No. 1

3 JANUARY 2015

UNITED STATES OF AMERICA

NOTICE TO MARINERS

Published Weekly by the
National Geospatial-Intelligence Agency

Prepared Jointly with the
National Ocean Service and U.S. Coast Guard

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Visit the Maritime Safety Web site at http://msi.nga.mil/NGAPortal/MSI.portal

IMPORTANT INFORMATION

The Notice to Mariners is published by the National Geospatial-Intelligence Agency (NGA), under the authority of Department of Defense Directive 5105.60, to advise mariners of important matters affecting navigational safety, including new hydrographic discoveries, changes in channels and navigational aids, etc. (U.S. Code Title 10, Sec. 442 and Title 44, Sec. 1336 refer). Nothing in the arrangement of information implies endorsement or acceptance by NGA in matters affecting the status and boundaries of States and territories. The Notice to Mariners presents corrective information affecting charts, NGA/DLIS Catalog of Maps Charts and Related Products, Coast Pilots, USCG Light Lists, NGA List of Lights and other products produced by the National Geospatial-Intelligence Agency, National Ocean Service and U.S. Coast Guard.

Information for the Notice to Mariners is contributed by the following Agencies: National Geospatial-Intelligence Agency (NGA) (Department of Defense) for waters outside the territorial limits of the United States; National Ocean Service (NOS) (Department of Commerce), which is charged with the surveys and charting of the coasts and harbors of the United States and its territories; the U.S. Coast Guard (USCG) (Department of Homeland Security), which is responsible for the safety of life at sea and the establishment and operation of aids to navigation; and the U.S. Army Corps of Engineers (Department of Defense), which is charged with the improvement of rivers and harbors of the United States. In addition, important contributions are made by foreign hydrographic offices and cooperating observers of all nationalities.

For further information concerning NGA hydrographic products and services, including the Maritime Safety Web site, users may contact:

Name	Telephone	DSN	FAX
Maritime Safety Office	571-557-8384	N/A	571-558-3213
World Wide Navigational Warning Service	571-557-5455	547-5455	571-558-3426
Maritime Safety Web site	571-557-7103	547-7103	N/A
Notice to Mariners: Regions 1 and 2	571-557-8282	547-8282	571-558-3213
Notice to Mariners: Regions 3 thru 9	571-557-8383	547-8383	571-558-3213
Sailing Directions, Fleet Guides	571-557-5831	547-5831	571-558-3213
Navigation Publications	571-557-8080	547-8080	571-558-3213
NGA/DLIS Catalog of Maps Charts and Related Products	269-961-7766	661-7766	269-961-7791

The Maritime Safety Web site can be accessed directly at **http://msi.nga.mil/NGAPortal/MSI.portal**. For your convenience NGA provides four e-mail addresses. For information affecting Notice to Mariners use MCDNtM@nga.mil, for information affecting Sailing Directions and all other navigational publications use MCDPubs@nga.mil, for information concerning the Maritime Safety Web site, use webmaster_nss@nga.mil and for information concerning the World Wide Navigational Warning Service, use NavSafety@nga mil.

Mariners are requested to notify NGA of discrepancies in charts and publications, using the Marine Information Report and Suggestion Sheet at the back of this Notice to Mariners. This form should also be used to report permanent changes, additions, or deletions from charted or published information. Reports which constitute an immediate hazard to navigation should be sent to the nearest NAVAREA Coordinator via coast radio stations. All reports are greatly appreciated.

Cover Photo: NOAA Ship *Reuben Lasker* (R228) is a fishery research vessel built at the Marinette Marine Corporation shipyard in Marinette, Wisconsin, and was commissioned in May, 2014. She is named for Dr. Reuben Lasker (1929-1988), a renowned fisheries scientist who served as director of the coastal fisheries division of NOAA's Southwest Fisheries Science Center. ***Reuben Lasker***'s primary objective is to support fish, marine mammal, and turtle surveys off the U.S. West Coast and in the eastern tropical Pacific Ocean. She has a low sound signature to reduce reactions of fish to the presence of the ship. ***Reuben Lasker*** is also equipped with oceanographic sampling and measuring systems, instrumented trawls, longlines, and plankton nets. The ship has a dynamic positioning system to steer along a pre-determined trackline. She is 208 feet in length, has a beam of 49 feet, a draft of 20 feet with centerboard up and 30 feet with centerboard down. She displaces 1,840 tons (light) and 2,479 tons fully loaded. She has a range of 12,000 nautical miles at 12 knots and can operate at sea for 40 days. She is manned by 5 NOAA Corps officers or mates, 5 licensed engineers, 14 crew and up to 15 scientists. Her homeport is San Diego, CA.

INFORMATION OF SPECIAL INTEREST OR IMPORTANCE TO MARINERS

HYDROGRAM

National Geospatial-Intelligence Agency
Springfield, VA 22150-7500

SPECIAL ANNOUNCEMENTS
NEW PRODUCTS OR SERVICES
IMPORTANT CHANGES

NM 1/15

3 January 2015

IMPORTANT INFORMATION

THIS NOTICE CONTAINS A VARIETY OF SUBJECTS AMPLIFYING INFORMATION NOT USUALLY FOUND ON CHARTS OR IN NAVIGATIONAL PUBLICATIONS. PARAGRAPHS 1 THRU 74 ARE "SPECIAL NOTICE TO MARINERS PARAGRAPHS" WHICH ARE PROMULGATED ONCE EACH YEAR IN THE INTEREST OF SAFE NAVIGATION. SEE SECTION I FOR DETAILS. ADDITIONAL ITEMS CONSIDERED OF INTEREST TO THE MARINER WILL BE FOUND IN SECTION III OF THIS NOTICE.

NOAA CHART NEW EDITIONS AND THEIR AVAILABILITY

NOAA RECOGNIZES TWO PAPER NAUTICAL CHART PRODUCTS: CHARTS-ON-DEMAND AND TRADITIONAL NOAA/NOS PAPER CHARTS. FOR ADDITIONAL INFORMATION, SEE SECTIONS II AND III.

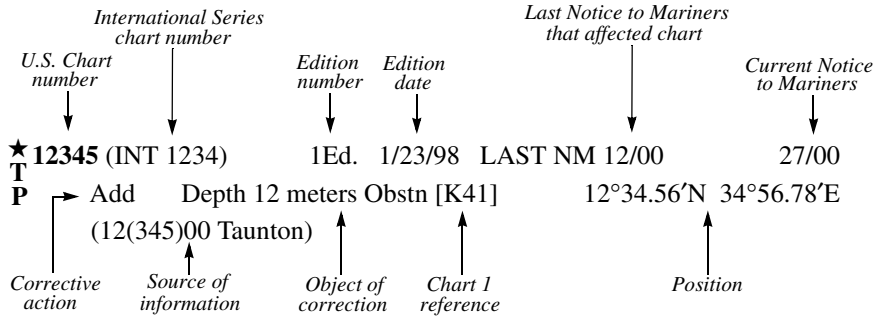
NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY'S IMPLEMENTATION OF A HARDCOPY TO DIGITAL TRANSITION STRATEGY

THIS NOTICE IS A REMINDER OF THE NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY (NGA) HARDCOPY TO DIGITAL TRANSITION PROGRAM. SEE SECTION III FOR DETAILS.

EXPLANATION OF CONTENTS

The Notice to Mariners contains corrective information affecting nautical charts, the NGA/DLIS Catalog of Maps Charts and Related Products, Coast Pilots, USCG Light Lists, NGA List of Lights and other related nautical publications. The information contained in these corrections is important to safe navigation. It is the user's responsibility to decide which of their charts and publications require correction. Consult the U.S. Coast Guard Local Notice to Mariners for information pertaining to waterways within the United States that are not normally used by oceangoing vessels. Because of the sometimes transitory nature of aids to navigation, depths and port information, local area sources should be consulted whenever possible. This publication is not required to be maintained intact. Portions may be separated for correction or attachment to an affected product. The Notice to Mariners is divided into the following sections:

Section I-1 contains corrections to nautical charts listed in numeric order by chart number. Each chart correction listed applies only to that particular chart. Related charts, if any, will have their own specific correction listed separately. Users should also refer to U.S. Chart 1 Nautical Chart Symbols, Abbreviations and Terms for additional information pertaining to the correcting of charts. The illustration below describes the elements that comprise a typical chart correction:



A chart correction preceded by:

★ indicates that it is based upon original U.S. source information.
T indicates that it is temporary in nature.
P indicates that it is preliminary, and that permanent corrective action will appear in a future Notice to Mariners.

The letter **M** immediately following the chart number indicates that the correction should be applied to the metric side of the chart only. The letter **M** is not a part of the chart number.

The letter **N** preceding the current Notice to Mariners number indicates that the affected chart is on Limited Distribution and is normally only for use by U.S. Navy, government-owned or -chartered vessels.

Position coordinates are referred to the horizontal datum of the affected chart.

Courses and bearings are given in degrees true.

Light sectors are expressed in degrees true from the vessel TOWARD the light.

The visible range(s) listed for lights is normally the nominal range (the distance at which it can be seen in clear weather), expressed in nautical miles, except in the Great Lakes where it is expressed in statute miles.

The colors of structures and lights of navigational aids are abbreviated in accordance with Chart 1.

Section I-2* contains all chartlets, depth tabulations and notes associated with the chart corrections in Section I-1. Chartlets and depth tabulations supersede all previous information portrayed.

Section I-3 lists all NGA and NOS charts which have been affected by Notice to Mariners and the notice numbers which have affected them since the date of the oldest Summary of Corrections or the chart's announcement, whichever is later.

Section II-1 is a weekly listing of corrections to the NGA/DLIS Catalog of Maps Charts and Related Products, including new charts and publications. It also contains the latest price category information.

Section II-2* contains corrections to navigation publications, including Coast Pilots, *The American Practical Navigator,* and other related nautical publications.

Section II-3* lists weekly updates to the USCG Light Lists.

Section II-4* lists weekly updates to the NGA List of Lights.

Section II-5 lists all NGA, NOS and USCG navigation publications which have been affected by Notice to Mariners and the notice numbers which have affected them since the date of the publication's announcement.

Section III-1 lists the message number of all in-force Navigational Warnings, and the text of those warnings promulgated during the previous week. Notice to Mariners Nos. 13, 26 and 39 list a summary of all in-force Navigational Warnings for the preceding quarter. Notice to Mariners No. 52 lists a complete summary of all in-force Navigational Warnings.

Section III-2 contains miscellaneous information of particular interest to the maritime community.

*The left-hand pages of these sections are intentionally blank.

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* *Denotes significant change*

SECTION I

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* *Denotes significant change*

(1) THE PRUDENT MARINER.

a. Warning On Use Of Floating Aids To Navigation and on Aids to Navigation in General and Fixing a Navigational Position.

The aids to navigation depicted on charts comprise a system consisting of fixed and floating aids with varying degrees of reliability. Therefore, prudent mariners will not rely solely on any single aid to navigation, particularly a floating aid. An aid to navigation also refers to any device or structure external to a craft, designed to assist in determination of position. This includes celestial, terrestrial, and electronic means, such as Global Positioning System (GPS) and Differential GPS (DGPS). Here, too, the prudent mariner will not rely solely on any single aid to navigation.

The buoy symbol is used to indicate the approximate position of the buoy body and the sinker which secures the buoy to the seabed. The approximate position is used because of practical limitations in positioning and maintaining buoys and their sinkers in precise geographical locations. These limitations include, but are not limited to, inherent imprecisions in position fixing methods, prevailing atmospheric and sea conditions, the slope of and the material making up the seabed, the fact that buoys are moored to sinkers by varying lengths of chain, and the fact that buoy and/or sinker positions are not under continuous surveillance but are normally checked only during periodic maintenance visits which often occur more than a year apart. The position of the buoy body can be expected to shift inside and outside the charting symbol due to the forces of nature. The mariner is also cautioned that buoys are liable to be carried away, shifted, capsized, sunk, etc. Lighted buoys may be extinguished or sound signals may not function as the result of ice or other natural causes, collisions, or other accidents. Many of these factors also apply to articulated lights.

For the foregoing reasons, a prudent mariner must not rely completely upon the position or operation of floating aids to navigation, but will utilize bearings from fixed objects and aids to navigation on shore. Further, a vessel attempting to pass close aboard always risks collision with a yawing buoy or with the obstruction the buoy marks.

b. Use of Foreign Charts.

In the interest of safe navigation, caution should be exercised in the use of foreign charts not maintained through U.S. Notice to Mariners.

Foreign produced charts are occasionally mentioned in NGA Sailing Directions and often times are used by the U.S. Navy when such charts may be of a better scale than U.S. produced charts. Mariners are advised that if or when such foreign charts are used for navigation it is their responsibility to maintain those charts from the Notice to Mariners of the foreign country producing the charts.

The mariner is warned that the buoyage systems, shapes, colors, and light rhythms used by other countries often have a different significance than the U.S. system.

Mariners are further warned about plotting positions, especially satellite-derived positions such as from GPS, onto foreign charts where the datum is unknown or the conversion from WGS-84 is unknown.

c. Chart Notes Regarding Different Datums.

NGA's Digital Nautical Charts (DNC) are all built to WGS-84 standards; however, NGA paper charts have various datums. Particular caution should be exercised during a passage when transferring the navigational plot to an adjacent chart upon a different geodetic datum or when transferring positions from one chart to another chart of the same area which is based upon a different datum. The transfer of positions should be done by bearings and distances from common features.

Notes on hardcopy charts should be read with care, as they give important information not graphically presented. Notes in connection with the chart title include the horizontal geodetic datum which serves as a reference for the values of the latitude and longitude of any point or object on the chart. The latitudes and longitudes of the same points or objects on a second chart of the same area which is based upon a different datum will differ from those of the first chart. The difference may be navigationally significant, particularly when the scale of the chart is large. Additionally, datum changes between chart editions could significantly affect the positions of navigational aids found in the List of Lights and other NGA publications.

Positions obtained from satellite navigation systems, such as from GPS, are normally referred to the World Geodetic System 1984 (WGS-84) Datum. The differences between GPS satellite-derived positions and positions on some foreign charts cannot be determined: mariners are warned that these differences MAY BE SIGNIFICANT TO NAVIGATION and are therefore advised to use alternative sources of positional information, particularly when closing the shore or navigating in the vicinity of dangers.

d. Bilateral Charts

Starting in 2004, NGA commenced the process of adopting certain foreign charts into its paper chart inventory, with new NGA chart numbers applied, as existing NGA coverage is canceled. The resulting product is known as a "bilateral chart" and is marked Distribution Limited, available only to DoD and Government users. Commercial users of NGA paper charts for these areas will need to purchase them from private chart vendors. This process is part of the hardcopy transition strategy and is currently underway in Australia, Canada, Japan and the UK, with other countries to follow. Updated information on bilateral charts is reissued weekly in the U.S. Notice to Mariners and on NGA's Maritime Safety Web site (http://msi.nga.mil/NGAPortal/MSI.portal).

(Repetition NTM 1(1)14) (NGA/SHG)

(2) NAUTICAL CHART SYMBOLS AND ABBREVIATIONS INFORMATION.

Symbols and abbreviations approved for use on all paper and electronic navigational charts published by the National Geospatial-Intelligence Agency (NGA) and the National Ocean Service (NOS) are contained in the April 15, 2013 edition of U.S. Chart No. 1, Symbols, Abbreviations and Terms used on Paper and Electronic Navigational Charts. This publication, in PDF format, is available through electronic access at the Maritime Safety Web site (http://msi.nga.mil/NGAPortal/MSI.portal) and from the "U.S. Chart No. 1" page of the NOAA Office of Coast Survey Web site at http://www.nauticalcharts.noaa.gov/mcd/chartno1.htm. New in this edition are Electronic Chart Display and Information System symbols and other ECDIS information. In addition to the symbols shown in the traditional lettered sections of the U.S. Chart No. 1, there are now several pages devoted exclusively to providing important details about ECDIS.

This edition updates the descriptions and depictions of the basic nautical chart elements and symbols described in the Chart Specifications of the IHO published by the International Hydrographic Organization, on charts produced by NOAA, NGA and NGA reproductions of foreign navigational charts. Lastly, the document shows the symbols specified by the IHO for the portrayal of Electronic Navigational Chart (ENC) data on Electronic Chart Display and Information Systems.

Buoys and Beacons of the IALA Buoyage System Regions A and B are illustrated in Appendix 1, including light characteristics in full color.

(Supersedes NTM 1(2)14) (NGA/SHG)

(3) GEOGRAPHIC NAMES USAGE FOR NGA PRODUCTS.

Wherever possible, names used on NGA charts and in NGA publications are in the form approved by the United States Board on Geographic Names. Generally, local official spellings are used for those features entirely within a single sovereignty, while names of countries and those features which are common to two or more countries or which lie beyond single sovereignty carry Board-approved conventional spellings (i.e. names in common English language usage). When alternate names would be of value to the user, they may be shown for information purposes within parentheses. Important individual name changes are made to all revised charts as the opportunity permits. Geographic names or their spellings do not necessarily reflect recognition of the political status of an area by the United States Government.

(Repetition NTM 1(3)14) (NGA)

(4) INTERNATIONAL ICE PATROL SERVICE.

The North American Ice Service (NAIS), a partnership comprised of the International Ice Patrol (IIP), the Canadian Ice Service (CIS), and the U.S. National Ice Center (NIC), provides year-round maritime safety information on iceberg and sea ice conditions in the North Atlantic Ocean. The daily NAIS Iceberg Limit, valid at 0000Z, along with the daily Sea Ice Limit, valid for 1400Z the previous day, will be distributed as a NAVAREA IV warning in the format of a text Iceberg Bulletin and as a graphic Iceberg Chart.

The purpose of the NAIS Iceberg Bulletin and Chart is to advise mariners of the estimated iceberg extent within the region. On the Chart, numbers within each grid sector inside the Iceberg Limit are intended to provide mariners an awareness of the relative density of icebergs. IIP produces the NAIS iceberg warning products from January through August when icebergs typically threaten the transatlantic shipping lanes, and CIS produces the products from September through December when icebergs typically only threaten Canadian coastal waters. To access the current iceberg warnings as well as more information on the Iceberg Bulletin and Iceberg Chart, visit http://www.navcen.uscg.gov/iipCharts.

