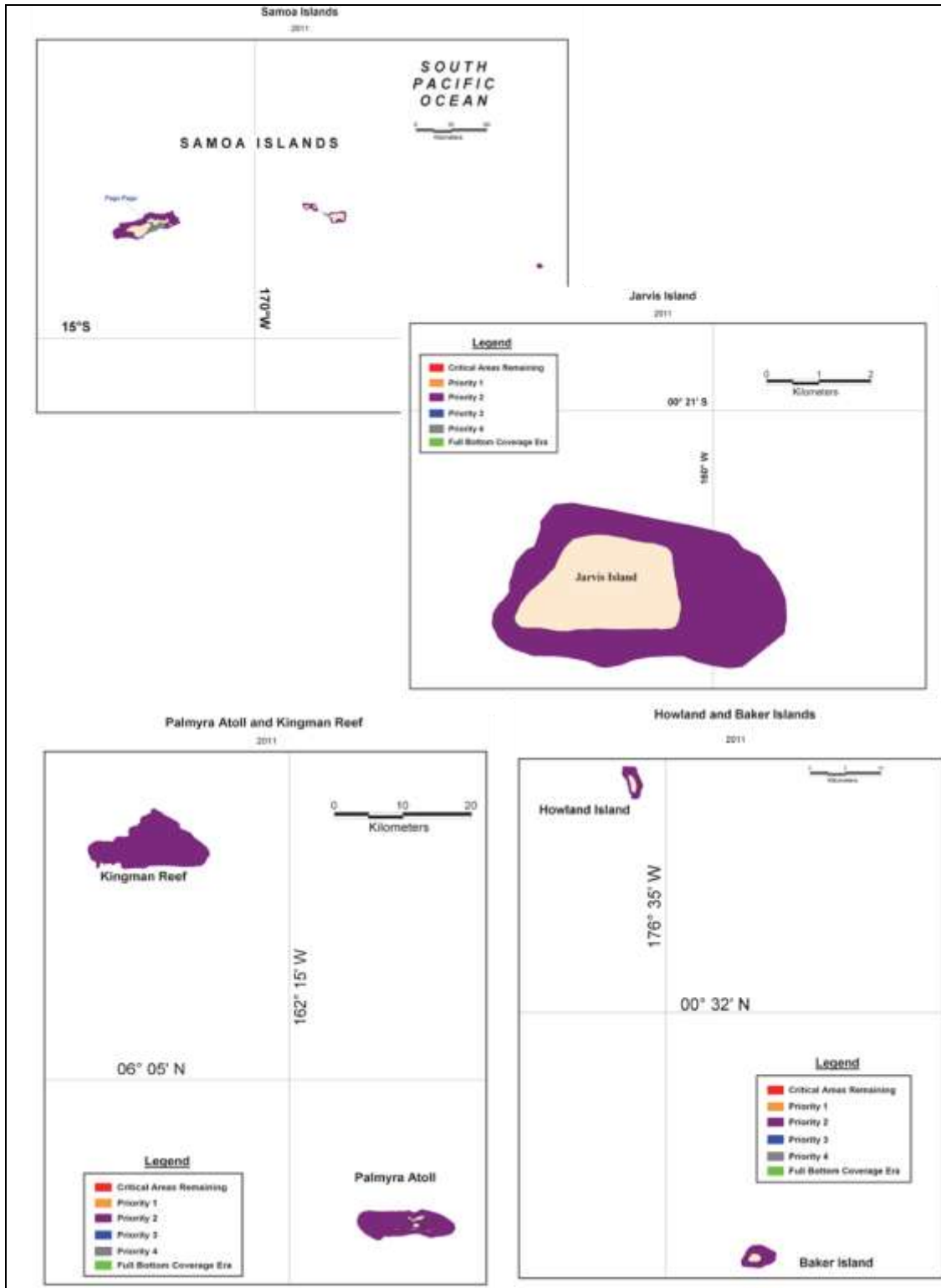


Figure 3: NOAA Hydrographic Survey Priorities in the SWPHC Region

### 3 New Charts and Updates

#### NOAA Charts

NOAA produces and maintains a suite of Raster Nautical Charts for the SWPHC region as shown in Table 2.

<b>Chart</b>	<b>Chart Title</b>
83116	Islands in the Pacific Ocean – Jarvis Island
83157	Palmyra Atoll; Approaches to Palmyra Atoll
83484	U.S. Possessions in Samoa Islands; Pago Pago Harbor
540	Hawaiian Islands

**Table 2: NOAA RNCs Covering the SWPHC Region**

NOAA also maintains appropriate Electronic Navigation Chart (ENC) coverage for U.S. territories region, as shown in and Table 3. This allows the mariner to navigate from the U.S. mainland to American Samoa. NOAA is cooperating with Japan and New Zealand to address ENC overlap issues

Additional details about NOAA’s national nautical chart program can be found in the Appendix A of this report. This Appendix provides links to websites with additional information about NOAA’s various chart products, chart catalogs, critical updates, how to submit consumer inquiries and chart discrepancies through the NOAA inquiry system.

