



UNITED STATES OF AMERICA

National Report

**Meso-American and Caribbean Sea
Hydrographic Commission (MACHC)
Manzanillo, Colima, Mexico
10-13 December 2014**

NOAA, Office of Coast Survey <http://www.nauticalcharts.noaa.gov>

National Geospatial-Intelligence Agency <https://www1.nga.mil>

Naval Meteorology and Oceanography Command <http://www.navmetocom.navy.mil>

Hydrographic Office/Service

This National Report provides specific information pertaining to individual products and services of primary interest to the Meso-American and Caribbean Sea Hydrographic Commission (MACHC). 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 (CNMOC, U.S. Navy).

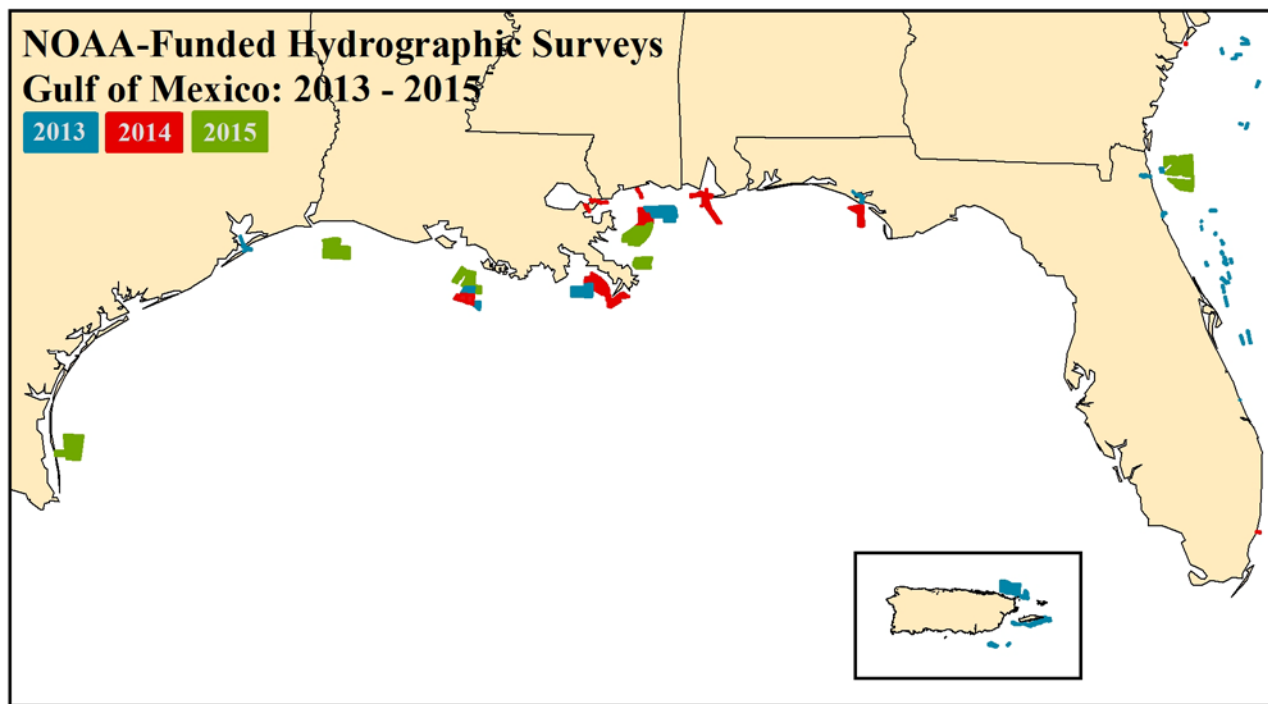
Surveys

A statutory mandate authorizes NOAA to provide nautical charts and related hydrographic information for the safe and efficient 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.

The *NOAA Hydrographic Survey Priorities* available at <http://www.nauticalcharts.noaa.gov/hsd/NHSP.htm> defines the methodology NOAA uses to identify survey priorities across the U.S. EEZ. *NOS Hydrographic Surveys Specifications and Deliverables* has been updated for 2014 and includes new specifications and changes made since the 2013 version. Those who acquire hydrographic survey data in accordance with NOS specifications should use the current version; [2014 Specifications and Deliverables](#).