NAIS reconnaissance is conducted in the North Atlantic Ocean with a focus on the Grand Banks of Newfoundland and the east coast of Labrador due to the location of the transatlantic shipping lanes. Ice conditions south of Greenland are not monitored by NAIS. For iceberg conditions off of Greenland, visit the Danish Meteorological Institute's website at http://www.dmi.dk/en/groenland/hav/ice-charts/. While NAIS strives to be as accurate as possible in reporting the presence of icebergs to mariners, it is not possible to ensure that all icebergs are detected and reported. There is no substitute for due vigilance and prudent seamanship, especially when operating near sea ice and icebergs.

Reports of icebergs in the North Atlantic originate from various sources, including passing ships, reconnaissance flights, and space-borne reconnaissance. Once position, time, size, and shape of icebergs detected are received, the data is entered into a computer model that predicts iceberg drift and deterioration. As the time after detection increases, so does the uncertainty in estimated positions. This uncertainty is taken into account when the Iceberg Limit is determined.

If an iceberg or radar target is detected and reported outside the published NAIS Iceberg Limit, a Notice to Shipping (NOTSHIP) will be sent by the Canadian Coast Guard Marine Communications and Traffic Service (MCTS) and an urgent NAVAREA IV message will be distributed on SafetyNET via the U.S. National Geospatial-Intelligence Agency (NGA) as the NAVAREA IV Coordinator. These warnings will remain in effect for 24 hours. Iceberg warning products will be revised shortly after notification between 1200Z and 0000Z or by 1400Z if reported between 0000Z and 1200Z.

(4) INTERNATIONAL ICE PATROL SERVICE. (Continued).

Ships are encouraged to immediately report sightings of icebergs or stationary radar targets that may likely be icebergs to the nearest Canadian Coast Guard MCTS Station or through INMARSAT using Service Code 42, as there is no charge when using this code. Vessels participating in a Voluntary Observing Ship (VOS) program should continue to report weather and sea surface temperature (SST) to their respective programs. Vessels interested in providing weather and SST reports to the U.S. National Oceanic and Atmospheric Administration's VOS program can contact vos@noaa.gov or visit www.vos.noaa.gov for guidance.

When making iceberg reports, please include SHIP NAME and CALL SIGN, ZULU TIME, SHIP POSITION (latitude, longitude), COURSE, SPEED, VISIBILITY, ICEBERG/RADAR TARGETS POSITION (Specify either the geographic coordinates or range/bearing from ship's position), ZULU TIME OF SIGHTING, METHOD OF DETECTION (Visual, Radar, or Both), LENGTH (in meters), SHAPE OF ICEBERG (See Table 3), and VESSEL CONTACT INFORMATION. If possible, please attach any photographs taken of the iceberg to the report.

(Supersedes NTM 1(4)14) (USCG)

(5) SPECIAL WARNINGS. (In force 23 December 2014).

SPECIAL WARNING NO. 1.

Navigational warnings broadcast by NGA are normally divided into categories, HYDROLANTS and HYDROPACS, referring respectively to the Atlantic and Pacific Oceans. It has been determined there now exists a need for disseminating information of general interest not covered by the above categories. Therefore, with this message the Special Warnings series is reintroduced. The messages will be transmitted from all U.S. Navy and Coast Guard Stations broadcasting HYDROS.

(27 May 27 1948)

SPECIAL WARNING NO. 29.

CUBA.

1. Mariners are advised to use extreme caution in transiting the waters surrounding Cuba. Within distances extending in some cases upwards of 20 miles from the Cuban coast, vessels have been stopped and boarded by Cuban authorities. Cuba vigorously enforces a 12-mile territorial sea extending from straight baselines drawn from Cuban coastal points. The effect is that Cuba's claimed territorial sea extends in many cases beyond 12 miles from Cuba's physical coastline.
2. The publication of this notice is solely for the purpose of advising United States mariners of information relevant to navigational safety and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation, or proclamation so published.

(1 Mar 1962, updated 1 Jan 1982, reviewed 14 Nov 2014)

(SPECIAL WARNING NO. 92.

LIBERIA.

1. Mariners are advised to use caution when sailing near the coast of Liberia.
2. The United Nations Security Council has passed Resolution 788 (November 19, 1992), which says that "All states shall, for the purposes of establishing peace and stability in Liberia, immediately implement a general and complete embargo on all deliveries of weapons and military equipment to Liberia until the Security Council decides otherwise." Resolution 788 also "requests all states to respect the measures established by the Economic Community of West African States (ECOWAS) to bring about a peaceful solution to the conflict in Liberia."
3. Cancel Special Warning No. 90.

(Dept. of State) (03 Dec 1992, revised 29 Oct 1997, reviewed 22 Oct 2014)

SPECIAL WARNING NO. 107.

SRI LANKA.

1. Sri Lanka has announced that entrance by unauthorized vessels into the waters of Palk Strait and the eastern territorial waters of Sri Lanka is prohibited because of increased acts of terrorism against shipping and Sri Lankan Naval Vessels. Sri Lanka requires that vessels in the vicinity contact the Sri Lankan Command (Tel. 941-42-30-19, Fax: 941-433-986) for authorization if they wish to enter these areas.
2. The government also has established a restrictive zone in coastal waters along the west coast from Kalpitiya to Colombo Port's southern backwaters. Written permission from the Sri Lankan Command is required for entry into these waters as well. Sri Lankan authorities have advised that they will fire on violators.

5) SPECIAL WARNINGS. (Continued).

3. The U.S. Embassy in Colombo reports that between July and September 1997, at least three foreign flag merchant vessels were attacked by the Liberation Tigers of Tamil Eelam (LTTE). One vessel operating as a passenger ferry off Mannar on the northwest coast was set on fire and sunk. A second vessel departing north from the Jaffna Peninsula was hijacked, stripped of equipment, and its crew temporarily held by the terrorists. One crew member was killed during the hijacking. A third vessel was loading a mineral cargo off the northeast coast near Pulmoddai when it was attacked and at least five members of its crew killed.
4. Any anti-shipping activity should be reported to NGA NAVSAFETY, U.S. State Department, or the nearest U.S. Consulate. Refer to NGA Pub. 117, Chapter 4, for instructions on filing a Ship Hostile Action Report (SHAR) or Anti-Shipping Activity Message (ASAM).
5. The publication of this notice is solely for the purpose of advising United States mariners of information relevant to navigational safety and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation or proclamation so published.
6. Cancel Special Warning No. 94.

(Dept. of State) (01 Dec 1997, reviewed 23 Oct 2014)

SPECIAL WARNING NO. 114.
IRAN.

1. Mariners are advised to exercise extreme caution when transiting the waters of the North Persian Gulf.
2. Iranian-flag speedboats and patrol craft operating in Iranian and international waters have boarded vessels and demanded payment before the vessels are allowed to proceed.
3. Mariners should exercise extreme caution and vigilance when operating in this area, and should obtain and evaluate current warning information broadcasted by the National Geospatial-Intelligence Agency (NGA) via HYDROPAC broadcasts.
4. Any anti-shipping activity should be reported to NGA NAVSAFETY Bethesda MD or navsafety@nga.mil via Ship Hostile Action Report (SHAR) procedures (see NGA Pub. 117-Chapter 4), or directly to the U.S. State Department, or nearest U.S. Embassy or Consulate.
5. The publication of this notice is solely for the purpose of advising U.S. mariners of information relevant to navigation safety, and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation, or proclamation so published.
6. Cancel Special Warning No. 104.

(Dept. of State) (05 Feb 2001, reviewed 19 Nov 2014)

SPECIAL WARNING NO. 119.
SIERRA LEONE.

1. Mariners are strongly advised not to use any ports in Sierra Leone except for the port of Freetown, which is currently considered to provide safe harborage. Mariners should note that the Department of State warns U.S. citizens against travel to Sierra Leone. Although the security situation in Freetown has improved somewhat, areas outside the capital are still very dangerous.
2. The Department of State has terminated the ordered departure status of U.S. Government personnel in non-emergency positions. However, the U.S. Embassy in Freetown currently operates with a reduced staff. Only emergency consular services to U.S. citizens are available, and the Embassy's ability to provide these services is limited. U.S. citizens in Sierra Leone should review their own personal security situations in determining whether to remain in the country.
3. Cancel Special Warning No. 109.

(Dept. of State) (16 Mar 2001, reviewed 22 Oct 2014)

SPECIAL WARNING NO. 120.
WORLDWIDE.

1. Due to recent events in the Middle East and the American homeland, U.S. forces worldwide are operating at a heightened state of readiness and taking additional defensive precautions against terrorist and other potential threats. Consequently, all aircraft, surface vessels, and subsurface vessels approaching U.S. forces are requested to maintain radio contact with U.S. forces on Bridge-to-Bridge Channel 16, international air distress (121.5 MHz VHF) or MILAIR distress (243.0 MHz UHF).
2. U.S. forces will exercise appropriate measures in self-defense if warranted by the circumstances. Aircraft, surface vessels, and subsurface vessels approaching U.S. forces will, by making prior contact as described above, help make their intentions clear and avoid unnecessary initiation of such defensive measures.
3. U.S. forces, especially when operating in confined waters, shall remain mindful of navigational considerations of aircraft, surface vessels, and subsurface vessels in their immediate vicinity.

5) SPECIAL WARNINGS. (Continued).

4. Nothing in the special warning is intended to impede or otherwise interfere with the freedom of navigation or overflight of any vessel or aircraft, or to limit or expand the inherent self-defense rights of U.S. forces. This special warning is published solely to advise of the heightened state of readiness of U.S. forces and to request that radio contact be maintained as described above.

(Dept. of State) (16 Nov 2001, reviewed 20 Nov 2014)

SPECIAL WARNING NO. 122.
EAST AFRICA.

As of early 2005, the United States Government has received unconfirmed information that terrorists may attempt to mount a maritime attack using speedboats against a Western ship possibly in East Africa. This information is unconfirmed and the United States is not aware of additional information on the planning, timing, or intended targets of the maritime attack.

(Dept. of State) (11 Mar 2005, reviewed 6 Nov 2014)

SPECIAL WARNING NO. 123.
SOMALIA.

1. Due to continuing conditions of armed conflict and lawlessness in Somalia and waters off its coast, mariners are advised to avoid the Port of Muqdisho (Mogadishu) and to remain at least 200 nautical miles distant from the Somali coast. The U.S. Government does not have an Embassy in Somalia and cannot provide services to US citizens. Travelers to Somalia should enroll with the U.S. Embassy in Nairobi, Kenya. U.S. citizens traveling by sea to the area of high threat are urged to inform MSC-HOA by emailing POSTMASTER@MSCHOA.ORG, with the subject line 'Yacht Vessel Movement.' The U.S. Embassy in Nairobi is located on United Nations Avenue, Gigiri, Nairobi, Kenya; telephone (254)(20) 363-6000; after-hours emergencies (254)(20) 363-6170. The mailing address is P.O. Box 606 Village Market 00621, Nairobi, Kenya.
2. Recent vessel hijackings off the east coast of Somalia demonstrate that pirates are able to conduct at sea hijackings from as far south as Kismaayo (Chisimayu) (00-22S) - though vessels are advised to transit no closer than 02-00S - to as far north as Eyl (08-00N), and out to a distance of 170 miles. The first known attempt to hijack a cruise vessel occurred in November 2005. All merchant vessels transiting the coast of Somalia, no matter how far offshore, should increase anti-piracy precautions and maintain a heightened state of vigilance. Pirates are reported to have used previously hijacked ships as bases for further attacks.
3. Another reported pirate tactic has been to issue a false distress call to lure a ship close inshore. Therefore, caution should be taken when responding to distress calls keeping in mind it may be a tactic to lure a vessel into a trap.
4. Victimized vessels have reported two to three (2-3) speedboats measuring six to nine meters (6-9M) in length. Each vessel has a crew of three to six (3-6) armed men with AK-47s and shoulder launched rockets, which are opening fire on vessels in broad daylight in order to intimidate them into stopping.
5. To date, vessels that increase speed and take evasive maneuvers avoid boarding while those that slow down are boarded, taken to the Somali coastline, and released after successful ransom payment, often after protracted negotiations of as much as 11 weeks.
6. Cancel Special Warning number 111.

(Dept. of State) (11 Nov2005, revised 24 Nov 2014)

SPECIAL WARNING NO. 124.
NICARAGUA.

1. Mariners operating small vessels such as yachts and fishing vessels should note that Nicaragua has boundary disputes with its neighbors in both its Caribbean and Pacific waters, and should exercise caution.
2. The Caribbean waters lying generally south of the 15th parallel and east of the 82nd up to the 79th meridians are subject to a current dispute between Nicaragua and Colombia.
3. The international court of justice has delimited a new maritime boundary line awarding maritime areas to the government of Nicaragua previously claimed by Honduras above the 15th parallel and apparently east of the 82nd meridian.
4. The Nicaraguan navy is patrolling portions of this maritime space, enforcing the requirement that fishing vessels hold a valid Nicaraguan fishing license, and has seized vessels not in compliance.
5. There have been cases where Nicaraguan authorities have seized foreign-flagged fishing and other vessels off the Nicaraguan coast. The government of Nicaragua imposes heavy fines on parties caught fishing illegally within waters of Nicaragua's jurisdiction.
6. While in all cases passengers and crew have been released within a period of several weeks, in some cases the ships have been searched, personal gear and navigational equipment has disappeared, and Nicaraguan authorities have held seized vessels for excessive periods.

(5) SPECIAL WARNINGS. (Continued).

7. Prompt U.S. embassy consular access to detained U.S. citizens on Nicaragua's Caribbean coast may not be possible because of delays in notification due to the relative isolation of the region.
8. There have been reported incidents of piracy in Caribbean and Pacific waters off the coast of Nicaragua, but the Nicaraguan Navy has increased its patrols and no recent incidents have been reported.
9. Cancel Special Warning number 95.

(Dept. of State) (10 June 2008, reviewed 22 Oct 2014)

SPECIAL WARNING NO. 125.
WORLDWIDE.

1. The Department of State warns U.S. citizens of the high security threat level in Yemen due to terrorist and recommends postponing non-essential to Yemen. The level of risk for foreigners in Yemen remains high. Yemen based Al Qaida Arabian Peninsula (AQAP) maintains an interest in conducting attacks against port facilities, commercial, or transiting warships, and are engaged in general planning in this regard. However, it cannot be ruled out that the extremists may be capable of other more sophisticated methods of targeting, such as the use of mortars or projectiles to target ships such as the missiles used to unsuccessfully strike a navy ship in Jordan in 2005. Although the time and location of such an attack is unknown, it is likely that ships in the Bab-al-Mandeb Strait, Southern Red Sea, and the Gulf of Aden along the coast of Yemen, as well as in associated ports or at offshore facilities are at the greatest risk of becoming targets of such an attack.
2. Travel by boat through the Red Sea or near the Socotra Islands in the Gulf of Aden also presents a continuing high risk of pirate attacks. In 2009, over 70 vessels were reportedly attacked. Since the beginning of 2010, four vessels reportedly have been seized in the area, one released in February. As of 15 March 2010, nine vessels and crew were being held for ransom, in addition to a British couple that was abducted from their yacht.
3. The Department of State strongly encourages U.S citizens to register at the consular section of the U.S. Embassy in Sana'a and enroll in the Warden System (Emergency Alert Network) to obtain updated information on travel and security in Yemen prior to travel at State Department's travel registration website: https://travelregistration.state.gov/ibrs/ui/. American citizens should also consult the U.S. eEmbassy website: http://yemen.usembassy.gov/yemen/citizen services.html get the most recent warden messages with up to date information on security conditions.
4. The U.S. Embassy, Sana'a is located at Dhahr Himyar Zone, Sheraton Hotel District, P.O. Box 22347. The number of the consular section is 967 1755 2000, extension 2153 or 2266. For after hours emergencies, please call 967 1755 2000 (press zero for extension) or 967 3321 3509. From time to time the embassy may temporarily close or suspend public services for security reasons. Emergency assistance to U.S. citizens during non-business hours (or when public access is restricted) is available through embassy duty personnel.
5. Additional information from the U.S. Maritime Administration may be available at: http://www marad.dot.gov/news_room_landing_page/ maritime_advisories/advisory_summary.htm.
6. Cancel Special Warning 113.

(Dept. of State) (16 Nov 2010, revised 22 Oct 2014)

SPECIAL WARNING NO. 126.
LIBYA.

1. U.S. mariners are advised to exercise caution in transiting the waters of the Gulf of Sidra south of 32-30N. Due to the security environment, the United States Embassy in Tripoli temporarily suspended all operations in Libya on July 26, 2014. There are no U.S. Government personnel in Libya. Sailors planning to travel to Libya should check the most recent Travel Warning before arrival.
2. The publication of this notice is solely for the purpose of advising United States mariners of information relevant to navigational safety and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation or proclamation so published.
3. Cancel Special Warning No. 81.

(Dept. of State) (29 Oct 2014)

SPECIAL WARNING NO. 127.
SUDAN.

1. The Department of State warns U.S. citizens of the risks of traveling to Sudan, urges U.S. citizens to avoid all travel to the Darfur region of Sudan, the Blue Nile and Southern Kordofan states, and advises U.S. citizens to consider carefully the risks of travel in other areas of Sudan. While the Government of Sudan has taken steps to limit the activities of terrorist groups, elements of these groups remain in Sudan and have threatened to attack Western interests.

(5) SPECIAL WARNINGS. (Continued).

2. The U.S. government maintains a comprehensive sanctions regime on Sudan. Among the prohibited activities are "any transaction by a United States person relating to transportation of cargo to or from Sudan." "United States person" is defined as any U.S. citizen, permanent resident, entity organized under U.S. law, or person in the United States.
3. The United States Maritime Administration (MARAD) has advised that regional tensions entail the risk of maritime attacks being conducted against vessels operating in the Gulf of Oman, North Arabian Sea, Gulf of Aden, and the Bab el Mandeb regions.
4. Cancel Special Warning No. 108.

(Dept. of State) (07 Nov 2014)

SPECIAL WARNING NO. 128.
PAPUA NEW GUINEA—BOUGAINVILLE COAST.