<b>Chart</b>	<b>Chart Title</b>
US4SP30M	U.S. Possessions in Samoa Islands ManuaIslands;TutuilaIsland;RoseAtoll;Swains Island
US5SP20M	Islands in the Pacific Ocean- Howland Island
US5SP22M	Palmyra Atoll;Approaches to Palmyra Atoll
US5SP23M	Islands in the Pacific Ocean- Baker Island
US5SP24M	Islands in the Pacific Ocean-Jarvis Island
US5SP30M	U.S. Possessions in Samoa Islands: Pago Pago Harbor
US1EEZ2M	South Pacific; Cook Islands, Samoa Islands, Phoenix Islands
US1HA01M	Hawaiian Islands

**Table 3: NOAA ENC's covering SWPHC Region**

**NGA Charts**

NGA is withdrawing most of its charts from public sale. The only charts NGA will continue to distribute to the public are those where NGA is the primary charting authority. These are specifically areas where the U.S. conducts the surveys, compiles and issues the, chart and there is no functioning national authority or NGA has specific authority (e.g. Trust Territory of the Pacific).

NGA produces almost 60 charts for the SWPHC region. These charts are available for purchase through OceanGrafix, which can be accessed through <http://www.oceangrafix.com>.

**INT Charts**

The US (NGA) produces INT Chart 617 Tuvalu to Palmyra Island and INT Chart 505, Tuvalu to Palmyra Atoll.

## 4 New Publications and Updates

### United States Coast Pilot®

The United States Coast Pilot® consists of a series of nautical books that cover a variety of information important to navigators of coastal and intracoastal waters and the Great Lakes.



Issued in nine regionally focused volumes, Coast Pilot 7 provides information covered by the SWHPC. The 44<sup>th</sup> edition was published in 2012 and is available in PDF, HTML, and XML digital format<sup>2</sup> at

[http://www.nauticalcharts.noaa.gov/nsd/coastpilot\\_w.php?book=7](http://www.nauticalcharts.noaa.gov/nsd/coastpilot_w.php?book=7). The next edition of Coast Pilot 7 is scheduled to be published in December 2012.

Additional information about the Coast Pilot can be found in Appendix A of this report.

### Sailing Directions

Sailing Directions are published by the U.S./NGA in 42 Planning Guide and Enroute volumes as part of a global portfolio of publications. Sailing directions and digital updates can be downloaded from the NGA Maritime Safety website,

<http://msi.nga.mil/NGAPortal/MSI.portal>

Four volumes of Sailing Directions cover the SWPHC region, as listed in Table 4.

Publication	Title	Edition Date
Sailing Directions 125	West Coast of South America	7/2011
Sailing Directions 126	Pacific Islands	9/2010
Sailing Directions 127	East Coast of Australia and New Zealand	10/2010

<sup>2</sup> HTML and XML formats of the Coast Pilot are experimental and NOT TO BE USED FOR NAVIGATION.



Sailing Directions 175	North, West, and South Coasts of Australia	7/2010
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**Table 4: Sailing Directions covering the SWPHC Region**

Additional information about NGA Sailing Directions can be found in Appendix A of this report.

**List of Lights, Radio Aids and Fog Signals**

The NGA *List of Lights, Radio Aids and Fog Signals* is published in seven volumes and contains more complete information about the navigational aids than can be conveniently shown on nautical charts. All of these publications and their digital updates are available to the public and are posted at the NGA Maritime Safety website at <http://msi.nga.mil/NGAPortal/MSI.portal>.

Two (2) volumes of List of Lights cover the SWHPC region as shown in Table 5.

<b>Publication</b>	<b>Edition Date</b>
List of Lights Pub. 111 <i>W. Coast N &amp; S America (excluding U.S.A), Australia, Tasmania, NZ, and Islands in the N/S Pacific Ocean</i>	2011
Pub 112 <i>Western Pacific and Indian Oceans Including the Persian Gulf and Red Sea</i>	2011

**Table 5: List of Lights Radio Aids and Fog Signals Covering the SWPHC Region**

Additional information about the NGA *List of Lights, Radio Aids and Fog Signals* can be found in Appendix A of this report.

**5 Maritime Safety Information (MSI)**

NGA is the NAVAREA IV and XII Coordinator within the IMO/IHO World-Wide Navigational Warning Service (WWNWS) and also acts as Chairman for the WWNWS Sub-Committee (SC).

The limits of NAVAREA XII are formed from the coast line at 03-24S to 120-00W, then to 00-00, then to 180-00, then to 50-00N, and then following the International Date Line to 67-00N.

NAVAREA XII is shown in Figure 4.

More information on NAVAREAs can be found in Appendix A of this report.



Figure 4: NAVAREA Limits

## 6 C-55 Update

The U.S. will have its five year C-55 information update by the International Hydrographic Conference in April 2012. In the meantime, the OCS priorities for the SWHPC are provided in Section 2 “Surveys” above.

## 7 Capacity Building

A list of U.S. institutions, which provide hydrographic training opportunities, is provided in the Appendix A of this report.