In 2014, NOAA funded hydrographic surveys in the Gulf of Mexico took place in the approaches to Panama City, FL, the western vicinity of Lake Borgne, MS/LA, the approaches to Barataria Bay to the Southwest Pass, LA, and the approaches to Mobile Bay, AL.

In 2015, NOAA plans to fund hydrographic surveys in the Gulf of Mexico in the approaches to Port Mansfield, TX Sabine Bank, LA, vicinity of Brenton Sound, LA, approaches to Atchafalaya Bay, LA, approaches to Charleston, SC, approaches to Jacksonville, FL and Chandeleur Sound, LA.



The U.S. Navy surveys waters outside the United States and in the territorial waters of other nations through diplomatic channels and international agreements. As such, hydrographic surveys were conducted through these mechanisms during 2014 in Honduras and Guatemala. In addition, there are proposed or planned hydrographic surveys for Belize, Colombia, and Dominica in 2015. Any further inquiries regarding specific information on any of these surveys should be directed to the Hydrographic Service or Port Authority of the respective country.

New Charts and Updates

ENCs

The U.S. (NOAA) produces 198 ENCs in domestic waters within the MACHC region. There will be a total of 97 new editions for 2014. (See table in Appendix A.)

The U.S. (NGA) produces 11 ENCs in the Panama Canal and select Haitian waters. These ENCs will continue to be maintained by NGA with new source information from the U.S., Panama, and Haiti as it becomes available. Additionally, the US (NGA) is working to expand its ENC Portfolio within the MACHC Region in areas where the U.S. is the Prime Charting Authority.

| ENC Band | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|----|----|-----|---|
| Number of U.S. ENCs existing in MACHC Region (NOAA) | 3 | 5 | 14 | 61 | 113 | 2 |
| Number of U.S. ENCs existing in MACHC Region (NGA) | 0 | 0 | 0 | 3 | 8 | 0 |

ENC distribution

U.S. ENCs, including newly created NGA ENCs, are distributed through PRIMAR, UKHO, Maris, Jeppesen, Chart World, Creative Map Corporation, and directly from NOAA at www.nauticalcharts.noaa.gov.

RNCs and Paper charts

NOAA produces 178 raster charts in domestic waters within the MACHC region. There have been 31 new or projected new editions for 2014. See table in Appendix B. As of April 2014, NOAA no longer produces lithographic paper charts with traditional print cycles for new editions. All paper charts are fully updated and available as Print on Demand (POD) products.

NGA produces 566 paper charts for the MACHC region in their Region 1 & Region 2 portfolios, but NGA is withdrawing many of them 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). (See table in Appendix C.)

INT Charts

NOAA and NGA share INT chart responsibility within the MACHC region. The U.S. is responsible for 11 international series charts in the MACHC, ranging in scales between 1:300,000 to 1:2,750,000. (See Appendix C for table depicting projected INT chart production.)

New Publications and Updates

United States Coast Pilot®

The *United States Coast Pilot*® consists of a series of nine regionally-focused nautical books that cover a variety of useful information important to navigators of coastal and intracoastal waters and the Great Lakes. *Coast Pilots 4, 5, and 7* provide information for the MACHC region. U.S. Coast Pilot now offers completely [updated publications](#) every week.

| Publication | Edition Date |
|--|------------------|
| U.S. Coast Pilot 4: Atlantic Coast of the United States from Cape Henry, Virginia to Key West, Florida | Edition 46, 2014 |
| Coast Pilot 5: Gulf of Mexico from Key West, FL to the Rio Grande, Texas. Coast Pilot 5 also covers Puerto Rico and the U.S. Virgin Islands. | Edition 42, 2014 |
| Coast Pilot 7: California, Oregon and Washington, between Mexico on the south and Canada's British Columbia on the north. <i>Coast Pilot 7</i> also includes Hawaii and other United States territories in the South Pacific. | Edition 46, 2014 |

U.S. Coast Pilots can be downloaded at: <http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm>

Sailing Directions

Sailing Directions are published by NGA, and digital updates can be downloaded from NGA at <http://msi.nga.mil/NGAPortal/MSI.portal>.