1. Bougainville Island declared unilateral independence from Papua New Guinea May 17, 1990. The status of Bougainville's struggle for independence was temporarily settled by the Bougainville Peace Agreement which granted the island autonomy until a referendum on independence takes place (estimated to conclude by 2020). Potential mariners should remain aware of open source media reporting on the timing of that event.
2. Marine traffic should be alert when traveling in coastal waters near South Bougainville, where some armed elements continue to pursue crime as a means of economic gain.
3. The Bougainville port at Kieta has accepted international vessels since 2008, and the majority of waters surrounding Bougainville are relatively peaceful and should not warrant significant concern for mariners.
4. Cancel Special Warning No. 77.

(Dept. of State) (12 Nov 2014)

SPECIAL WARNING NO. 129.
PAKISTAN.

1. Mariners calling on Pakistan are advised that levels of sectarian and factional violence remain high. Karachi, the main port, continues to be affected by politically-motivated killings.
2. Anti-American sentiment can be provoked easily and spontaneously in response to international events that radicals misconstrue as directed against Islam.
3. Port facilities and vessels may offer targets of opportunity for terrorist attacks. U.S. mariners are advised to exercise heightened security awareness and prudent security precautions when in Pakistani ports and waters.
4. In September 2014, al-Qa'ida's new affiliate in South Asia (AQIS) claimed responsibility for attempting to hijack a Pakistani frigate docked in Karachi and use it to target U.S. Navy vessels in the Arabian Sea.
5. Cancel Special Warning No. 116.

(Dept. of State) (19 Nov 2014)

SPECIAL WARNING NO. 130.
LEBANON.

1. The potential for death or injury in Lebanon exists in particular because of the frequency of terrorist bombing attacks throughout the country. Many of the attacks have targeted specific individuals or venues, but nearly all cases have resulted in death and injuries to passersby in the vicinity. Although there is no evidence these attacks were directed specifically at U.S. citizens at this time, there is a real possibility of "wrong place, wrong time" harm to U.S. citizens. The most recent wave of bombings began in June 2013, with four bombings in Beirut and Tripoli that collectively left hundreds dead and wounded.
2. Attacks now regularly involve suicide bombers. Similar incidents can occur without warning. In addition to these attacks, there have been numerous reports in the media of Lebanese security forces disrupting other planned bombings. To date, Lebanese security forces have been successful against potential suicide bombers, who have often been forced to detonate their vests or vehicles short of their targets. This practice of suicide bombers adds an additional element of unpredictability, since just avoiding potential target areas does not provide any guarantee from being in the wrong place at the wrong time.
3. The Department of State considers the threat to U.S. Government personnel in Beirut sufficiently serious to require them to live and work under strict security restrictions. The internal security policies of the U.S. Embassy may be adjusted at any time and without advance notice. These practices limit, and may prevent, access by U.S. Embassy officials to certain areas of the country, especially to parts of metropolitan Beirut, the city of Tripoli, northern Lebanon, the Bekaa Valley, and southern Lebanon.
4. Cancel Special Warning No. 118.

(Dept. of State) (20 Nov 2014)

(5) SPECIAL WARNINGS. (Continued).

SPECIAL WARNINGS FOOTNOTE.
In January 1977, DMA now NGA commenced issuing warnings as NAVAREAS IV and XII broadcasts in addition to the HYDROLANT and HYDROPAC series.
(Supersedes NTM 1(5)14) (NGA/DEPT. OF STATE)

(6) TRADE WITH CUBA.

The President of the United States proclaimed an embargo February 7, 1962 on all trade with Cuba. Except as authorized by Department of Treasury regulations or license, all dealings in property in which Cuba or a Cuban national has an interest (including all financial transactions in Cuba) by any person subject to U.S. jurisdiction are prohibited. Unless otherwise authorized by the Department of Treasury, it is unlawful for any person subject to the jurisdiction of the United States to transport, import, or otherwise deal in or engage in any transaction with respect to any merchandise outside the United States if such merchandise: (1) is of Cuban origin; (2) is or has been located in or transported from or through Cuba; or (3) is made or derived in whole or part from any Cuban growth, produce, or manufacture. It is also unlawful for any person subject to U.S. jurisdiction to engage in any transportation of goods or merchandise from anywhere to Cuba unless the following conditions are met: (1) such transportation is licensed or otherwise authorized by Treasury; and (2) if U.S. goods or merchandise are involved, the exportation is itself licensed or otherwise authorized by the Department of Commerce under the provisions of the Export Administration Act of 1979, as amended. Licenses or authorizations to engage in such trade will not normally be granted. Certain exceptions exist for trade in informational materials. Unless licensed by Treasury, no vessel may enter a U.S. port for any purpose including bunkering or the acquisition of ship's stores if there are on board goods or passengers coming from, or going to, Cuba, or goods in which Cuba or a Cuban national has an interest. Unless licensed by Treasury, no vessel which enters a port or place in Cuba to engage in the trade of goods or services may, within 180 days of such vessel's departure from such port or place in Cuba, load or unload freight at any place in the United States. Persons who violate these restrictions may be subject to criminal or civil sanctions, or both, and vessels involved in such trade contrary to law may be subject to seizure and forfeiture (reviewed November 12, 1998).
(Repetition NTM 1(6)14) (DEPT. OF STATE)

(7) AMVER.

The Internet Web site for Amver is: www.amver.com. The Amver system, maintained and administered by the United States Coast Guard, with the cooperation of coast radio stations of many nations, is a global ship reporting system for search and rescue (SAR) which provides important aid to the development and coordination of SAR efforts in the offshore areas of the world. Vessels of all nations, on the high seas, are encouraged to voluntarily send movement (sailing) reports and periodic position reports to the Amver Center located in Martinsburg, West Virginia, via selected radio stations and coast earth stations.

Information from these reports is entered into a computer database which is used to generate and maintain dead reckoning positions. Characteristics of vessels which are valuable for determining SAR capability are also entered into the computer from available sources of information. Information concerning the predicted location and SAR characteristics of each vessel estimated to be in the search area of interest is made available, upon request and only to recognized SAR agencies of any nation, or vessels needing assistance. Predicted locations are only disclosed for reasons related to maritime safety.

Messages sent within the Amver system are at no cost to the ship owner. Benefits to shipping include: improved chances of aid in emergencies, reduced number of calls for assistance by vessels not favorably located to assist, and reduced time lost by vessels responding to calls for assistance. An Amver participant is under no greater obligation to render assistance during an emergency than a vessel that is not participating.

Instructions on participation in the Amver system are available on the Web site: http://www.amver.com.

Amver Maritime Relations Office
USCG Battery Park Building
1 South Street
New York, NY 10004-1499
U.S.A.

Telephone: (212) 232-3862
Fax: (212) 332-3866
E-mail: benjamin.m.strong@uscg.mil
Web site: http://www.amver.com

(7) AMVER. (Continued).

AMVERSEAS is a comprehensive real-time ship and environmental data acquisition and transmission system, which acquires several types of data such as **AMVER** (**A**utomated **M**utual assistance **V**essel **R**escue system), **Met** (**M**eteorological), **TSG** (**T**hermo**S**alino**G**raph), and **XBT** (e**X**pendable **B**athy **T**hermograph) messages.

AMVER reports can be sent at no cost to the ship if sent via INMARSAT-C, using the AMVER/SEAS software and the designated Vizada land earth stations (LES 004-104-204-304) and the proper Special Access Code (SAC). AMVER reports sent in text format should use **SAC 43** and in BINARY format, **SAC SEAS** should be used. AMVER reports can also be sent via email, which the ship would be responsible for transmission costs. Send AMVER reports via email to: amvermsg@amver.com.

AMVER/SEAS software requirements: Windows based PC with operating system of Vista, Windows XP, Windows 7, Windows 2000, Windows NT, Windows 98, Windows 95 (works best with 200 MHz Pentium or better); video card that supports 800 x 600 pixels, with 65K colors or better; 10 MB of free hard disk space, and a 3.5 inch floppy disk drive or thumb drive. Additionally, an Inmarsat Standard C transceiver with a 3.5 inch floppy disk drive or thumb drive and capability to transmit a binary file is required as well.

You may get asked to install prerequisites if your computer does not have Visual C++ 2008 installed. The .NET Framework 3.5 SP1, and the Visual C++ Runtime Libraries (x86) component will be installed. This component is required to run AMVERSEAS v 9.0 modules. Please choose **always Accept** and/or **Install**.

To request AMVERSEAS software send an email to: vos@noaa.gov.

(Supersedes NTM 1(7)14) (USCG)

(8) INTERNATIONAL AERONAUTICAL AND MARITIME SEARCH AND RESCUE (IAMSAR) MANUAL.

The 2013 edition of the International Aeronautical and Maritime Search and Rescue (IAMSAR) became applicable 1 July 2013. Instead of publishing future amendments, a complete new edition will be published every three years with the next edition to be in 2016. IAMSAR Manual, Volume III, Mobile Facilities is to be carried onboard Safety Of Life At Sea (SOLAS)-compliant merchant vessels and intended to be carried aboard other vessels, aircraft and rescue units to help with performance of a search, rescue or on-scene coordinator function, and with aspects of search and rescue that pertain to their own emergencies. The 2013 edition introduces “Action Cards” in Volume III for use in “Own Emergencies” and for “Rendering Assistance”. This Manual can be purchased direct from the International Maritime Organization (IMO) or from selected book sellers around the world as provided under “Publication Catalogue” on the IMO web page: www.imo.org/ It is to be available in the English, French, and Spanish languages and will also be published in Russian, Chinese and Arabic languages by the IMO or other sources.

(Supersedes NTM 1(8)14) (USCG)

(9) SPECIAL REPORTING INSTRUCTIONS FOR U.S. FLAG VESSELS, VESSELS CARRYING WAR RISK INSURANCE, AND CERTAIN OTHER DESIGNATED VESSELS (Formerly USMER Vessels).

According to a U.S. Maritime Administration regulation effective 1 August 1983, U.S. flag vessels and foreign-flag “War Risk” vessels must report and regularly update their voyages to the Amver Center.

Who Must Report

A. U.S.-flag vessels of one thousand gross tons or more, operating in foreign commerce.
B. Foreign-flag vessels of one thousand gross tons or more, for which an Interim War Risk Insurance binder has been issued under the provisions of Title XXI, Merchant Marine Act, 1936.

Who May Report

Other merchant vessels, when approved by MARAD, whose owners may have chosen to participate and to have voyage information forwarded to MARAD. (Other merchant vessels may participate in Amver, but information provided by them will be released only for safety purposes or to satisfy certain advance arrival notification requirements of Title 33, Code of Federal Regulations.)

When to Report

A. Sailing plans may be sent days or even weeks prior to departure, but no later than departure.

(9) SPECIAL REPORTING INSTRUCTIONS FOR U.S. FLAG VESSELS, VESSELS CARRYING WAR RISK INSURANCE, AND CERTAIN OTHER DESIGNATED VESSELS (Formerly USMER Vessels). (Continued).

B. Departure Report must be sent as soon as practicable upon leaving port.
C. Position Report must be sent within twenty-four hours of departure, and subsequently no less frequently than every forty-eight hours until arrival.
D. Arrival Report must be sent immediately prior to or upon arrival at the Port of Destination.
E. Reports are to be sent during the Radio Officer's normal duty hours, but no later than the above schedule.
F. At the discretion of the vessel, reports may be sent more frequently than the above schedule, as, for example, in heavy weather or under other adverse conditions.

(Repetition NTM 1(9)14) (USCG)

(10) URGENCY AND SAFETY SIGNALS.

The radiotelephone urgency signal is the group of words PAN PAN (pronounced "Panne-Panne") spoken three times. The urgency call format and the urgency signal indicate that the calling station has a very urgent message to transmit concerning the safety of a mobile unit or a person. The call has priority over all other communications except distress calls and it should be used in all urgent cases in which the sending out of the SOS or MAYDAY signal is not fully justified.

The urgency signal and message may be addressed to all stations or to a specific station. The message must be canceled as soon as any action is no longer necessary.

The radiotelephone SAFETY signal "SECURITE" (pronounced "SAY-CUR-E-TAY") spoken three times, is provided for reporting hazards to navigation or meteorological warnings including dangers regarding ice, derelicts, tropical storms, etc. Transmissions bearing the safety signal preface are accorded priority over all other transmission less those bearing the distress or urgency preface.

(Repetition NTM 1(10)14) (USCG)

(11) SUBMARINE EMERGENCY IDENTIFICATION SIGNALS AND HAZARD TO SUBMARINES.

1. U.S. submarines are equipped with signal ejectors which may be used to launch identification signals, including emergency signals. Two general types of signals may be used: smoke floats and flares or stars. A combination signal which contains both smoke and flare of the same color may also be used. The smoke floats, which burn on the surface, produce a dense, colored smoke for a period of fifteen to forty-five seconds. The flares or stars are propelled to a height of three hundred to four hundred feet from which they descend by small parachute. The flares or stars burn for about twenty-five seconds. The color of the smoke or flare/star has the following meaning:
   a) GREEN-Used under training exercise conditions only to indicate that a torpedo has been fired or that the firing of a torpedo has been simulated.
   b) YELLOW-Indicates that submarine is about to come to periscope depth from below periscope depth. Surface craft terminate antisubmarine counter-attack and clear vicinity of submarine. Do not stop propellers.
   c) RED-Indicates an emergency condition within the submarine and that it will surface immediately, if possible. Surface ships clear the area and stand by to give assistance after the submarine has surfaced. In case of repeated red signals, or if the submarine fails to surface within reasonable time, she may be assumed to be disabled. Buoy the location, look for submarine buoy and attempt to establish sonar communications. Advise U.S. Naval authorities immediately.
   d) WHITE-Two white flares/smoke in succession indicates that the submarine is about to surface, usually from periscope depth (non-emergency surfacing procedure). Surface craft should clear the vicinity of the submarine.
2. A Submarine Marker Buoy consists of a cylindrically shaped object about 3 feet by 6 feet with connecting structure and is painted international orange. The buoy is a messenger buoy with a wire cable to the submarine; this cable acts as a downhaul line for a rescue chamber. The buoy may be accompanied by an oil slick release to attract attention. A submarine on the bottom in distress and unable to surface will, if possible, release this buoy. If an object of this description is sighted, it should be investigated and U.S. Naval Authorities advised immediately.
3. A Submarine Emergency Position Indicating Radio Buoy (SEPIRB) is a serialized signal identifying the submarine and hatch from which to conduct rescue operations.
4. Transmission of the International Distress Signal (SOS) will be made on the submarine's sonar gear independently or in conjunction with the red emergency signal as conditions permit.
5. Submarines may employ any or all of the following additional means to attract attention and indicate their position while submerged:

(11) SUBMARINE EMERGENCY IDENTIFICATION SIGNALS AND HAZARD TO SUBMARINES (Continued).

a) Release of dye marker.
b) Ejection of oil.
c) Release of air bubble.
d) Pounding on the hull.

6. United States destroyer-type vessels in international waters will, on occasion, stream a towed underwater object at various speeds engaged in naval maneuvers. All nations operating submarines are advised that this underwater object in the streamed condition constitutes a possible hazard to submerged submarines.

(Repetition NTM 1(11)14) (U.S. NAVY)

(12) RULES, REGULATIONS AND PROCLAMATIONS ISSUED BY FOREIGN GOVERNMENTS.

The National Geospatial-Intelligence Agency, as a means of promoting maritime safety, includes in its publications rules, regulations, and proclamations affecting navigation as issued by foreign nations.

In this connection, it should be clearly understood that the publication of such material is solely for information relative to the navigational safety of shipping, and in no way constitutes a legal recognition by the United States of the international validity of any rule, regulation, or proclamation so published. While every effort is made to publish all such information, the National Geospatial-Intelligence Agency cannot assume any liability for failure to publish any particular rule, regulation, proclamation, or the details thereof.

(Repetition NTM 1(12)14) (NGA/SHG)

(13) WARNING-DANGER FROM SUBMARINE CABLES AND PIPELINES.

Submarine cables or pipelines pass beneath various navigable waterways throughout the world. Installation of new submarine cables and pipelines may be reported in the Notice to Mariners; their locations may or may not be charted. Where feasible, warning signs are often erected to warn the mariners of their existence. In view of the serious consequences resulting from damage to submarine cables and pipelines, vessel operators should take special care when anchoring, fishing or engaging in underwater operations near areas where these cables or pipelines may exist or have been reported to exist.

Certain cables carry high voltages; many pipelines carry natural gas under high pressure or petroleum products. Electrocution, fire or explosion with injury or loss of life or a serious pollution incident could occur if they are penetrated.

Vessels fouling a submarine cable or pipeline should attempt to clear without undue strain. Anchors or gear that cannot be cleared should be slipped; no attempt should be made to cut a cable or pipeline.

(Repetition NTM 1(13)14) (USCG)

(14) CAUTION-CLOSE APPROACH TO MOORED OFFSHORE AIDS TO NAVIGATION.

Courses should invariably be set to pass these aids with sufficient clearance to avoid the possibility of collision. Errors of observation, current and wind effects, other vessels in the vicinity, and defects in steering gear may be, and have been, the cause of collisions. Experience shows that buoys cannot be safely used as leading marks to be passed close aboard, and should always be left broad off the course whenever sea room permits.

It should be borne in mind that most large buoys are anchored to a very long scope of chain and, as a result, the radius of their swinging circle is considerable. The charted position is the approximate location. Furthermore, under certain conditions of wind and current, they are subject to sudden and unexpected sheers which are certain to hazard a vessel attempting to pass close aboard.

Further warning on use of floating aids to navigation for position taking is contained in paragraph 1 of this Notice. When approaching an offshore light structure, large navigational buoy, or a station on a submarine site, on radio bearings, the risk of collision will be lessened by ensuring that the radio bearing does not remain constant.

(Repetition NTM 1(14)14) (USCG)

(15) PIPELINE LAYBARGES AND JETBARGES.