The United States is an active participant in the IHO Capacity Building Sub-Committee (CBSC) and the U.S./NGA directly supports the IHO Maritime Safety Information (MSI) training course. An overview and description of NGA's training activities in the field of Marine Safety Information (MSI) are provided in Appendix A of this report.

## 8 Oceanographic Activities

### **NOAA's Center for Operational Oceanographic Products and Services**

CO-OPS maintains one tide station in the SWPHC region at Pago Pago (Station 177-0000). Data on this station and all U.S. Tide Data Stations can be found at [http://tidesandcurrents.noaa.gov/station\\_retrieve.shtml?type=Tide+Data](http://tidesandcurrents.noaa.gov/station_retrieve.shtml?type=Tide+Data).

### **GEBCO**

The United States participates on the IOC-IHO Guiding Committee for GEBCO and hosts the IHO Data Centre for Digital Bathymetry at NOAA's National Geophysical Data Center. The United States actively participates in the International Bathymetric Chart of the Southern Ocean ([http://www.ibcso.org/documents/IBCSO\\_SCAR\\_A4.pdf](http://www.ibcso.org/documents/IBCSO_SCAR_A4.pdf)).Pag

### **National Geophysical Data Center (NGDC)**

NGDC develops integrated coastal digital elevation models (DEM) in support of improved tsunami forecast, warning, and mitigation. In 2009, NGDC completed a series of DEMs for American Samoa, Midway Atoll, and Wake Island. These DEMs are documented and available on-line <http://ngdc.noaa.gov/mgg/bathymetry/> for re-use. NGDC has developed a set of Best Practices for digital elevation modeling that is also available on-line.

NGDC works with other NOAA agencies, such as the Pacific Tsunami Warning Center (PTWC), the West Coast and Alaska Tsunami Warning Center (WC/ATWC), and the National Data Buoy Center (NDBC) to archive high-resolution water level data. NGDC is working to extend this partnership to agencies outside of NOAA to have a portal for all water level data related to tsunami events.

## 9 Other

Multibeam and backscatter data from a U.S. Law of the Sea Cruise to Map the Southern Flank of the Kingman Reef-Palmyra Atoll section of the Line Islands, Equatorial Pacific Ocean is now available for download from the University of New Hampshire (UNH) Center for Coastal & Ocean Mapping-Joint Hydrographic Center (CCOM-JHC) website, <http://www.ccom-jhc.unh.edu/index.php?p=53|58|64&page=unclos/lineIslands.php>. This cruise was completed in June, 2010 with the objective to map the bathymetry of the southern flank of the Line Islands in the vicinity of Kingman Reef and Palmyra Atoll, central equatorial Pacific for the U.S. Extended Continental Shelf (ECS) Task Force.

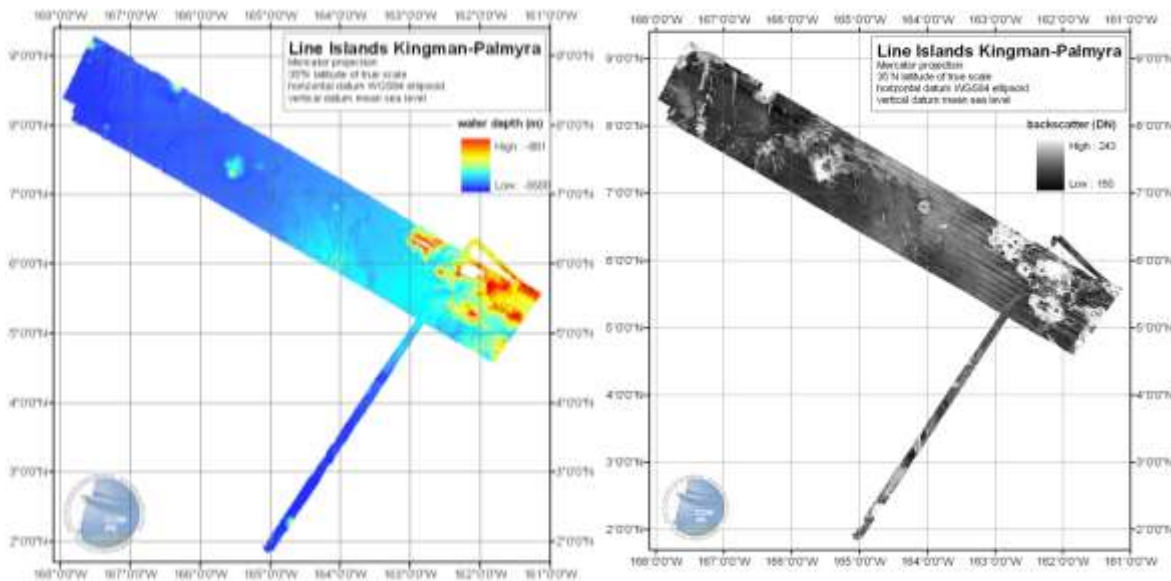


Figure 5: Images from Line Islands Law of the Sea Survey