Six (6) volumes of *Sailing Directions* cover the MACHC region.

| Publication | Edition Date |
|---|--------------|
| <i>Sailing Directions 120</i> – Pacific Ocean and Southeast Asia (Planning) | 2014 Edition |
| <i>Sailing Directions 140</i> – North Atlantic Ocean and Adjacent Seas (Planning) | 2014 Edition |
| <i>Sailing Directions 124</i> – East Coast of South America (Enroute) | 2014 Edition |
| <i>Sailing Directions 147</i> – Caribbean Vol. 1 (Enroute) | 2013 Edition |

| Publication | Edition Date |
|--|--------------|
| <i>Sailing Directions 148</i> – Caribbean Vol. 2 (Enroute) | 2013 Edition |
| <i>Sailing Directions 153</i> – West Coast of Mexico and South America (Enroute) | 2013 Edition |

List of Lights, Radio Aids and Fog Signals

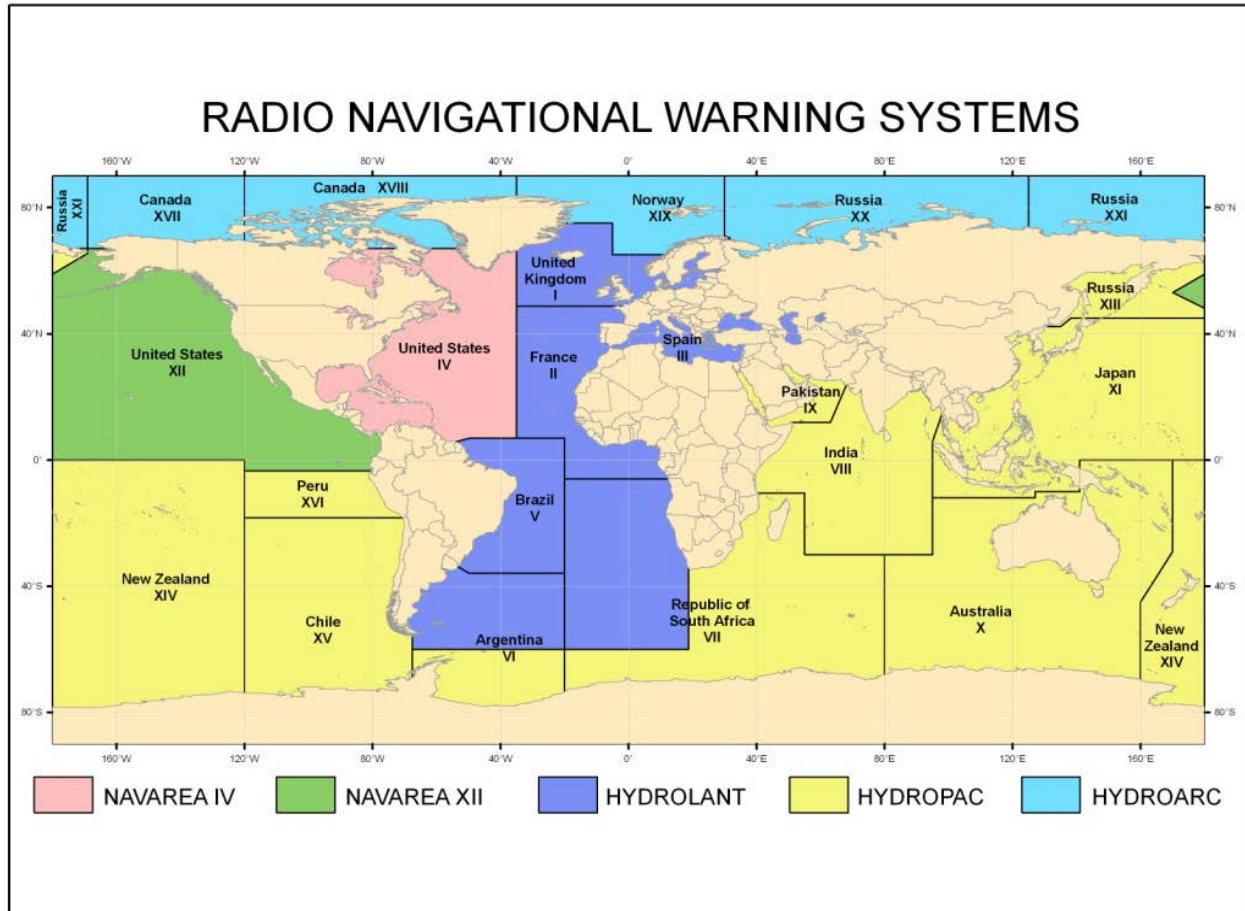
The NGA *List of Lights, Radio Aids and Fog Signals* and their digital updates are available to the public and are posted at the NGA Maritime Safety website, at <http://msi.nga.mil/NGAPortal/MSI.portal>.