With the increased number of pipeline laying operations in the Gulf of Mexico and other areas, operators of all types of vessels should be aware of the dangers of passing close aboard, close ahead, or close astern of a jetbarge or pipelaying barge. Pipelaying barges and jetbarges usually move at 1/2 knot or less and have anchors which extend out approximately 3500-5000 feet in all directions, and may be marked by lighted anchor buoys. The exposed pipeline behind the pipelaying barge and the areas in the vicinity of anchors are hazardous to navigation and should be avoided. The pipeline and anchor cables also

(15) PIPELINE LAYBARGES AND JETBARGES. (Continued).

represent a submerged hazard to navigation. It is suggested, if safe navigation permits, for all types of vessels to pass well ahead of the pipelaying barge or well astern of the jetbarge. The pipelaying barge, jetbarge, and attending vessels may be contacted on VHF-FM Channel 16 for passage instructions.
(Repetition NTM 1(15)14) (USCG)

(16) REQUIRED REPORTING OF DAMAGED U.S. AIDS TO NAVIGATION.

It frequently occurs that aids to navigation are collided with, causing damage and displacement, or complete loss, without the knowledge of the Coast Guard District Commander. The replacement or repair of such aids is consequently often not made as promptly as desired. This situation results in diminished protection for marine traffic, and is attributable in large part to the failure of vessel operators to furnish notice of these collisions to the nearest local or district office of the U.S. Coast Guard, or to Coast Guard Headquarters, as required by law and regulation. The prompt submission of notice of any marine casualty or accident, including damage or destruction of aids to navigation, is required by the Marine Investigation Regulations, Section 4.05-20 of Title 46, Code of Federal Regulations, with penalty for noncompliance.
(Repetition NTM 1(16)14) (USCG)

(17) REGULATIONS FOR THE PREVENTION OF POLLUTION FROM SHIPS.

International Convention for the Prevention of Pollution by Ships - MARPOL 73/78: In 1973, the International Maritime Organization (IMO) adopted the International Convention for the Prevention of Pollution by Ships and subsequently modified it by Protocol in 1978. The Convention is widely known as MARPOL 73/78. Its objective is to limit ship-borne pollution by restricting operational pollution and reducing the possibility of accidental pollution. MARPOL specifies standards for stowing, handling, shipping, and transferring pollutant cargoes, as well as standards for discharge of ship-generated operational wastes. Acceptance of the convention by a national government obliges them to make the requirements part of domestic law.

MARPOL 73/78 consists of six separate Annexes, each set out in regulations covering the various sources of ship-generated pollution. Annex I and II are mandatory for all signatory nations to MARPOL while Annexes III, IV, V, and VI are optional.

Currently, the U.S. is signatory to Annexes I, II, III, V, and VI. Annexes I, II, V, and VI have been incorporated into U.S. law by the Act to Prevent Pollution from Ships (APPS) and implemented within 33 USC 1901 and 33 CFR 151. The U.S. incorporates Annex III by the Hazardous Materials Transportation Act (HMTA) implemented within 46 USC 2101 and 49 CFR 171-174 and 176. Although the U.S. has not ratified Annex IV, the U.S. has equivalent regulations for the treatment and discharge standards of shipboard sewage – the Federal Water Pollution Control Act (FWPCA) as amended by the Clean Water Act and implemented by 33 USC 1251 and 33 CFR 159.

The table below indicates each Annex by pollution source, its title, U.S. signatory status, and implementing legislation, law, and/or regulations and applicable Coast Guard guidance. A brief discussion of the major provisions of each MARPOL Annex follows.

International Convention for the Prevention of Pollution by Ships (MARPOL 73/78)

Annex	Pollution Source	Title	U.S. Signatory	Implementing Legislation/Regulations
I	Oil	Regulations for the Prevention of Pollution by Oil	Yes	Act to Prevent Pollution from Ships of 1980 (APPS) 33 U.S.C. § 1901 – 1912 33 CFR Parts 151,155, 156, 157 Marine Safety Manual (MSM) Vol. II NVIC 6-94 CG-3PCV Policy Ltr 06-09 G-MOC Policy Ltr 04-011, Rev. 1 G-PCV Policy Ltr 06-01
II	NLS	Regulations for the Control of Pollution by Noxious Liquid Substances (NLS) in bulk	Yes	APPS 33 U.S.C. § 1901 – 1912 33 CFR Parts 151 MSM, Vol. II NVIC 03-06, 03-04

(17) REGULATIONS FOR THE PREVENTION OF POLLUTION FROM SHIPS. (Continued).

III	Packaged Substances	Regulations for the Prevention of Pollution by Harmful Substances in Packaged Form	Yes	Hazardous Materials Transportation Act of 1974 (HMTA) 49 U.S.C. § 1801 – 1813 46 CFR 148 49 CFR Parts 171-174 & 176 MSM, Vol. II
IV	Sewage	Regulations for the Prevention of Pollution by Sewage from Ships	No	Federal Water Pollution Control Act (FWPCA) as amended by the Clean Water Act (CWA) 33 U.S.C. § 1251 33 CFR 159 MSM, Vol. II NVIC 01-09
V	Garbage	Regulations for the Prevention of Pollution by Garbage from Ships	Yes	APPS 33 U.S.C. § 1901 – 1912 33 CFR Parts 151 MSM, Vol. II
VI	Air	Regulations for the Prevention of Air Pollution from Ships	Yes	APPS 33 U.S.C. § 1901 – 1912 EPA Engine Emissions: 40 CFR 94 CG-543 Policy Ltr 09-01

Annex I addresses oil pollution prevention. Annex I is applicable to oceangoing tankers over 150 gross tons and all other oceangoing ships over 400 gross tons. Requirements include oily waste discharge limitations, oily-water separating equipment, monitoring and alarm systems for discharges from cargo areas, cargo pump rooms and machinery space bilges, construction of cargo and ballast tanks, crude oil washing and inert gas systems, as well Shipboard Oil Pollution Emergency Plans (SOPEP).

The U.S. implements MARPOL 73/78 Annex II by the Act to Prevent Pollution from Ships (APPS), codified within 33 USC 1901. The implementing regulations are in 33 CFR 151.

Ships to which Annex I MARPOL 73/78 is applicable are also required to have an International Oil Pollution Prevention (IOPP) Certificate. Annex I, Chapter 2 and 33 CFR 151.19. Issuance of the IOPP Certificate verifies that the vessel is in compliance with the requirements of Annex I and that any required equipment is on board and operational.

Annex I also requires each vessel to maintain an Oil Record Book to record all oil transfers and discharges. Annex I, Regulation 17 & 36, 33 CFR 151.25. The Coast Guard's most recent update to the Oil Record Book was in 2007. A copy is available to all U.S. vessel owners and operators subject to the Oil Record Book requirements through any local Captain of the Port/Officer in Charge, Marine Inspection. Vessel operators are encouraged to obtain and use the latest edition of the Oil Record Book (Rev 01-07).

Annex II addresses discharge criteria and measures for controlling pollution caused by Noxious Liquid Substances (NLS) carried in bulk. Annex II is applicable to oceangoing vessels and non-self propelled oceangoing ships that carry NLS cargos. These regulations limit at-sea discharges of NLS residue. It requires vessels to discharge its NLS residues to reception facilities, except under specified conditions. The Annex II requirements include discharge restrictions for various classes of cargo residues; the maintenance of a Cargo Record Book for recording all NLS cargo and residue transfers and discharges; and a Procedures and Arrangements Manual describing the correct procedures for off loading and pre-washing cargo tanks.

The U.S. implements MARPOL 73/78 Annex II by the Act to Prevent Pollution from Ships (APPS), codified within 33 USC 1901. The implementing regulations are in 33 CFR 151.

Since April of 1987, Annex II NLS cargoes have been classified in one of four categories: A, B, C, or D. As of January 1, 2007, the IMO revised Annex II to incorporate new classification rules that changed the criteria for assigning values for both the ship type and pollution category. For further details of these new classifications and vessel compliance, see Navigation and Vessel Inspection Circular (NVIC) 03-06.

The existing pollution categories A, B, C, D, and III have been replaced by X, Y, Z and Other Substances (OS). Category X has the most severe pollution hazards, category Y has moderate pollution hazards, category Z has low pollution hazards and category OS has no hazards when discharged from tank cleaning or de-ballasting operations. Category X and other substances that tend to solidify in tanks must be pre-washed in port under the supervision of a Pre-wash Surveyor prior to departure from the off loading terminal. Authorized vessel discharges of NLS residue at sea must be below the water line. Tanks that carry Category Y and Z NLS cargos must be tested to ensure that after tank stripping only a minimal amount of residues will remain.

(17) REGULATIONS FOR THE PREVENTION OF POLLUTION FROM SHIPS. (Continued).

Reception facilities must be able to assist in cargo stripping operations by reducing backpressure during the final stages of off loading.

Terminals and ports receiving oceangoing tankers, or any other oceangoing ships of 400 GT or more, carrying residues and mixtures containing oil, or receiving oceangoing ships carrying NLS cargos, are required to provide adequate reception facilities for the wastes generated. Coast Guard Captains of the Port issue a Certificate of Adequacy to terminals or ports to show that they comply with federal reception facility requirements.

Resolution A.673 (16) for Offshore Supply Vessels:

As discussed above, on October 15, 2004, the Marine Environmental Protection Committee (MEPC) of the International Maritime Organization (IMO) adopted revisions to Annex II and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code). Those amendments entered into force January 1, 2007.

The 2004 revisions to Annex II included changes to Regulation 11. The revised language of Regulation 11.2 of Annex II requires that for the carriage of NLS cargoes listed in Chapter 17 of the IBC Code by those vessels other than chemical tankers or liquefied gas carriers, Flag Administrations shall establish appropriate measures to minimize the uncontrolled discharge of NLS cargoes into the sea. Furthermore, Regulation 11.2 states that each Flag Administration's measures shall be based upon "Guidelines" developed by the IMO. In the associated footnote to the term "Guidelines," reference is made specifically to Resolution A.673 (16).

Resolution A.673 (16) was adopted on October 19, 1980, and later amended by Resolution MSC.236 (82) on December 1, 2006. It provides an alternative to the IBC Code for the design, construction, and operation of OSVs. It is intended to permit limited quantities of NLS substances to be transported in bulk in OSVs with minimum risk to the vessel, its crew, and the environment. The basic philosophy of Resolution A.673 (16) is to apply standards contained in the IBC Code to the extent that that is practicable and reasonable, taking into account the unique design features and service characteristics of these vessels, as well as to limit the quantity of hazardous and noxious liquid substances carried onboard OSVs.

The U.S. implementation of A.673 (16) is found in CG-522 Policy Letter 09-01. This policy has been developed by the Coast Guard, in consultation with the OSV industry, to provide guidance to owners, operators, and designers for the design, construction, and operation of U.S. flagged OSVs. It is intended to resolve any conflicts until such time as relevant U.S. regulations are more completely harmonized with the revised international standards.

Annex III applies to all ships carrying harmful substances in packaged forms, or in freight containers, portable tanks or road and rail tank wagons. Annex III requires standards on packaging, marking, labeling, documentation, stowage, quantity limitations, exceptions and notifications for preventing or minimizing pollution by harmful substances.

The U.S. implements MARPOL 73/78 Annex III under the Hazardous Materials Transportation Act (HMTA), codified within 46 USC 2101. The implementing regulations are in 49 CFR 171 -174 and 176.

For the purpose of Annex III, "harmful substances" are those substances which are identified as marine pollutants in the International Maritime Dangerous Goods Code (IMDG Code), also defined in U.S. domestic regulations under 49 CFR 171.4 and 171.8. On 5 November 1992, the U.S. Research and Special Programs Administration (RSPA) amended the Hazardous Materials Regulations (HMR, 49 CFR 100-177) to list and regulate these marine pollutants in all modes of transportation. Under the HMR, marine pollutants are listed in a separate appendix, (Appendix B to 49 CFR 172.101 – List of Marine Pollutants). In accordance with 49 CFR 172.322, "marine pollutant mark" is required for those materials. The marine pollutant mark is in addition to any existing labels or placards designating a hazardous substance.

Annex IV applies to discharges of sewage into the sea. Annex IV applies to all ships over 400 gross tons engaged in international voyages or to ships less than 400 gross tons certified to carry more than 15 persons. The Annex requires the installation of holding tanks or approved sewage treatment devices.

The U.S. did not ratify Annex IV. Rather, the U.S. has equivalent regulations for the treatment and discharge standards of shipboard sewage – the Federal Water Pollution Control Act (FWPCA) as amended by the Clean Water Act codified in 33 USC 1251. The U.S. considers the implementing regulations of 40 CFR 140 and 33 CFR 159 as equivalent to the sewage treatment requirements of Annex IV. For more information on this equivalency and vessel compliance, see NVIC 01-09.

Section 312 of FWPCA, as amended, requires the installation of a Marine Sanitation Device (MSD), a sewage treatment device to prevent the discharge of untreated or inadequately treated sewage into U.S. waters. The Act requires every vessel that operates in U.S. waters and equipped with an installed toilet to have a certified and operable MSD. A vessel with no installed toilet is not subject to the provisions of section 312. Installed toilets that are not equipped with a certified MSD, and that discharge raw sewage directly over the side are illegal. Section 312(g)(2) of the FWPCA directs the Coast Guard to certify MSDs and 33 CFR 159 sets out equipment construction and operation requirements.

(17) REGULATIONS FOR THE PREVENTION OF POLLUTION FROM SHIPS. (Continued).

Since the U.S. has not ratified MARPOL 73/78 Annex IV, the Coast Guard will not enforce its provisions aboard foreign vessels during Port State Control examinations, even if the vessel is under the flag of an Annex IV signatory country. Foreign vessels must meet the requirements of 33 CFR 159 when operating in U.S. waters. However, since the U.S. considers Annex IV equivalent to 33 CFR 159, Coast Guard Port State Control officers shall accept foreign vessels that comply with Annex IV. A foreign flag vessel that has a "Certificate of Type Test" under MARPOL Annex IV indicating that its sewage treatment plant meets the test requirements of Resolution MEPC.2(VI) of the International Maritime Organization (IMO) will be accepted by the Coast Guard as being in compliance with 33 CFR 159.7(b) or (c). The Coast Guard considers such treatment plants as fully equivalent to a Coast Guard certified Type II MSD (NVIC 9-82, CH-1, dated 8 October 1988) as long as the unit is in operable condition. U.S. registered vessels will continue to be required to have Coast Guard certified MSDs per 33 CFR 159.

Annex V applies to ship-generated garbage, and aims to reduce the amount of garbage - both plastics and other persistent wastes - that ships dump into the oceans. Annex V defines "garbage" broadly, and includes nearly any kind of waste generated during a ship's normal operations. This Annex requires terminals to provide reception facilities at ports and terminals to receive plastics and other garbage from visiting vessels.

On July 15, 2011, the International Maritime Organization's (IMO) Marine Environment Protection Committee (MEPC) formally adopted Resolution MEPC.201(62), amending MARPOL Annex V. These amendments enter into force enter into force on January 1st, 2013 and establish a general prohibition on discharges of garbage into the sea. Under prescribed conditions, exceptions are provided for food wastes, cargo residues, cleaning agents or additives contained in cargo hold, deck, and external surface wash waters, and animal carcasses. An overview of MARPOL Annex V and associated amendments may be found on IMO's website at http://www.imo.org/OurWork/Environment/PollutionPrevention/Garbage/Pages/Default.aspx.

The U.S. implements MARPOL 73/78 Annex V under the Marine Plastic Pollution Research and Control Act of 1987 (MPPRCA), codified within 33 U.S.C. § 1901 et seq. The implementing regulations are in 33 CFR 151.51 - 79. These requirements require adequate waste reception facilities at U.S. ports; that manned ships of certain sizes to display pollution prevention placards; for certain ships to develop a waste management plan; and that certain manned ships maintain waste disposal records. MPPRCA and 33 CFR 151.51 is applicable to all recreational, fishing, uninspected and inspected vessels, and foreign flag vessels on the navigable waters and all other waters subject to the jurisdiction of the United States, out to and including the Exclusive Economic Zone (200 miles).

Annex VI outlines international requirements for vessel air emissions and shipboard air pollution prevention measures. Annex VI entered into force for the United States on January 8, 2009. Starting on that date, U.S. ships operating anywhere and foreign-flag ships operating in United States waters must comply with the requirements set out in MARPOL Annex VI. (33 U.S.C. 1901(a) (4) & (5), 1902(a)(1)&(5), and 1907 (a), as amended by the Maritime Pollution Prevention Act of 2008 (MPPA), Pub.L. 110-280, 122 Stat 2611).

On July 15, 2011, the International Maritime Organization formally adopted Resolution MEPC.203(62), which amends MARPOL Annex VI. The main requirements of MEPC.203(62)enter into force on January 1st, 2013 as MARPOL Annex VI Chapter 4 and addresses ship energy efficiency.

Annex VI sets limits on sulfur oxide (SOx) and nitrogen oxide (NOx) emissions from ship exhausts and prohibits deliberate emissions of ozone-depleting substances. These regulations include a global cap of 3.5% m/m on the sulfur content of fuel oil and calls on IMO to monitor the worldwide average sulfur content of fuel. A mandatory NOx Technical Code defines how vessels can achieve the set limits on NOx emissions.

Additionally, certain regions may be declared as Sulfur Emission Control Areas (SECA). In these areas, the sulfur content of fuel oil used on board ships must not exceed 1.5% m/m. Alternatively, ships must fit an exhaust gas cleaning system or use other technological methods to limit Sox emissions. The Baltic Sea and North Sea Areas have already been designated as SECAs.

The North American Emission Control Area (ECA), under the International Convention for the Prevention of Pollution from Ships (MARPOL), came into effect on 1 August 2012, bringing in stricter controls on emissions of sulfur oxide (SOx), nitrogen oxide (NOx) and particulate matter for ships trading off the coasts of Canada, the United States and the French overseas collectivity of Saint-Pierre and Miquelon. Within ECAS, the sulfur content of fuel oil (expressed in terms of % m/m - that is, by weight) must be no more than 1.00% m/m; falling to 0.10% m/m on and after 1 January 2015. This compares to 3.50% m/m outside an ECA, falling to 0.50% m/m on and after 1 January 2020. This date could be deferred to 1 January 2025, depending on the outcome of a review, to be completed by 2018, as to the availability of compliant fuel oil.

Annex VI prohibits deliberate emissions of ozone depleting substances, which include halons and chlorofluorocarbons (CFCs). New installations containing ozone-depleting substances are prohibited. But existing installations containing hydrochlorofluorocarbons (HCFCs) are permitted until 1 January 2020. The Annex also prohibits the incineration on board

(17) REGULATIONS FOR THE PREVENTION OF POLLUTION FROM SHIPS. (Continued).

ships of certain products, such as contaminated packaging materials and polychlorinated biphenyls (PCBs). Coast Guard guidelines for ensuring compliance with Annex VI can be found in CG-543's Policy Letter 09-01 located on Homeport (http://homeport.uscg.mil - Missions > Domestic Vessels > Domestic Vessel Policy > Office of Commercial Vessel Compliance Policy Letters or http://homeport.uscg.mil - Missions > Port State Control > General Information > MARPOL Annex VI).

Oil Spill Reporting. Article 8 and Protocol I of MARPOL 73/78 requires the immediate reporting of any un-permitted discharges of oil, NLS substances, or harmful substance in package form to the party in which the vessel is located. For any discharge that occurs within the waters under U.S. jurisdiction, the reporting requirements are found in 33 CFR 153, Subpart B – Notice of the Discharge of Oil or a Hazardous Substance.

33 CFR 153.203 states that any person in charge of a vessel or of an onshore or offshore facility shall, as soon as they have knowledge of any discharge of oil or a hazardous substance shall immediately notify the National Response Center (NRC), NRC's toll free telephone number is (800) 424–8802, fax number is (202) 372–2920.

If direct reporting to the NRC is not practicable, notice of discharge may be made to the Coast Guard or EPA predesignated On-Scene Coordinator (OSC) for the geographic area where the discharge occurs. All such reports shall be promptly relayed to the NRC. If it is not possible to notify the NRC or the predesignated OSC immediately, reports may be made immediately to the nearest Coast Guard unit, provided that the person in charge of the vessel or onshore or offshore facility notifies the NRC as soon as possible.

Any person who fails to notify the appropriate agency of the United States Government immediately of a discharge is, upon conviction, fined in accordance with 18 U.S. Code, or imprisoned for not more than 5 years, or both (33 CFR 153.205).

Penalties for Violation. As stated in 33 CFR 151.04, a person who violates MARPOL 73/78, the Act to Prevent Pollution from Ships (APPS)(33 USC 1901-1911), or the implementing regulations (33 CFR 151), is liable for civil or criminal penalties. Civil penalties carry a fine not to exceed $40,000 for each violation. A person who makes a false, fictitious statement or fraudulent representation in any matter in which a statement or representation is required to be made to the Coast Guard under MARPOL 73/78, the Act, or the implementing regulations, is liable for a civil penalty of $8,000 for each statement or representation, as provided by 33 U.S.C. 1908(b)(2). A person who knowingly violates MARPOL 73/78, the Act, or the regulations of this subpart commits a class D felony. 18 U.S.C. 1355 *et seq.*

Vessel owners or operators that discharge oil or hazardous substances into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone, may be subject to civil penalties. Civil penalties carry a fine of not more than $15,000 per violation and a maximum amount not exceed $190,000. 33 U.S.C. 1321 *et seq.*

Vessel General Permit (VGP): NPDES stands for National Pollution Discharge Elimination System, which is a matter within the authority of our federal Environmental Protection Agency under the Clean Water Act. As the result of a court decision in 2005, vessels lost the exclusion to the requirements which they had long enjoyed. The VGP incorporates existing CG regulations for ballast, bilge and gray water and dry cargo residue runoff, and in most cases imposes permitting requirements that exceed these standards. It established requirements for 26 types of general discharges, as well as for corrective actions, inspections, monitoring, recordkeeping and reporting. The EPA has the primary responsibility for enforcing the provisions of the VGP and specific questions should be directed to them. Further information on the VGP is provided on the Coast Guard's Homeport web page http://homeport.uscg.mil/ selecting the following tabs: Missions > Domestic Vessels > Domestic Vessel General > EPA Vessel General Permit (VGP) or on the EPA web page at http://www.epa.gov/npdes/vessels or CG web page at http://www.uscg.mil/hq/cg5/cg522/cg5224/vgp.asp.

(Repetition NTM 1(17)14) (USCG)

(18) COMPLIANCE WITH THE ACT TO PREVENT POLLUTION FROM SHIPS.

Widely known as the London Dumping Convention, the 1972 International Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter entered into force on August 30, 1975. This Convention addresses the unregulated dumping of non-ship generated waste materials into ocean waters, and creates a regime to prevent or strictly limit dumping that degrades or endangers human health or the marine environment. The Convention bans the dumping of certain hazardous materials and requires permits for the dumping of other identified materials and other wastes or matter. "Dumping" is defined as the deliberate disposal at sea of wastes or other matter from vessels, aircraft, platforms, or other man-made structures. In addition, the Convention controls the incineration of wastes on board ships, sets out criteria for the selection of dumping and incineration sites at sea, and has provisions to promote regional cooperation.

(18) COMPLIANCE WITH THE ACT TO PREVENT POLLUTION FROM SHIPS. (Continued).

The Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA or the Ocean Dumping Act) is codified at 33 U.S.C. §1401 *et seq.* MPRSA implements the 1972 London Dumping Convention under U.S. law. MPRSA was amended in 1988 by Public Law 100-688, Title I of which is the Ocean Dumping Ban Act of 1988, and Title IV of which is the Shore Protection Act.

The purpose of MPRSA is to regulate the transportation of material from the U.S. or by U.S. vessels, aircraft, or agencies for the purpose of dumping the material into ocean waters, and the dumping of material transported by any person from a location outside the U.S. if the dumping occurs in the territorial sea or the contiguous zone of the U.S.

MPRSA establishes the statutory authority to regulate ocean dumping beyond the territorial sea line (three mile limit) from U.S. flag vessels and of material from the U.S.; and regulate dumping by any vessel in the U.S. territorial sea and contiguous zone.

Under MPRSA, no dumping is allowed in U.S. waters except some sewage, sludge, dredge materials, and fish wastes. The EPA may issue a permit for dumping of other materials under extraordinary circumstances.

Various federal agencies share certain responsibilities under the MPRSA. The EPA issues ocean dumping permits, and the U.S. Army Corps of Engineers (USACE) issues permits for the dumping of dredge materials. NOAA monitors the effects of waste dumping. The Coast Guard is responsible to conduct surveillance and other appropriate enforcement activity to prevent unlawful transportation of material for dumping, or unlawful dumping.

One of the Coast Guard's activities under the MPRSA includes enforcement of regulations relating to safe transportation of municipal and commercial waste (33 CFR 151.1000). Here, the regulations state that a vessel may not transport municipal or commercial waste in coastal waters without a conditional permit issued by the Coast Guard. 33 CFR 151.1009 and 1012 describe the transportation of municipal or commercial waste requirements and the application process for obtaining a conditional permit.

(Repetition NTM 1(18)14) (USCG)

(19) INTERNATIONAL SAFETY MANAGEMENT CODE ENFORCEMENT.

Compliance with the ISM Code is mandatory for passenger ships, cargo ships, bulks carriers, and oil and chemical tankers, gas carriers, as well as high speed craft and MODUs over 500 GT engaged on international voyages. To demonstrate compliance, vessels must present copies of approved Documents of Compliance and Safety Management Certificates to Coast Guard Port State control Boarding Officers during routine compliance examinations. ISM compliance demonstrates that vessel operators have safety and environmental policies, emergency response procedures, designated accident and code non-conformity reporting procedures, and on board maintenance and operating manuals. If inbound vessels are not in compliance with the ISM Code, they will be denied entry into U.S. waters (SOLAS Chapter IX and 33 CFR 96).

(Repetition NTM 1(19)14) (USCG)

(20) BALLAST WATER MANAGEMENT FOR CONTROL OF NONINDIGENOUS SPECIES.

Every day, large quantities of ballast water from all over the world are discharged into United States waters. Carried in this ballast water from ships are plants, animals, bacteria, and pathogens. These organisms range in size from microscopic to large plants and free-swimming fish. These organisms have the potential to become aquatic nuisance species (ANS). ANS may displace native species, degrade native habitats, spread disease, and disrupt human social and economic activities that depend on water resources. Any ship carrying ballast water is a potential invasion source.

In recent years, there has been increased international focus on Ballast Water Management (BWM) due to the ecological, economic, and potential health threats caused by the spread of ANS from ballast water. The United States Coast Guard is responding to these concerns through a comprehensive national BWM program. This program applies to all vessels equipped with ballast water tanks that operate in U.S. waters and are bound for ports or places in the U.S.

Highlights of the BWM program include:

(a) Requires mandatory ballast water management practices for all vessels that operate in U.S. waters;
(b) Establishes additional practices for vessels entering U.S. waters after operating beyond the EEZ; and
(c) Requires the reporting and record keeping of ballasting operations by all vessels.

The BWM program regulations maybe found in 33 CFR Part 151 Subparts C and D. These regulations implement the provisions of the Non indigenous Aquatic Nuisance Prevention and Control Act of 1990 (NANPCA, 16 USC 4701 – 4751) as amended by the National Invasive Species Act of 1996 (NISA).

(20) BALLAST WATER MANAGEMENT FOR CONTROL OF NONINDIGENOUS SPECIES. (Continued).

The Coast Guard provides guidance on the BWM program in NVIC 07-04, CH 1 and NVIC 01-04. The Coast Guard's Aquatic Nuisance Species web page provides an additional guidance on the BWM program: http://www.uscg.mil/hq/cg5/cg522/cg5224/ and http://www.uscg.mil/hq/cg5/cg522/cg5224/bwm.asp.
(Repetition NTM 1(20)14) (USCG)

(21) VESSEL SECURITY REGULATIONS: MTSA AND ISPS CODE.

In December 2002, the International Maritime Organization (IMO) amended the International Convention of Safety of Life at Sea (SOLAS) by implementing Chapter IX-2: Special measures to enhance maritime security. SOLAS IX-2 implements the International Ship & Port Facility (ISPS) Code, which established a set of international security-oriented regulations relating to vessel and port facilities. ISPS is applicable to all cargo vessels over 500 International Gross Tons engaged on international voyages.

On October 22, 2003, the U.S. Coast Guard implemented domestic security regulations for maritime security under the authority of the. The requirements of the MTSA align, where appropriate, with the security requirements in the SOLAS IX-2 and the ISPS Code. MTSA implementing regulations are found in 33 CFR 101 – 106. Regulations issued under MTSA require the owner of each vessel covered by regulation to comply with an approved Vessel Security Plan (VSP). SOLAS vessels must comply with a similar plan called a Ship Security Plan (SSP).

To ensure vessels subject to MTSA and/or ISPS are in compliance, the Coast Guard conducts annual security plan verification (SPV) exams on all U.S. flag inspected and uninspected vessels and onboard foreign vessels operating in U.S. waters. In verifying compliance with this plan, the inspector has three tasks: ensure that the vessel or facility complies with the approved plan, ensure that the plan and assessment adequately addresses the security vulnerabilities, and verify that the measures accomplish the intended function.

The Coast Guard conducts SPV exams on inspected vessels during the vessel's normal inspection process. After the initial SPV exam, uninspected vessels subject to MTSA undergo subsequent SPV exams once every 5 years, while vessels subject to both MTSA and ISPS undergo subsequent exams twice every 5 years, to align with the requirements for the International Ship Security Certificate (ISSC). The Coast Guard conducts SPV exams on foreign vessels under its Port State Control program.

Further guidance on the Coast Guard's vessel security program for vessels subject to MTSA/ ISPS is found in NVIC 04-03, change 3 and at the Coast Guard's MTSA-ISPS web page at: http://cgweb.comdt.uscg.mil/g-mp/helpdesk.htm.
(Repetition NTM 1(21)14) (USCG)

(22) WARNING-POSSIBLE DANGER FROM UNLABELED INTERMODAL CONTAINERS AND DRUMS.

With the many exotic chemicals being transported in inter-modal freight containers and in drums as deck cargo, increasingly more reports are received regarding the loss overboard of these potentially dangerous cargo-carrying units. Empty containers and drums may contain residues which may be extremely hazardous to touch or smell, and vapors emanating from these packages may be explosive.

When encountering derelict inter-modal containers and drums, whether afloat or from the sea bottom, the dangers listed above should be considered. Identifying labels will give adequate warning, but containers and drums are more likely to be found with caution labels washed away. All inter-modal freight containers have unique identifying numbers, which should be included in any sighting report if visible from a safe distance. Avoid direct contact and notify U.S. Coast Guard of any sightings in U.S. coastal waters (24 HR TOLL FREE reporting number 1-800-424-8802), or government authorities of the nearest port state if sighting is near any foreign shores.
(Repetition NTM 1(22)14) (USCG)

(23) REPORTING OF DANGERS TO NAVIGATION.

Mariners will occasionally discover uncharted shoals, malfunctions of important navigational aids or other dangerous situations that should be made known to other navigators. Those items that can be classified as urgent should be reported by any rapid means to the closest responsible charting authority. The general criterion for important data is "that information, without which, a mariner might expose his vessel to unnecessary danger." Reports to the U.S. Coast Guard and to foreign authorities can be made via radio using voice, SITOR and Digital Selective Calling (DSC), via TELEX, or via satellite using telephone and fax. Reports to NGA (NAVAREA IV, NAVAREA XII, HYDROLANT, HYDROPAC, and HYDROARC) in Springfield, VA can be made via the Automated Message Handling System (AMHS) (NGA NAVSAFETY) WASHINGTON DC, telephone (1-800-362-6289), fax (1-571-558-3426), or e-mail (navsafety@nga.mil).

Guidance in preparing reports of dangers to navigation and specific radio frequencies, addresses and telephone numbers are contained in NGA Pub. 117, Radio Navigational Aids. Reports should be brief, but must contain:

(23) REPORTING OF DANGERS TO NAVIGATION. (Continued).

What - Description of danger
When - GMT and date
Where - Latitude and Longitude (Reference chart in use.)
Who - Reporting vessel and observer

Additionally, mariners are requested to notify NGA of discrepancies in charts and publications using the "Marine Information Report and Suggestion Sheet" form included in each issue of the Notice to Mariners. The same form can be submitted electronically from the Submit Reports section of the Maritime Safety Office Web site at http://msi.nga.mil/NGAPortal/MSI.portal.
(Supersedes NTM 1(23)14) (NGA/SHGA)

(24) VESSEL BRIDGE-TO-BRIDGE RADIOTELEPHONE REGULATIONS.

APPLICATION: These regulations (33 CFR 26) contain watch and equipment requirements for VHF-FM Radiotelephone. The regulations apply to the following vessels (including recreational, commercial, public, and military vessels) while underway on the navigable waters of the United States, including internal rivers and tributaries and seaward out to *twelve* nautical miles off the coast:

(1) Power-driven vessels 20 meters or greater in length;
(2) Vessels 100 gross tons or more carrying one or more passengers for hire (and vessels carrying more than 6 passengers for hire on the Great Lakes);
(3) Towing vessels 26 feet or more in length while towing; and
(4) Dredges and Floating Plants near a channel or fairway.

EQUIPMENT REQUIRED: Vessels subject to these regulations must have two separate VHF-FM radios. Either a single radio, provided that it has two separate receivers; two multi-channel radios; or a single channel radio set to bridge-to-bridge frequency, and a separate multi-channel receiver (multi-channel radios should be capable of transmitting and receiving on VHF-FM Channels 13 (156.65 MHz) or 67 (156.375 MHz), 16 (156.8 MHz), 22A (157.1 MHz), and, the designated Vessel Traffic Service (VTS) frequency as denoted in 33 CFR Table 161.12(c) and NTM 1(25)07, i.e. Channels 5A (156.250 MHz), 11 (156.550 MHz), 12 (156.600 MHz), or 14 (156.700 MHz). A single scanning, or sequential monitoring radio (often referred to as "dual watch" capability) will not meet the requirements for both radios. Hand-held, portable radios may be used to meet these requirements, however, this radio must be permanently associated with the vessel and it must have a connection for an external antenna. Foreign vessels entering into U.S. waters must also meet these provisions, however, may use portable radios brought aboard by a pilot, yet, not permanently associated with the vessel.

WATCH ON CHANNEL 13: The *master, operator, or whomever is designated to pilot the vessel* must, while underway, maintain a listening watch on the designated bridge-to-bridge frequency Ch. 13 or Ch. 67 (on the Lower Mississippi River). The person maintaining the watch must also be able to communicate in English.

WATCH ON CHANNEL 16: In *addition* to the Ch. 13 watch, vessels must keep a continuous listening watch on Ch. 16 (International Distress and Calling Channel), except when transmitting or receiving traffic on other VHF-FM channels (e.g. vessels may switch to other channels for port operations, to pass traffic, listen to weather reports or safety broadcasts, etc.) or when participating in and monitoring the assigned VTS channel. Note, vessels not required to have a VHF-FM radio onboard, but do, must also maintain a watch on Ch. 16.

MORE INFORMATION: The Vessel Bridge-to-Bridge Radiotelephone regulations are denoted in Title 33, Code of Federal Regulations, Part 26 and can also be found in the U.S. Coast Guard publication Navigation Rules: *International-Inland*, (COMDTINST M16672.2D) or at http://www.navcen.uscg.gov/?pageName=navRulesContent#Annexes. Additional VHF-FM Radiotelephone requirements and regulations can be found in Title 47, CFR Part 80–Stations in the Maritime Services. For inquiries or questions mail: Commandant (CG-NAV-3), U.S. Coast Guard, 2100 2nd Street SW Stop 7580, Washington, DC 20593-7580; telephone: (202) 372-1563, e-mail: cgnav@uscg.mil.
(Repetition NTM 1(24)14) (USCG)

(25) VESSEL TRAFFIC SERVICES AND VESSEL MOVEMENT REPORTING SYSTEM CENTER, CALL SIGNS, DESIGNATED FREQUENCIES, AND MONITORING AREAS.