Two (2) volumes of *List of Lights* cover the MACHC region.

| Publication | Edition Date |
|---|--------------|
| List of Lights Pub. 110 (Greenland, E. Coast N & S America and W. Indies, excluding USA) | 2014 Edition |
| List of Lights Pub. 111 (W. Coast N & S America (excluding USA), Australia, Tasmania, NZ, and Islands in the N/S Pacific Ocean) | 2014 Edition |

Maritime Safety Information (MSI)

The U.S. Coast Guard issues Notice to Mariners are issued for NOAA charts. NGA produces Notices to Mariners for NGA charts in the MACHC region.



NAVAREA Limits

NGA produces navigational warnings for the area including the MACHC Region. These are broadcast and uploaded to <http://msi.nga.mil/NGAPortal/MSI.portal>. NGA requests the assistance of all member states within the MACHC Region to relay pertinent maritime safety information for promulgation to navsafety@nga.mil. This is the most efficient process to keep mariners informed of time sensitive material while navigating within the MACHC Region, and it is both an IHO and IMO obligation per SOLAS.

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).

C-55 Update

The most recent U.S. update to C-55, *Status of Hydrographic Surveying and Nautical Cartography Worldwide*, is as follows:

A = percentage which is adequately surveyed

B = percentage which requires re-survey at larger scale or to modern standards

C = percentage which has never been systematically surveyed

| | A | B | C |
|---------------|----|---|----|
| Depths < 200m | 17 | 1 | 0 |
| Depths > 200m | 0 | 0 | 94 |

Coverage of charts published by the U.S. in the MACHC region, where:

A = percentage covered by INT series, or a paper chart series meeting the standards in M-4

B = percentage covered by Raster Navigational Charts (RNCs) meeting the standards in S-61

C = percentage covered by ENC's meeting the standards in S-57

| Purpose/Scale | A | B | C |
|---|------|------|------|
| Offshore passage/Small | 100% | 100% | 100% |
| Landfall and Coastal passage/Medium | 100% | 100% | 100% |
| Approaches and Ports/Large | 100% | 100% | 100% |
| Percentage of Group A showing depths in metres | 2.8% | | |
| Percentage of Group A referenced to a satellite datum | 100% | | |

The latest C-55 publication can be found online at http://www.iho.int/iho_pubs/CB/C-55/C-55_Eng.htm.

Capacity Building

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. Mr. Chris Janus of NGA is one of the Instructors for the course. There is no MSI course scheduled for FY2015 in the MACHC Region.

Training Opportunities available in the United States

Training opportunities are available at various institutions in the United States. Two Category A certified hydrographic programs are available through the University of Southern Mississippi

(www.marine.usm.edu/hs.php) and the University of New Hampshire (www.marine.unh.edu/research/ccom.html).

Capt. Andrew Armstrong, NOAA (ret.), the NOAA co-director of the Joint Hydrographic Center at UNH, is a member of the FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers. As a member of the board, Capt. Armstrong is available to advise institutions on establishing hydrographic training curricula and preparing submissions to the International Board for Category A or Category B recognition.