Center *Call Sign* **-- MMSI** [1]	**Designated frequency (Channel designation)** *- purpose* [2]	**Vessel Traffic Service and Vessel Movement Reporting System Monitoring area** [3, 4]
Berwick Bay *Berwick Traffic* -- 003669950	156.550 MHz (Ch. 11)	The waters south of 29°45'N., west of 91°10'W., north of 29°37'N., and east of 91°18' W.
Buzzards Bay *Buzzards Bay Control* [5]	156.600 MHz (Ch. 12)	The waters east and north of a line drawn from the southern tangent of Sakonnet Point, Rhode Island, in approximate position latitude 41°27.2' N, longitude 70°11.7' W, to the Buzzards Bay Entrance Light in approximate position latitude 41°23.5' N, longitude 71°02.0' W, and then to the southwestern tangent of Cuttyhunk Island, Massachusetts, at approximate position latitude 41°24.6' N, longitude 70°57.0' W, and including all of the Cape Cod Canal to its eastern entrance, except that the area of New Bedford harbor within the confines (north of) the hurricane barrier, and the passages through the Elizabeth Islands, is not considered to be "Buzzards Bay".
Houston-Galveston -- 003669954		The navigable waters north of 29°N., west of 94°20'W., south of 29°49'N., and east of 95°20'W.
Houston Traffic	156.550 MHz (Ch. 11) 156.250 MHz (Ch. 5A) *- Sailing Plans only.*	The navigable waters north of a line extending due west from the southern most end of Exxon Dock #1 (20°43.37'N., 95°01.27'W.).
Houston Traffic	156.600 MHz (Ch. 12) 156.250 MHz (Ch. 5A) *- Sailing Plans only.*	The navigable waters south of a line extending due west from the southern most end of Exxon Dock #1 (29°43.37'N., 95°01.27'W.).
Los Angeles/Long Beach: MMSI/To be determined		
San Pedro Traffic	156.700 MHz (Ch.14)	*Vessel Movement Reporting System Area:* The navigable waters within a 25 nautical mile radius of Point Fermin Light (33°42.3'N., 118°17.6'W.).
Louisville: Not applicable		
Louisville Traffic	156.650 MHz (Ch. 13)	The waters of the Ohio River between McAlpine Locks (Mile 606) and Twelve Mile Island (Mile 593), only when the McAlpine upper pool gauge is at approximately 13.0 feet or above.
Lower Mississippi River -- 0036699952		
New Orleans Traffic	156.550 MHz (Ch. 11)	The navigable waters of the Lower Mississippi River below 29°55.3'N 089°55.6'W (Saxonholm Light) at 86.0 miles Above Head of Passes (AHP), extending down river to Southwest Pass, and, within a 12 nautical mile radius around 28°54.3'N 089°25.7'W (Southwest Pass Entrance Light at 20.1 miles Below Head of Passes.)

(25) VESSEL TRAFFIC SERVICES AND VESSEL MOVEMENT REPORTING SYSTEM CENTER, CALL SIGNS, DESIGNATED FREQUENCIES, AND MONITORING AREAS. (Continued).

Center *Call Sign* -- **MMSI** [1]	**Designated frequency (Channel designation)** *- purpose* [2]	**Vessel Traffic Service and Vessel Movement Reporting System Monitoring area** [3, 4]
New Orleans Traffic	156.600 MHz (Ch. 12)	The navigable waters of the Lower Mississippi River bounded on the north by a line drawn perpendicular on the river at 29°55'30"N and 090°12'46"W (Upper Twelve Mile Point) at 109.0 miles AHP and on the south by a line drawn perpendicularly at 29°55.3'N 089°55.6'W (Saxonholm Light) at 86.0 miles AHP.
New Orleans Traffic	156.250 MHz (Ch. 05A)	The navigable waters of the Lower Mississippi River below 30°38.7'N 091°17.5'W (Port Hudson Light) at 254.5 miles AHP bounded on the south by a line drawn perpendicular on the river at 29°55'30"N and 090°12'46"W (Upper Twelve Mile Point) at 109.0 miles AHP.
New York -- 003669951	1	
New York Traffic	156.550 MHz (Ch. 11) - Sailing Plans only 156.600 MHz (Ch. 12) - For Vessels at anchor	The area consists of the navigable waters of the Lower New York Bay bounded on the east by a line drawn from Norton Point to Breezy Point; on the south by a line connecting the entrance buoys at the Ambrose Channel, Swash Channel, and Sandy Hook Channel to Sandy Hook Point; and on the southeast including the waters of Sandy Hook Bay south to a line drawn at latitude 40°25'N; then west in the Raritan Bay to the Raritan River Railroad Bridge, then north into waters of the Arthur Kill and Newark Bay to the Lehigh Valley Draw Bridge at latitude 40°41.9'N; and then east including the waters of the Kill Van Kull and the Upper New York Bay north to a line drawn east-west from the Holland Tunnel ventilator shaft at latitude 40°43.7'N, longitude 74°01.6'W, in the Hudson River; and then continuing east including the waters of the East River to the Throgs Neck Bridge, excluding the Harlem River.
New York Traffic	156.700 MHz (Ch. 14)	The navigable waters of the Lower New York Bay west of a line drawn from Norton Point to Breezy Point; and north of a line connecting the entrance buoys of Ambrose Channel, Swash Channel, and Sandy Hook Channel, to Sandy Hook Point; on the southeast including the waters of the Sandy Hook Bay south to a line drawn at latitude 40°25'N; then west into the waters of Raritan Bay East Reach to a line drawn from Great Kills Light south through Raritan Bay East Reach LGB #14 to Comfort PT, NJ; then north including the waters of the Upper New York Bay south of 40°42.40'N (Brooklyn Bridge) and 40°43.70'N (Holland Tunnel Ventilator Shaft); west through the KVK into the Arthur Kill north of 40°38.25'N (Arthur Kill Railroad Bridge); then north into the waters of the Newark Bay, south of 40°41.95'N (Lehigh Valley Draw Bridge).
New York Traffic	156.600 MHz (Ch. 12)	The navigable waters of the Raritan Bay south to a line drawn at latitude 40°26'N; then west of a line drawn from Great Kills Light south through the Raritan Bay East Reach LGB #14 to Point Comfort, NJ; then west to the Raritan River Railroad Bridge; and north including the waters of the Arthur Kill to 40°28.25'N (Arthur Kill Railroad Bridge); including the waters of the East River north of 40°42.40'N (Brooklyn Bridge) to the Throgs Neck Bridge, excluding the Harlem River.

(25) VESSEL TRAFFIC SERVICES AND VESSEL MOVEMENT REPORTING SYSTEM CENTER, CALL SIGNS, DESIGNATED FREQUENCIES, AND MONITORING AREAS. (Continued).

Center *Call Sign* **-- MMSI** [1]	**Designated frequency (Channel designation)** *- purpose* [2]	**Vessel Traffic Service and Vessel Movement Reporting System Monitoring area** [3, 4]
Port Arthur[6] -- 003669955		
Port Arthur Traffic	156.050 MHz (Ch. 01A)	The navigable waters of the Sabine-Neches Canal south of 29°52.70'N.; Port Arthur Canal; Sabine Pass Channel; Sabine Bank Channel; Sabine Outer Bar Channel; the offshore safety fairway; and the ICW from High Island to its intersection with the Sabine-Neches Canal.
Port Arthur Traffic	156.275 MHz (Ch 65A)	The navigable waters of the Neches River; Sabine River; and Sabine-Neches Waterway north of 29°52.70'N.; and the ICW from its intersection with the Sabine River to MM 260.
Port Arthur Traffic	156.675 MHz (Ch 73)[6]	The navigable waters of the Calcasieu Channel; Calcasieu River Channel; and the ICW from MM 260 to MM 191.
Prince William Sound -- 003669958		
Valdez Traffic	156.650 MHz (Ch. 13)	The navigable waters south of 61°05'N., east of 147°20'W., north of 60° N., and west of 146°30'W.; and, all navigable waters in Port Valdez.
Puget Sound[7]		
Seattle Traffic -- 003669957	156.700 MHz (Ch. 14)	The waters of Puget Sound, Hood Canal and adjacent waters south of a line connecting Nodule Point and Bush Point in Admiralty Inlet and south of a line drawn due east from the southernmost tip of Possession Point on Whidbey Island to the shoreline.
Seattle Traffic -- 003669957	156.250 MHz (Ch. 5A)	The waters of the Strait of Juan de Fuca east of 124°40'W. excluding the waters in the central portion of the Strait of Juan de Fuca north and east of Race Rocks; the navigable waters of the Strait of Georgia east of 122°52'W.; the San Juan Island Archipelago, Rosario Strait, Bellingham Bay; Admiralty Inlet north of a line connecting Nodule Point and Bush Point and all waters east of Whidbey Island north of a line drawn due east from the southernmost tip of Possession Point on Whidbey Island to the shoreline.
Tofino Traffic -- 003160012	156.725 MHz (Ch. 74)	The waters west of 124°40'W. within 50 nautical miles of the coast of Vancouver Island including the waters north of 48°N., and east of 127°W.
Victoria Traffic -- 003160010	156.550 MHz (Ch. 11)	The waters of the Strait of Georgia west of 122°52'W., the navigable waters of the central Strait of Juan de Fuca north and east of Race Rocks, including the Gulf Island Archipelago, Boundary Pass and Haro Strait.

(25) VESSEL TRAFFIC SERVICES AND VESSEL MOVEMENT REPORTING SYSTEM CENTER, CALL SIGNS, DESIGNATED FREQUENCIES, AND MONITORING AREAS. (Continued).

Center *Call Sign* **-- MMSI** [1]	**Designated frequency (Channel designation)** *- purpose* [2]	**Vessel Traffic Service and Vessel Movement Reporting System Monitoring area** [3, 4]
San Francisco -- 003669956		
San Francisco Traffic	156.700 MHz (Ch. 14)	The navigable waters of the San Francisco Offshore Precautionary Area, the navigable waters shoreward of the San Francisco Offshore Precautionary Area east of 122°42.0'W. and north of 37°40.0'N. extending eastward through the Golden Gate, and the navigable waters of San Francisco Bay and as far east as the port of Stockton on the San Joaquin River, as far north as the port of Sacramento on the Sacramento River.
San Francisco Traffic	156.600 MHz (Ch. 12)	The navigable waters within a 38 nautical mile radius of Mount Tamalpais (37°55.8'N., 122°34.6'W.) west of 122°42.0'W. and south of 37°40.0'N and excluding the San Francisco Offshore Precautionary Area.
St. Marys River -- 003669953		
Soo Traffic	156.600 MHz (Ch. 12)	The waters of the St. Marys River between 45°57'N. (De Tour Reef Light) and 46°38.7'N. (lle Parisienne Light), except the St. Marys Falls Canal and those navigable waters east of a line from 46°04.16'N. and 46°01.57'N. (La Pointe to Sims Point in Potagannissing Bay and Worsley Bay).

[1] Maritime Mobile Service Identifier (MMSI) is a unique nine-digit number assigned that identifies ship stations, ship earth stations, coast stations, coast earth stations, and group calls for use by a digital selective calling (DSC) radio, an INMARSAT ship earth station or AIS. AIS requirements are set forth in §§ 161.21 and 164.46 of this subchapter. The requirements set forth in §§ 161.21 and 164.46 of this subchapter apply in those areas denoted with a MMSI number.

[2] In the event of a communication failure, difficulties or other safety factors, the Center may direct or permit a user to monitor and report on any other designated monitoring frequency or the bridge-to-bridge navigational frequency, 156.650 MHz (Channel 13) or 156.375 MHz (Ch. 67), to the extent that doing so provides a level of safety beyond that provided by other means. The bridge-to-bridge navigational frequency, 156.650 MHz (Ch. 13), is used in certain monitoring areas where the level of reporting does not warrant a designated frequency.

[3] All geographic coordinates (latitude and longitude) are expressed in North American Datum of 1983 (NAD 83).

[4] Some monitoring areas extend beyond navigable waters. Although not required, users are strongly encouraged to maintain a listening watch on the designated monitoring frequency in these areas. Otherwise, they are required to maintain watch as stated in 47 CFR 80.148.

[5] In addition to the vessels denoted in section 161.16 of this chapter, requirements set forth in subpart B of 33 CFR part 161 also apply to any vessel transiting VMRS Buzzards Bay required to carry a bridge-to-bridge radiotelephone by part 26 of this chapter.

[6] Until otherwise directed, full VTS services will not be available in the Calcasieu Channel, Calcasieu River Channel, and the ICW from MM 260 to MM 191. Vessels may contact Port Arthur Traffic on the designated VTS frequency to request advisories, but are not required to monitor the VTS frequency in this sector.

[7]A Cooperative Vessel Traffic Service was established by the United States and Canada within adjoining waters. The appropriate Center administers the rules issued by both nations; however, enforces only its own set of rules within its jurisdiction. Note, the bridge-to-bridge navigational frequency, 156.650 MHz (Ch. 13), is not so designated in Canadian waters, therefore users are encouraged and permitted to make passing arrangements on the designated monitoring frequencies.

(Supersedes NTM 1(25)14) (USCG)

(26) SEISMIC SURVEYS.

Details of seismic surveys may be broadcast to mariners via HYDROLANT, HYDROPAC, HYDROARC, NAVAREA IV and NAVAREA XII broadcast systems. Surveys can be conducted without prior notification or broadcast warnings.

Survey vessels may operate alone or in company with other surface vessels or submersibles. Survey vessels may be towing cables in excess of 2 miles astern. Cables may be marked by buoys and may be towed on the surface or submerged.

During a survey, repeated shock waves are created by using explosive charges, compressed air, mechanical vibrators or by electrical means at any level from the bottom to the surface. Vessels surveying may be underway but sometimes are stopped for extended periods.

Seismic survey vessels which are unable to maneuver are required to carry the lights and signals described in Rule 27 of International Regulations for Preventing Collisions at Sea. These vessels should be given a wide berth.

Charges may be contained in a variety of cylinders, tubes, or bags which may not be marked as dangerous. No attempt to recover such items should be made. Any suspicious charge-like containers inadvertently taken aboard by trawls or any other means should be carefully handled and jettisoned immediately if possible.

(Repetition NTM 1(26)14) (NGA/SHG)

(27) UNITED STATES-CAUTION REGARDING SUBMARINE OPERATIONS.

Boundary limits and designations of submarine operating areas are shown on the charts in magenta or purple lines. As submarines may be operating in these areas, vessels should proceed with caution. During torpedo practice firing, all vessels are cautioned to keep well clear of naval target vessels flying a large red flag where it may best be seen.

During the past a number of potentially dangerous incidents have occurred. Ships have entered Fleet Operating Areas in which UDT (Underwater Demolition Teams) or SEAL (Sea, Air, and Land) Teams were conducting scheduled operations from a submerged submarine. These operations were being conducted in a specific area assigned for that purpose. These submerged operations ordinarily involve transferring swimmers in and out of a submarine while submerged. In this situation, movements of the submarine must be restricted in course, speed, and depth. Furthermore, emergency surfacing could prove hazardous and result in loss of life to swimmers. Therefore, when conducting operations of this type the submarine and swimmer detachment are relatively immobile and are helpless to evade approaching ships passing through their area. There is also a real danger that a well-intentioned ship, unaware of these operations, might turn in the submarine's direction to investigate rubber raft, swimmers, or submarine periscope.

Notice of date and time prior to any subsurface operations should be provided to Commander Submarine Force, U.S. Atlantic Fleet, 7958 Blandy Rd., Norfolk, VA 23551-2492.

(Repetition NTM 1(27)14) (U.S. NAVY)

(28) SPECIAL RULES WITH RESPECT TO ADDITIONAL STATION AND SIGNAL LIGHTS FOR NAVY SHIPS.

1. Man overboard lights.-Naval vessels may display, as a means of indicating man overboard, two pulsating, all around red lights in a vertical line located on a mast from where they can best be seen.
2. Yard arm signaling lights.-Naval vessels may display, as a means of visual signaling, white all around lights at the end of the yardarms. These lights will flash in varying sequences to convey the intended signal.
3. Aircraft warning lights.-Naval vessels may display, as a means of indicating the presence of an obstruction to low flying aircraft, one or two all around red lights on each obstruction.
4. Underway replenishment contour lights.-Naval vessels may display, as a means of outlining the contour of the delivery ship during night time underway replenishment operations, red or blue lights at deck edge extremities. These lights are being converted to blue, vice red, therefore either color may be seen until conversion is complete.
5. Minesweeping station keeping lights.-Naval vessels engaged in minesweeping operations may display, as an aid in maintaining a prescribed interval and bearing, two white lights in a vertical line visible from 070 through 290 degrees relative.

(6. Submarine identification light.-Submarines may display, as a distinctive means of identification, an intermittently flashing amber beacon located where it can best be seen, as near as practicable, all around the horizon.

7. Special operations lights.-Naval vessels may display, as a means of coordinating certain operations, a revolving beam colored red, green or amber, located on either yardarm or mast platform from where it can be seen all around the horizon.
8. Convoy operations stern light.-Naval vessels may display, during periods of convoy operations, a blue light located near the stern, with the same characteristics as, but in lieu of, the normal white stern light.
9. Wake illumination light.-Naval vessels may display a white light located near the stern to illuminate the wake.

28) SPECIAL RULES WITH RESPECT TO ADDITIONAL STATION AND SIGNAL LIGHTS FOR NAVY SHIPS. (Continued).

10. Flight operations lights.-Naval vessels engaged in night flight operations may display various arrangements of light systems containing combinations of different colored lights as a means of assisting in the launch and recovery of aircraft and enhancing flight safety. These light systems will be located at various points on the vessels, depending on the vessel type and nature or the flight operations being conducted.
11. Amphibious operations lights.-Naval vessels engaged in night amphibious operations may display various arrangements of light systems containing combinations of different colored lights as a means of assisting in the launch and recovery of assault craft and enhancing the safety of the amphibious operation. These light systems will be located at various points on the vessels, depending on the vessel type and the nature of the amphibious operations being conducted.
12. Minesweeping polarity signal lights.-Naval vessels engaged in minesweeping operations may display either a red or green light on each side of vessel.
13. Replenishment-at-sea floodlights.-Naval vessels engaged in replenishment-at-sea operations may display various arrangements of floodlights of different colors for general illumination of equipment, work areas, and cargo being transferred between ships. These lights will be located at various points on the vessels, depending on the vessel type and location of the replenishment-at-sea handling areas.
14. Replenishment-at-sea cargo transfer signal lights.-Naval vessels engaged in replenishment-at-sea operations may display one or more red light signal devices on the delivery side of the vessels. These devices display various combinations of lights to indicate type of cargo being transferred.
15. Replenishment-at-sea truck light.-Naval vessels engaged in replenishment-at-sea operations may display one or more red all-round light(s) located on a mast to assist the receiving vessel in approaching the delivery vessel.
16. Replenishment-at-sea lights.-Naval aircraft carriers and similar type vessels may display two all-round lights installed along the forward starboard flight deck edge to indicate the fore-and-aft axis when the aircraft carrier or similar type vessel is the delivery vessel.