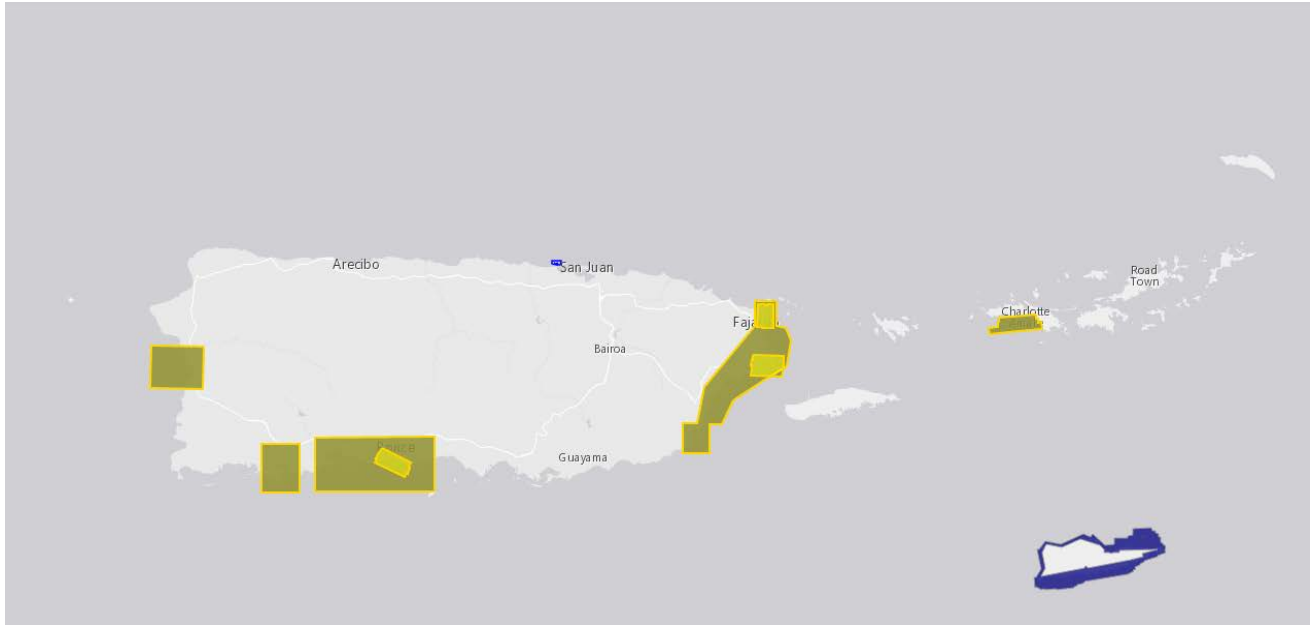
(andy.armstrong@noaa.gov).

Oceanographic Activities

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 Caribbean Sea & Gulf of Mexico.

Remote Sensing Shoreline Mapping: New shoreline mapping projects in the Caribbean Sea began around the coast of St. Croix, USVI (95 square nautical miles) and Port of Mayaguez, Tallaboa Bay and Port of Yabucoa, Puerto Rico in October 2014.



Shoreline mapping projects during 2014 in the Gulf of Mexico include Laguna Madre From Corpus Christi to Port Mansfield, Texas, portions of Apalachicola Bay, Florida, Cedar Key to Anclote Key, Florida, Venice Beach, Florida, and the Florida Keys, including the Dry Tortugas.



Appendix A

The U.S. (NOAA) produces 198 ENC's in domestic waters within the MACHC region. There will be a total of 97 new editions and projected new editions as follows for 2014.

| NOAA | |
|-----------|-----------|
| Cell Name | Posted |
| US4LA22M | 1/2/2014 |
| US5FL65M | 1/7/2014 |
| US5TX51M | 1/9/2014 |
| US6LA36M | 1/10/2014 |
| US1GC09M | 1/16/2014 |
| US5FL96M | 1/23/2014 |
| US5TX33M | 1/23/2014 |
| US3LA02M | 1/31/2014 |
| US5PR46M | 2/4/2014 |
| US4TX15M | 2/7/2014 |
| US5PR41M | 2/7/2014 |
| US5PR51M | 2/11/2014 |
| US5PR61M | 2/11/2014 |
| US5PR47M | 2/19/2014 |
| US5FL16M | 2/20/2014 |
| US5FL73M | 2/26/2014 |
| US5CA71M | 3/7/2014 |
| US5FL72M | 3/10/2014 |
| US4TX11M | 3/18/2014 |
| US5LA37M | 3/19/2014 |
| US4FL69M | 3/20/2014 |
| US5TX73M | 4/2/2014 |
| US4TX52M | 4/7/2014 |
| US4CA74M | 4/17/2014 |
| US5TX12M | 4/18/2014 |
| US5PR11M | 4/25/2014 |
| US4TX58M | 4/29/2014 |
| US5TX58M | 4/30/2014 |
| US5FL32M | 5/8/2014 |
| US2WC11M | 5/13/2014 |
| US2WC05M | 5/15/2014 |
| US3CA70M | 5/15/2014 |
| US5FL12M | 5/20/2014 |

| NOAA | |
|-----------|-----------|
| Cell Name | Posted |
| US5FL40M | 5/27/2014 |
| US5FL41M | 5/27/2014 |
| US5FL19M | 5/29/2014 |
| US5LA27M | 6/11/2014 |
| US5PR13M | 6/13/2014 |
| US6PR13M | 6/13/2014 |
| US4PR30M | 6/24/2014 |
| US4LA15M | 6/26/2014 |
| US5FL42M | 7/1/2014 |
| US5FL11M | 7/11/2014 |
| US5FL21M | 7/14/2014 |
| US5FL48M | 7/15/2014 |
| US5LA26M | 7/15/2014 |
| US4LA30M | 7/23/2014 |
| US5AL11M | 7/23/2014 |
| US4FL40M | 7/25/2014 |
| US4FL15M | 7/28/2014 |
| US5MS11M | 7/28/2014 |
| US5PR16M | 7/28/2014 |
| US4FL20M | 7/29/2014 |
| US5FL22M | 7/30/2014 |
| US5AL13M | 8/1/2014 |
| US5FL63M | 8/4/2014 |
| US5PR55M | 8/5/2014 |
| US5TX13M | 8/5/2014 |
| US5TX56M | 8/6/2014 |
| US3FL28M | 8/8/2014 |
| US5AL12M | 8/8/2014 |
| US4FL31M | 8/12/2014 |
| US4PR11M | 8/12/2014 |
| US5LA33M | 8/12/2014 |
| US5MS21M | 8/12/2014 |
| US5TX61M | 8/18/2014 |

| NOAA | |
|-----------|------------|
| Cell Name | Posted |
| US3GC05M | 8/19/2014 |
| US4FL44M | 8/20/2014 |
| US5FL33M | 8/20/2014 |
| US5FL45M | 8/21/2014 |
| US5PR56M | 8/21/2014 |
| US5FL34M | 9/3/2014 |
| US5MS22M | 9/3/2014 |
| US4FL62M | 9/4/2014 |
| US4FL71M | 9/4/2014 |
| US5FL62M | 9/4/2014 |
| US5TX22M | 9/4/2014 |
| US5FL88M | 9/5/2014 |
| US5FL44M | 9/8/2014 |
| US5FL4AM | 9/8/2014 |
| US5LA24M | 9/19/2014 |
| US5FL15M | 9/30/2014 |
| US4LA32M | 10/1/2014 |
| US4LA31M | 10/2/2014 |
| US5LA23M | 10/9/2014 |
| US3GC06M | 10/10/2014 |
| US5TX23M | 10/10/2014 |
| US4AL11M | 10/21/2014 |
| US4LA29M | 10/21/2014 |
| US5FL27M | 10/21/2014 |
| US5LA36M | 10/22/2014 |
| US3GC02M | 10/27/2014 |
| US5FL09M | 10/28/2014 |
| US5FL67M | 10/29/2014 |
| US4LA35M | 10/31/2014 |
| US4LA10M | 11/3/2014 |
| US3GC04M | 11/5/2014 |
| | |

The U.S. (NGA) is responsible for producing ENC's in areas where the US functions as the Prime Charting Authority outside US domestic waters. NGA currently has produced 11 ENCs within the MACHC region. NGA will continue to add additional ENCs to this portfolio in the future.