(Repetition NTM 1(28)14) (U.S. NAVY)

(29) UNITED STATES NAVAL VESSELS-NAVIGATIONAL LIGHT WAIVERS-DISTINCTIVE LIGHTS AUTHORIZED FOR NAVAL VESSELS.

1. All ships are warned that, when U.S. Naval vessels are met on the high seas or on navigable waters of the United States during periods when navigational lights may be displayed; certain navigational lights of some naval vessels may vary from the requirements of the Regulations for Preventing Collisions at Sea, 1972, and rules applicable to the navigable waters of the United States, as to number, position, range of visibility or arc of visibility. These differences are necessitated by reasons of military function or special construction of the naval ships. An example is the aircraft carrier where the two masthead lights are considerably displaced to starboard from the center or keel line of the vessel when viewed from ahead. Certain other naval vessels cannot comply with the horizontal separation requirements of the masthead lights, and the two masthead lights on even larger naval vessels, such as some cruisers, will thus appear to be crowded together when viewed from a distance. Other naval vessels may also have unorthodox navigational light arrangements or characteristics when seen either underway or at anchor.
2. Naval vessels may also be expected to display certain other lights. These lights include, but are not limited to, different colored recognition light signals, and aircraft landing lights. These lights may sometimes be shown in combination with navigational lights.
3. During naval maneuvers, naval ships, alone or in company, may also dispense with showing any lights, though efforts will be made to display lights on the approach of shipping.
4. Naval vessels, except for aircraft carriers, may dispense with showing the masthead lights during operations or maneuvers in which the vessels are restricted in ability to maneuver.

(Repetition NTM 1(29)14) (CNO)

(30) TRAFFIC SEPARATION SCHEMES, AREAS TO BE AVOIDED, RECOMMENDED TRACKS, AND OTHER ROUTING MEASURES.

To increase the safety of navigation, particularly in converging areas of high traffic density, routes incorporating traffic separation schemes have been adopted by the IMO in certain areas of the world. Certain maritime nations have also adopted their own non-IMO approved traffic separation schemes. In the interest of safe navigation, it is recommended that through traffic use these schemes, as far as circumstances permit, by day and by night and in all weather conditions.

(30) TRAFFIC SEPARATION SCHEMES, AREAS TO BE AVOIDED, RECOMMENDED TRACKS, AND OTHER ROUTING MEASURES. (Continued).

An area to be avoided (ATBA) is a routing measure comprising an area within defined limits, in which either navigation is particularly hazardous or it is exceptionally important to avoid casualties, and which should be avoided by all ships, or certain classes of ships.

Recommended tracks are routes, generally found to be free of dangers, which ships are advised to follow to avoid possible hazards nearby.

The International Maritime Organization (IMO) is recognized as the only international body responsible for establishing and recommending measures on an international level concerning ships' routing. In deciding whether or not to adopt or amend a traffic separation scheme, IMO will consider whether the scheme complies with the design criteria for traffic separation schemes and with the established methods of routing. IMO also considers whether the aids to navigation proposed will enable mariners to determine their position with sufficient accuracy to navigate the scheme in accordance with Rule 10 of the International Regulations for Preventing Collisions at Sea (72 COLREGS).

General principles for navigation in traffic separation schemes are as follows:

1. A ship navigating in or near a traffic separation scheme adopted by IMO shall in particular comply with Rule 10 of the 72 COLREGS to minimize the development of risk of collisions with another ship. The other rules of the 72 COLREGS apply in all respects, and particularly the steering and sailing rules if risk of collision with another ship is deemed to exist.
2. Traffic separation schemes are intended for use by day and by night in all weather, in ice-free waters or under light ice conditions where no extraordinary maneuvers or assistance by icebreaker(s) is required.
3. Traffic separation schemes are recommended for use by all ships unless stated otherwise. Bearing in mind the need for adequate underkeel clearance, a decision to use a traffic separation scheme must take into account the charted depth, the possibility of changes in the sea-bed since the time of last survey, and the effects of meteorological and tidal conditions on water depths.
4. A deep water route is an allied routing measure primarily intended for use by ships which require the use of such a route because of their draft in relation to the available depth of water in the area concerned. Through traffic to which the above consideration does not apply should, if practicable, avoid following deep water routes. When using a deep water route mariners should be aware of possible changes in the indicated depth of water due to meteorological or other effects.
5. The arrows printed on charts merely indicate the general direction of traffic; ships should not set their courses strictly along the arrows.
6. Vessels should, so far as practicable, keep clear of a traffic separation line or separation zone.
7. Vessels should avoid anchoring in a traffic separation scheme or in the area near its termination.
8. The signal "YG" meaning "You appear not to be complying with the traffic separation scheme" is provided in the International Code of Signals for appropriate use.

   NOTE.-Several governments administering traffic separation schemes have expressed their concern to IMO about the large number of infringements of Rule 10 of the 72 COLREGS and the dangers of such contraventions to personnel, vessels and environment. Several governments have initiated surveillance of traffic separation schemes for which they are responsible and are providing documented reports of vessel violations to flag states. As in the past, the U.S. Coast Guard will investigate these reports and take appropriate action. Mariners are urged to comply at all times with the 72 COLREGS and, in particular, Rule 10 when operating in or near traffic separation schemes.
9. Notice of temporary adjustments to traffic separation schemes for emergencies or for accommodation of activities which would otherwise contravene Rule 10 or obstruct navigation may be made in Notices to Mariners. Temporary adjustments may be in the form of a precautionary area within a traffic lane, or a shift in the location of a lane.
10. The IMO approved routing measures which affect shipping in or near U.S. waters are:

UNITED STATES TRAFFIC SEPARATION SCHEMES

In the Approaches to Portland, Maine
In the Approach to Boston, Massachusetts
In the Approaches to Narragansett Bay, Rhode Island and Buzzards Bay, Massachusetts
Off New York
Off Delaware Bay
In the Approaches to Chesapeake Bay, including a deep water route
In the Approaches to the Cape Fear River
In the Approaches to Galveston Bay
In the Approaches to Los Angeles-Long Beach
In the Santa Barbara Channel
Off San Francisco

(30) TRAFFIC SEPARATION SCHEMES, AREAS TO BE AVOIDED, RECOMMENDED TRACKS, AND OTHER ROUTING MEASURES. (Continued).

In the Strait of Juan de Fuca and its Approaches
In Puget Sound and its approaches
In Haro Strait, Boundary Pass, and the Strait of Georgia
In Prince William Sound, Alaska

UNITED STATES AREAS TO BE AVOIDED
In the region of Nantucket Shoals
In the vicinity of Northeast Gateway Energy Bridge Deepwater Port
In the vicinity of Neptune Deepwater Port
In the Great South Channel
Off the Florida Coast (Adjacent to Florida Keys)
At Louisiana Offshore Oil Port (LOOP) in the Gulf of Mexico
Off the California Coast (In the region of the Channel Islands)
Off Washington Coast
In the region of the Northwest Hawaiian Islands

UNITED STATES NO ANCHORING AREAS
In the vicinity of Northeast Gateway Energy Bridge Deepwater Port
In the vicinity of Neptune Deepwater Port
Flower Garden Banks
Tortugas Ecological Reserve and the Tortugas Bank in the Florida Keys

UNITED STATES RECOMMENDED TRACKS
Off the California Coast (Off Monterey Bay for vessels 300 gross tons or more and vessels carrying hazardous cargo in bulk)

UNITED STATES TWO-WAY ROUTE
In the Strait of Juan de Fuca
(Repetition NTM 1(30)14) (IMO/USCG)

(31) FIRING DANGER AREAS.

Firing and bombing practice exercises take place either occasionally or regularly in numerous areas established for those purposes along the coast of practically all maritime countries.

In view of the difficulty in keeping these areas up to date on the charts, and since the responsibility to avoid accidents rests with the authorities using the areas for firing and/or bombing practice, these areas will not as a rule be shown on NGA charts.

National Ocean Service Charts show firing and bombing practice areas as defined by Code of Federal Regulations (Title 33, Part 334) in United States waters.

Any permanent aid to navigation that may be established to mark a danger area, or any target, fixed or floating, that may constitute a danger to navigation, will be shown on the appropriate charts.

Warning signals, usually consisting of red flags or red lights, are customarily displayed before and during the practice, but the absence of such warnings cannot be accepted as evidence that a practice area does not exist. Vessels should be on the lookout for local warnings and signals, and should, whenever possible, avoid passing through an area in which practice is in progress, but if compelled to do so should endeavor to clear it at the earliest possible moment.
(Repetition NTM 1(31)14) (NGA/SHG)

(32) ENDANGERED SPECIES (WHALES AND SEA TURTLES) EASTERN SEABOARD.

National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), Office of Protected Resources has advised that several species of endangered and threatened sea turtles and endangered whales occur along the U.S. eastern seaboard; all are vulnerable to collisions with ships.

Sea Turtles. Sea turtles are highly susceptible to vessel collisions because they regularly surface to breathe and often rest at or near the surface. Leatherback turtles commonly feed on jellyfish near the surface; areas where concentrations of jellyfish are

(32) ENDANGERED SPECIES (WHALES AND SEA TURTLES) EASTERN SEABOARD. (Continued).

readily visible should be avoided or traversed slowly as turtles are likely to be present and actively feeding. Sea turtles can be difficult to see, especially in choppy or rough seas. Sea turtles are commonly found along the U.S. eastern seaboard from Maine to Florida and throughout the Caribbean. Critically important nesting beaches and associated near shore habitat occurs from North Carolina to Florida, and adult turtles migrate to and from these areas from April through September. These are particularly important times and areas for adults, but sea turtles (both adults and juveniles) are found year-round in waters along the eastern seaboard and care should be taken at all times to avoid collisions.

North Atlantic Right Whales. The North Atlantic right whale is one of the world's most endangered large whale species. North Atlantic right whales are found primarily in continental shelf waters between Florida and Nova Scotia. The species is listed as "endangered" under the Endangered Species Act, and protected under the Marine Mammal Protection Act. Intentionally approaching within 500 yards of right whales is prohibited and is a violation of U.S. federal law.

These whales migrate annually along the east coast between feeding grounds off New England and Canada and the southern calving grounds off Florida, Georgia and South Carolina. Because right whales mate, rest, feed and nurse their young at the surface, and often do not move out of the way of oncoming ships, they are highly vulnerable to being struck. Pregnant females and females with nursing calves are particularly vulnerable to collisions with ships.

Right whales are large baleen whales. Adults are generally 45 to 55 feet in length and can weigh up to 70 tons. The body is mostly black, but irregularly shaped white patches of skin may be present on the underside. The best field identifiers are a broad back with no dorsal fin, irregular raised white patches on the head, and a distinctive two-column V-shaped blow when viewed from directly behind or in front of the whale. The whales have broad, paddle-shaped flippers and a broad, deeply notched tail. Right whales are slow moving and seldom travel faster than 5 or 6 knots. They can stay submerged for 10 to 20 minutes and may appear suddenly when surfacing to breathe. They are often seen alone or in small groups. At times, right whales form large courtship groups of 20 to 30 animals.

The following table describes the seasonal occurrence of North Atlantic right whales. However, in any given year oceanographic variability may affect the seasonal distribution of this species. There are three areas in U.S. waters designated as critical habitats for right whales, Coastal Florida and Georgia (Sebastian Inlet, Florida, to the Altamaha River, Georgia), the Great South Channel (east of Cape Cod), and Cape Cod Bay extending into Massachusetts Bay. The northern critical habitat areas are feeding and nursery grounds, while the southern area contains a calving area. The waters off South Carolina, Georgia and northern Florida are the only known calving area for North Atlantic right whales.

Location	Season	Comments
Central Gulf of Maine (Jordan Basin, Cashes Ledge)	April-June, October-December	
Cape Cod Bay	December-May	
Great South Channel, Northern Edge of Georges Bank	March-July	
Bay of Fundy, Scotian Shelf (Browns Bank, Roseway Basin)	July - October	Most of the population can be found in this area during this time
Jeffreys Ledge	October-December	Whales are frequently sighted in this area
Stellwagen Bank National Marine Sanctuary	Year-round	Peak sightings occur in the early spring with infrequent sightings in the summer

(32) ENDANGERED SPECIES (WHALES AND SEA TURTLES) EASTERN SEABOARD. (Continued).

Location	Season	Comments
New York to North Carolina	November-April	The migration corridor between right whale habitats is within 30 miles of the Atlantic coast
South Carolina, Georgia and Florida Calving Area	November-April	Calving right whales have been sighted as far north as Cape Fear, NC and as far south as Miami, FL with rare sightings in the Gulf of Mexico

To address the problem of vessel strikes with right whales the following recommendations and regulations have been established:

Vessels greater than or equal to 65 ft in overall length are subject to mandatory speed restrictions of 10 knots or less in seasonal management areas (SMA) along the U.S. East Coast during times when right whales are likely to be present. The Northeastern SMA speed restrictions are in place from January 1 through May 15 in Cape Cod Bay, from March 1 through April 30 off Race Point, and from April 1 through July 31 in the Great South Channel. Speed restrictions in the U.S. Mid-Atlantic SMAs are in place from November 1 to April 30, and include Block Island Sound, entry into the Ports of New York/ New Jersey, Delaware Bay, Entrance to Chesapeake Bay, and the Ports of Morehead City and Beaufort, NC, and within a continuous area approximately 20 nautical miles from shore around the major ports of Wilmington, NC, Charleston, SC and Savannah, GA. Speed restrictions are in place in the Southeastern U.S. SMA from November 15 to April 15, this area extends from shore approximately 30 nautical miles eastward and contains the major ports of Brunswick, GA, Fernandina Beach, FL and Jacksonville, FL. NOAA Fisheries may also establish voluntary Dynamic Management Areas (DMAs) when right whales are present in areas and times not covered by the SMAs. Information about established DMAs will be announced via Coast Guard Broadcast Notice to Mariners, Coast Guard Local Notice to Mariners, and NAVTEX. Mariners are encouraged to avoid DMAs or reduce speeds to 10 knots or less while transiting through DMAs. Additional information on SMA locations and exemptions to this law in addition to printed compliance guides and information on how to obtain an interactive CD for mariners that identifies ways to reduce the probability of collisions with whales can be found at the following websites: http://nmfs.noaa.gov/pr/shipstrike, http://nero.noaa.gov/shipstrike and http://rightwhalessouth.nmfs.noaa.gov.

As weather and conditions permit, a dedicated seasonal program of aerial and vessel surveys are conducted in various locations along the U.S. East Coast to provide whale sighting information to mariners. Surveys typically occur in the following locations at the specified times: a) Cape Cod Bay from December through May and year-round in the Gulf of Maine (including the Great South Channel); b) Georgia south to Crescent Beach, FL from December through March. Survey planes occasionally use VHF-FM channel 16 to contact ships directly if whales have been spotted in close proximity to that vessel. However, many right whales go undetected by surveys. Right whale advisories are broadcast periodically for these and surrounding areas by Coast Guard Broadcast Notice to Mariners, NAVTEX, NOAA Weather Radio, Cape Cod Canal Vessel Traffic Control, the Bay of Fundy Vessel Traffic Control, and are included in the return message from the Right Whale Mandatory Ship Reporting (MSR) systems. Sighting information may be obtained by sending an email to ne.rw.sightings@noaa.gov (Northeast) or se.rw.sightings@noaa.gov (Southeast). Recent right whale sighting information can also be found at http:// www.nefsc.noaa.gov/psb/surveys/.

In addition to the requirements identified above, NOAA National Marine Fisheries Service recommends the following precautionary measures be taken to avoid adverse interactions with North Atlantic right whales:

1. Before entering right whale habitat, check sources for recent right whale sighting reports. Local ship pilots also have information on whale sightings and safe local operating procedures.
2. Review right whale identification materials and maintain a sharp watch with lookouts familiar with spotting whales. Even though right whales are very large, they can be difficult to spot because of their dark color and lack of a dorsal fin.
3. Avoid transiting through the right whale critical habitats and areas where right whales have recently been sighted. If transiting between ports within critical habitats, minimize transit distance. Route around observed or recently reported right whales and anticipate delays due to whale sightings. Vessels should avoid transits at night or during periods of low visibility.
4. If a right whale is sighted from the ship or reported along the intended track of the ship, mariners should exercise caution, post a lookout and continue to operate at 10 knots when consistent with safe navigation. If a right whale is sighted, a vessel must steer a course away from the right whale and immediately leave the area at slow safe speed. Do not assume right whales will move out of the way of an approaching vessel.

(32) ENDANGERED SPECIES (WHALES AND SEA TURTLES) EASTERN SEABOARD. (Continued).

Any whale accidentally struck, any dead whale carcass, and any sighting of an injured or entangled whale should be reported immediately to the Coast Guard or NOAA National Marine Fisheries Service noting the precise location, date, and time of the accident or sighting. In the case of an accidental strike other information such as the speed and course of the vessel, vessel specifications such as size and propulsion, water depth, environmental conditions such as visibility, wind speed and direction, description of the impact, fate of the animal, and species and size, if known should be provided. Reports to NOAA for dead, ship struck or injured whales can be made to +1-866-755-6622 in the Northeast U.S. and +1-877-942-5343 in the Southeast U.S.

Recommended Two-Way Routes were developed for vessels entering and transiting through Cape Cod Bay and arriving and departing the ports of Brunswick, GA, Fernandina Beach, FL and Jacksonville, FL. To reduce the risk of ship strikes to the North Atlantic right whale, an Area To Be Avoided was established in the Great South Channel, east of the Boston Harbor traffic lanes. Ships of 300 gross tons and above should avoid the area between the period of April 1st through July 31st. The area is bounded by 41°44′05″N, 69°34′58″W; 42°10′00″N, 68°31′00″W; 41°24′53″N, 68°31′00″W; and 40°50′28″N, 68°58′40″W, and then back to the starting point. Information on these can be found at http://www.nmfs.noaa.gov/pr/shipstrike/.