| NGA Cells | | |
|-----------|--|------------|
| Cell Name | Title | Posted |
| US409860 | Approach to Panama Canal – North, Panama | 02/19/2014 |
| US410880 | Approach to Port-Au-Prince, Haiti | 09/09/2014 |
| US410930 | Approaches to Cap-Haitien and Bahia de Monte Cristi, Haiti | 09/09/2014 |
| US509860 | Panama Canal Northern End, Panama | 09/26/2013 |
| US510820 | Jacmel, Haiti | 09/09/2014 |
| US510880 | Port-Au-Prince, Haiti | 09/09/2014 |
| US510885 | Baie de Saint-Marc, Haiti | 09/09/2014 |
| US510910 | Gonaives, Haiti | 09/09/2014 |
| US510930 | Cap-Haitien, Haiti | 09/09/2014 |
| US515390 | Panama Canal, Panama | 11/21/2013 |
| US515410 | Panama Canal Southern End, Panama | 10/01/2014 |

Appendix B

The U.S. (NOAA) produces 178 raster charts in domestic waters within the MACHC region. There have been 31 new or projected new editions for 2014.

| Chart Number | Chart Title | Edition Number | Latest Print Date |
|--------------|---|----------------|-------------------|
| 11302 | Intracoastal Waterway Stover Point to Port Brownsville, including Brazos Santiago Pass | 34 | 1/1/2014 |
| 11303 | Intracoastal Waterway Laguna Madre - Chubby Island to Stover Point, including The Arroyo Colorado | 22 | 1/1/2014 |
| 11373 | Mississippi Sound and approaches Dauphin Island to Cat Island | 51 | 1/1/2014 |
| 11376 | Mobile Bay Mobile Ship Channel-Northern End | 57 | 1/1/2014 |
| 25644 | Frederiksted Road;Frederiksted Pier | 15 | 1/1/2014 |
| 11331 | Intracoastal Waterway Ellender to Galveston Bay | 22 | 2/1/2014 |
| 11470 | Fort Lauderdale Port Everglades | 40 | 2/1/2014 |
| 11472 | Intracoastal Waterway Palm Shores to West Palm Beach; Loxahatchee River | 36 | 2/1/2014 |
| 25650 | Virgin Passage and Sonda de Vieques | 37 | 2/1/2014 |
| 11349 | Vermilion Bay and approaches | 46 | 3/1/2014 |
| 11353 | Baptiste Collette Bayou to Mississippi River Gulf Outlet; Baptiste Collette Bayou Extension | 7 | 3/1/2014 |
| 11468 | Miami Harbor | 44 | 3/1/2014 |
| 25647 | Pillsbury Sound | 12 | 3/1/2014 |
| 25663 | Pasaje de San Juan to Puerto de Humacao and Western Part of Isla de Vieques | 29 | 3/1/2014 |
| 25664 | Pasaje de Vieques and Radas Roosevelt | 18 | 3/1/2014 |
| 11317 | Matagorda Bay including Lavaca and Tres Palacios Bays; Port Lavaca; Continuation of Lavaca River; Continuation of Tres Palacios Bay | 33 | 5/1/2014 |
| 11357 | Timbalier and Terrebonne Bays | 43 | 5/1/2014 |
| 11358 | Barataria Bay and approaches | 58 | 5/1/2014 |
| 11364 | Mississippi River-Venice to New Orleans | 45 | 5/1/2014 |
| 11385 | Intracoastal Waterway West Bay to Santa Rosa Sound | 28 | 5/1/2014 |
| 11311 | Corpus Christi Harbor | 25 | 6/1/2014 |
| 11367 | Intracoastal Waterway Waveland to Catahoula Bay | 37 | 6/1/2014 |
| 11356 | Isles Dernieres to Point au Fer | 41 | 7/1/2014 |
| 11464 | Intracoastal Waterway Blackwater Sound To Matecumbe | 18 | 7/1/2014 |
| 1116A | Mississippi River to Galveston (Oil and Gas Leasing Areas) | 78 | 8/1/2014 |
| 11340 | Mississippi River to Galveston | 78 | 8/1/2014 |
| 11344 | Rollover Bayou to Calcasieu Pass | 40 | 8/1/2014 |
| 11392 | St. Andrew Bay - Bear Point to Sulpher Point | 8 | 9/1/2014 |
| 11452 | Intracoastal Waterway Alligator Reef to Sombrero Key | 23 | 9/1/2014 |
| 25667 | Bahia de Fajardo and Approaches | 21 | 9/1/2014 |
| 11380 | Mobile Bay East Fowl River to Deer River Pt; Mobile Middle Bay Terminal | 3 | 10/1/2014 |

Appendix C

The US (NGA) produces 566 paper charts within the MACHC region. There have been seven new editions completed in FY2014 with an additional six charts still in work.

| Chart | Chart Title | Edition Date | Distribution |
|-------|--|---------------|--------------|
| 25845 | Puerto Viejo de Azua and Bahia de Las Calderas, Dominican Republic | February 2012 | |
| 26131 | Ocho Rios Bay, Jamaica | February 2012 | LIM DIS |
| 25487 | Bridgetown, Barbados | February 2012 | LIM DIS |
| 21441 | Salina Cruz and Approaches, Mexico | March 2012 | LIM DIS |
| 21489 | Approaches to Puerto San Jose and Puerto Quetzal, Guatemala | March 2012 | |
| 24271 | Baia De Sao Marcos, Brazil | March 2012 | LIM DIS |
| 24464 | Caracas Bay, Curacao | April 2012 | LIM DIS |
| 28136 | The Witties, Nicaragua | July 2012 | LIM DIS |
| 21546 | Putearenas and Puerto Caldera, Costa Rica | August 2012 | |
| 21021 | Bahia de Todos Santos and Ensenada, Mexico | November 2012 | LIM DIS |
| 24463 | Aruba | December 2012 | LIM DIS |
| 28260 | Barra Tupilco to Isla Piedra, Mexico | April 2013 | LIM DIS |
| 26229 | Approaches to Guantanamo Bay, Cuba | May 2013 | LIM DIS |
| 21540 | Corinto to Punta Guiones, Nicaragua | July 2013 | |
| 26066 | Approaches to Cristobal, Panama | October 2013 | |
| 21525 | Corinto and Approaches, Nicaragua | November 2013 | |
| 26323 | Freeport, Riding Point and Approaches, Bahamas | November 2013 | LIM DIS |
| 21563 | Golfito, Costa Rica | April 2014 | |
| 25565 | Saint-Louis to Grand-Bourg, Guadeloupe | April 2014 | LIM DIS |
| 25564 | Les Saintes, Guadeloupe | May 2014 | LIM DIS |
| 25487 | Bridgetown, Barbados | May 2014 | LIM DIS |
| 11004 | Mississippi River to Rio Grande, United States | July 2014 | |
| 26042 | Bahia Concepcion to Punta Brava, Panama | July 2014 | |
| 28051 | Puerto Limon and Bahia De Moin, Costa Rica | October 2014 | |
| 26063 | Punta San Blas to Bahia Concepcion, Panama | In Work | |
| 26065 | North Coast of Panama | In Work | |
| 25527 | Baie De Forte-De-France, Martinique | In Work | LIM DIS |
| 25525 | Baie Du Francois to Havre De La Trinite, Martinique | In Work | LIM DIS |
| 25526 | Martinique – North and West Coasts | In Work | LIM DIS |
| 24480 | Cabo Tiburon to Barranquilla, Columbia | In Work | LIM DIS |
| | | | |

Appendix D

The table below depicts projected INT chart production.

| INT No. | Nat No. | Producing Agency | Title | Projected Availability |
|---------|---------|------------------|--|------------------------|
| 4015 | | NOAA | | FY2016 |
| 4016 | 11006 | NOAA | Gulf Coast - Key West to Mississippi River | FY2016 |
| 4017 | | NOAA | | FY2016 |
| 4021 | 26025 | NGA | Eastern Cuba to Puerto Rico | FY2016 |
| 4145 | 11300 | NOAA | Galveston to Rio Grande | FY2015 |
| 4146 | 11340 | NOAA | Mississippi River to Galveston | FY2015 |
| 4147 | 11360 | NOAA | Cape St. George to Mississippi Passes | FY2015 |
| 4149 | | NOAA | | FY2017 |
| 4178 | 25640 | NOAA | Puerto Rico and Virgin Islands | FY2017 |