Mandatory Ship Reporting (MSR) Systems areas have also been established for two areas off the east coast of the United States. The system in the northeastern U.S. operates year round and the system in the southeast U.S. operates from November 15 to April 16. The systems require all commercial ships 300 gross tons or greater to report to a shore-based station when entering the areas. In return, ships will receive an automated message indicating precautionary measures mariners can take to reduce the possibility of striking right whales and recent sighting locations. The reporting system requires reporting only and will affect no other aspect of vessel operation. Reports to the Mandatory Ship Reporting Systems can be sent by email: RightWhale.MSR@noaa.gov or Telex: 48156090. Additional information on MSR locations and reporting procedures may be obtained in the U.S. Coast Pilots or at the following Web site: http://www.nmfs.noaa.gov/pr/shipstrike/msr/.

Example Report to MSR North:

WHALESNORTH// (Reporting system area, WHALESSOUTH is the other area)
M/487654321// (Vessel INMARSAT number)
A/CALYPSO/NRUS// (Vessel name and call sign)
B/031401Z APR// (Day, time and month of report)
E/345// (True course)
F/10.0// (Speed in knots and tenths)
H/031410Z APR/4104N/06918W// (Date, time and point of entry into system)
I/BOSTON/032345Z APR// (Destination and ETA)
L/WP/4104N/06918W/10.0//
L/WP/4210N/06952W/10.0//
L/WP/4230N/07006W/10.0//

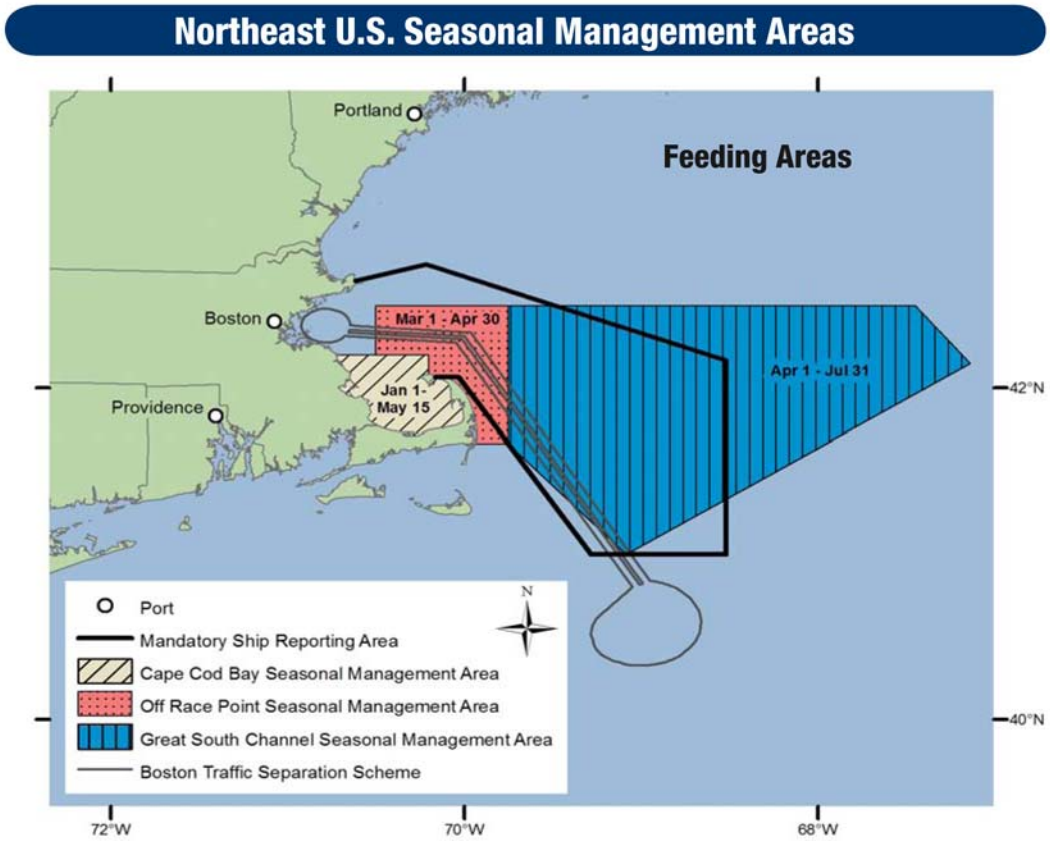
Route information can be reported as a set of waypoints (WP) and intended speed shown above or a rhumb line to port and intended speed shown below:

L/RL/10.0

(Compliance Guide for Right Whale Ship Strike Reduction Rule (50 CFR 224.105)

ATTENTION: All vessels greater than or equal to 65 ft (19.8 m) in overall length and subject to the jurisdiction of the United States and all vessels greater than or equal to 65 ft in overall length entering or departing a port or place subject to the jurisdiction of the United States.

YOU MUST SLOW TO SPEEDS OF 10 KNOTS OR LESS IN ACTIVE SEASONAL MANAGEMENT AREAS



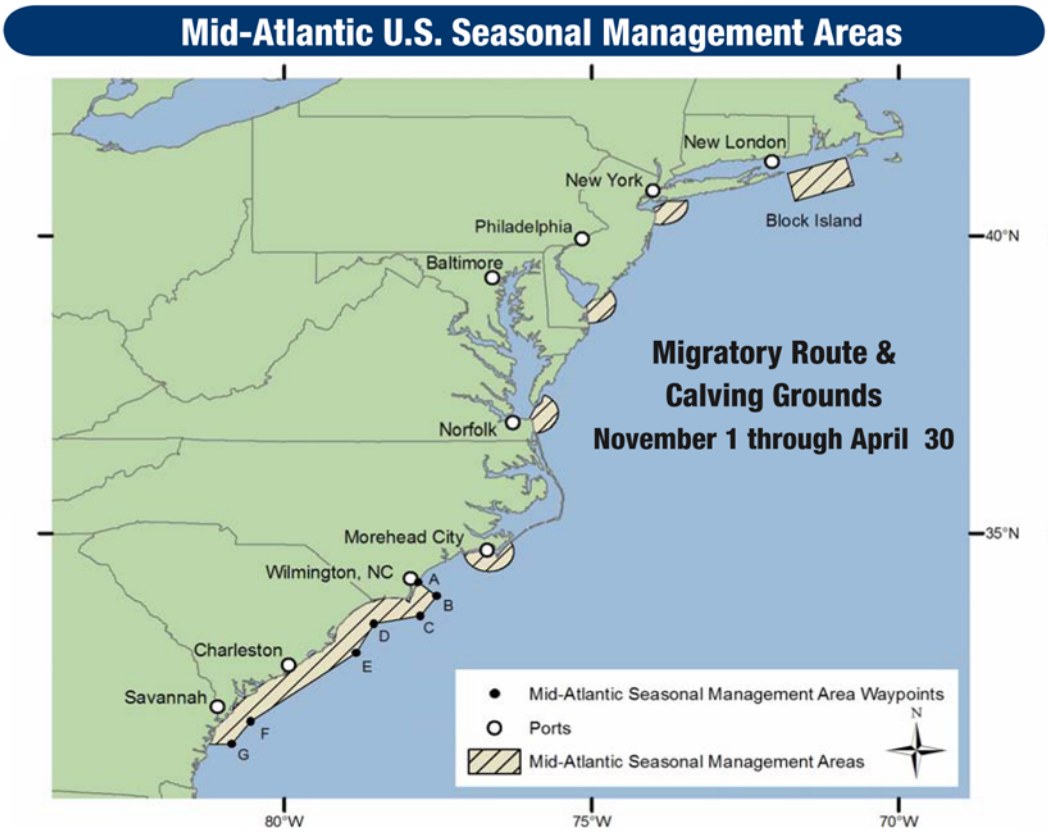
Feeding Areas

Cape Cod Bay	Off Race Point	Great South Channel
January 1 - May 15	March 1 - April 30	April 1 - July 31
Includes all waters of Cape Cod Bay with Northern Boundary of 42°04′56.5″N, 070°12′W to 42°12′N, 070°12′W then due west back to shore.	Waters bounded by: 42°04′56.5″N 070°12′W 42°12′N, 070°12′W 42°12′N, 070°30′W 42°30′N, 070°30′W 42°30′N, 069°45′W 41°40′N, 069°45′W then due west back to shore.	Waters bounded by: 42°30′N, 069°45′W 42°30′N, 067°27′W 42°09′N, 067°08′24″W 41°00′N, 069°05′W 41°40′N, 069°45′W then back to starting point.

The rule does not apply to waters inshore of COLREGS lines.

(32) ENDANGERED SPECIES (WHALES AND SEA TURTLES) EASTERN SEABOARD. (Continued).

Migratory Route



November 1 through April 30

Vessel speed is restricted in the following areas:

- Block Island Sound waters bounded by: 40°51′53.7″N 070°36′44.9″W, 41°20′14.1″N 070°49′44.1″W, 41°04′16.7″N 071°51′21.0″W, 40°35′56.5″N 071°38′25.1″W, then back to starting point.
- Within a 20 nm (37 km) radius of the following (as measured seaward from the COLREGS lines):
  - Ports of New York/New Jersey: 40°29′42.2″N 073°55′57.6″W
  - Entrance to the Delaware Bay (Ports of Philadelphia and Wilmington): 38°52′27.4″N 075°01′32.1″W
  - Entrance to the Chesapeake Bay (Ports of Hampton Roads and Baltimore): 37°00′36.9″N 075°57′50.5″W
  - Ports of Morehead City and Beaufort, NC: 34°41′32.0″N 076°40′08.3″W

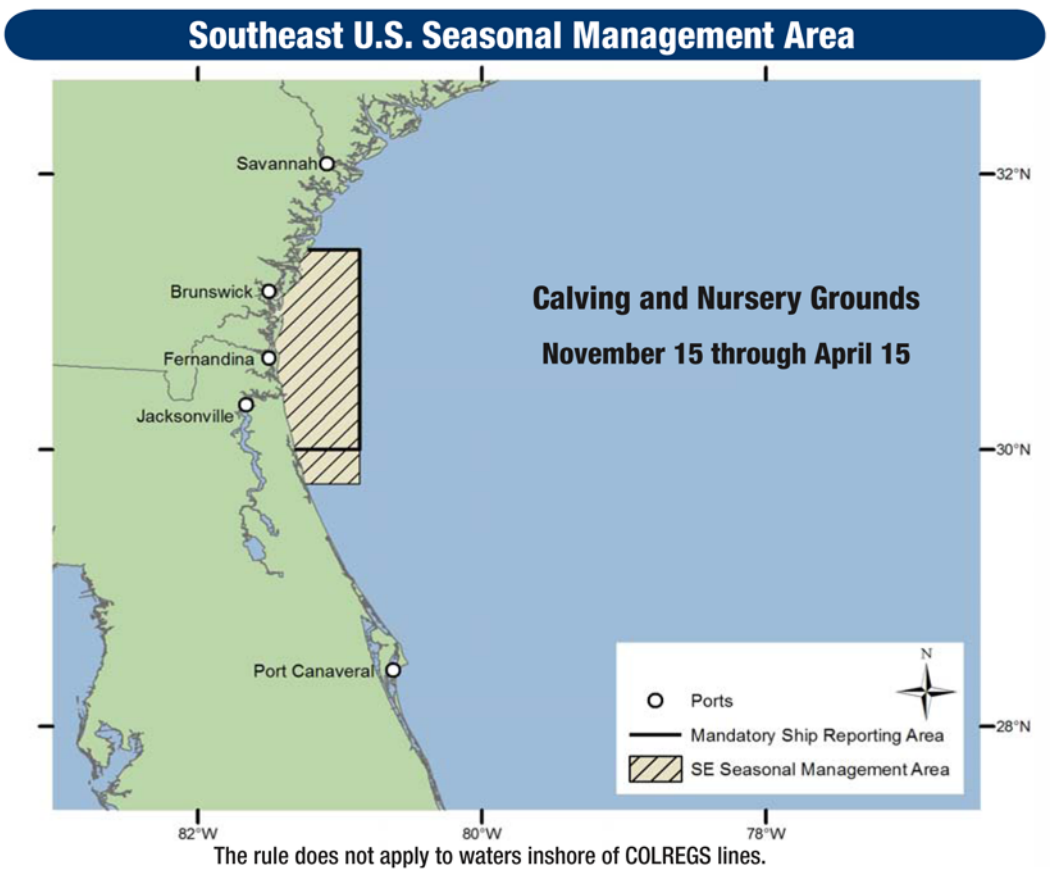
(32) ENDANGERED SPECIES (WHALES AND SEA TURTLES) EASTERN SEABOARD. (Continued).

- Within a continuous area 20 nm from shore between Wilmington, NC, to Brunswick, GA, bounded by the following:

Point	Latitude	Longitude
A	34°10′30″N	077°49′12″W
B	33°56′42″N	077°31′30″W
C	33°36′30″N	077°47′06″W
D	33°28′24″N	078°32′30″W
E	32°59′06″N	078°50′18″W
F	31°50′00″N	080°33′12″W
G	31°27′00″N	080°51′36″W

and west back to the shore.

Calving and Nursery Ground



November 15 through April 15

Vessel speed is restricted in the area bounded to the north by latitude 31°27′N; to the south by latitude 29°45′N; to the east by longitude 080°51′36″W.

Temporary Dynamic Management Areas (DMAs) may also be established by NOAA Fisheries Service. Mariners are encouraged to avoid these areas or travel at 10 knots or less while transiting through these areas. NOAA Fisheries Service will announce DMAs to mariners through its customary maritime communication media.

(32) ENDANGERED SPECIES (WHALES AND SEA TURTLES) EASTERN SEABOARD. (Continued).

NOAA FISHERIES SERVICE

Mandatory speed restrictions of 10 knots or less are required in Seasonal Management Areas along the U.S. East Coast during times when right whales are likely to be present. The purpose of this regulation is to reduce the likelihood of deaths and serious injuries to these endangered whales that result from collisions with ships.

Vessels may operate at a speed greater than 10 knots only if necessary to maintain a safe maneuvering speed in an area where conditions severely restrict vessel maneuverability as determined by the pilot or master.

If a deviation from the 10 knot speed restriction is necessary, the following information must be entered into the vessel's logbook:
- Reasons for deviation
- Speed at which vessel is operated
- Latitude and longitude at time of deviation
- Time and duration of deviation
- Master of the vessel shall sign and date the logbook entry

(Supersedes NTM 1(32)14) (NOAA)

(33) REPORTING DEPTH INFORMATION.

The many ships presently equipped with reliable depth recorders constitute a potential wealth of sounding data desired by charting agencies for the purpose of confirming charted depths or charting heretofore unknown depths. While oceanographic survey vessels remain the primary source of bathymetric data, depth recordings submitted by navy, coast guard and merchant vessels will make an important contribution to the vital task of charting the oceans.

Mariners are encouraged to obtain and report soundings whenever bridge routine and equipment capabilities will allow. The American Practical Navigator (Bowditch) (PUB9), Sections 2911-2916 describes the bathymetric requirements and provides some guidance for observing and reporting sonic soundings. However, soundings must be correlated to positions and accompanied by supportive data such as:

(a) Detailed position/time information.
(b) Mariner's own evaluation of positional accuracy (type of navigational system used and frequency of fixes).
(c) Ship's course and speed with time of changes noted.
(d) Echogram scales in use and graduated scales provided, with time of scale changes.
(e) Draft of vessel and whether zero reference is corrected for draft.
(f) Regular annotations of date/time marks on echograms to enable correlation with positions.
(g) State of the tide and weather conditions.
(h) Other related information considered appropriate.

An uncharted depth of 15 fathoms/28 meters or less should be considered an urgent danger to navigation, and should be reported via radio without delay. Follow up with substantiating evidence, including the echogram, track chart and/or position log and all relevant navigational data and forward to NGA at the earliest opportunity.

Charts submitted to amplify a sounding report will be replaced, on request, with a new chart, except that foreign charts will be replaced with the equivalent U.S. chart, if available. Data reports and charts should be sent to the National Geospatial-Intelligence Agency, Mail Stop N64-SH, 7500 Geoint Dr., Springfield, VA 22150-7500, either directly by mail or via any U.S. Consulate.

(Repetition NTM 1(33)14) (NGA/SHG)

(34) WARNING-MINED AREAS.

Mines of various types and ages pose a threat to navigation in many parts of the world. Once mined, an area can never be certified to be completely danger free. Sweeping produces only statistical probability of protection. Mines may still remain, having failed to respond to orthodox sweeping methods. Some swept areas have not been covered by modern surveys and may contain uncharted wrecks, shoals or other dangers to navigation.

(34) WARNING-MINED AREAS. (Continued).

Prudent seamanship in former mine fields, swept channels and swept areas includes:

(a) Transit using only established routes or buoyed channels.
(b) Avoid shallow water. Sweeping techniques often preclude sweeping in restricted waters.
(c) Avoid fishing, trawling or any other form of submarine or seabed activity.
(d) Mariners are advised to anchor with caution only in established anchorages.
(e) Consult local authorities and regulations.

(Repetition NTM 1(34)14) (U.S. NAVY)

(35) MINED AREAS REPORTED.

Minefields-Tarabulus, Libya.

In early 1973 Libya reported that the following areas had been mined. Although these areas are probably no longer a mine threat, they still represent a potential hazard to navigation. The areas reported by Libya are bounded by lines joining the following positions:

1. (a) 32°52'48"N., 13°24'30"E.
   (b) 32°57'42"N., 13°24'30"E.
   (c) 32°57'42"N., 13°18'00"E.
   (d) 32°53'48"N., 13°22'18"E.
2. (a) 32°53'42"N., 13°20'36"E.
   (b) 32°55'54"N., 13°18'00"E.
   (c) 32°55'54"N., 13°15'00"E.
   (d) 32°54'30"N., 13°15'00"E.

(Repetition NTM 1(35)14) (U.S. NAVY)

(36) MINESWEEPING-CAUTION-ATTENTION IS CALLED TO THE FOLLOWING INSTRUCTIONS.

Minesweeping Operations:

(a) United States vessels engaged in minesweeping operations or exercises are hampered to a considerable extent in their maneuvering powers. Other Vessels Must Keep Clear of Minesweepers (COLREGS 1972).
(b) With a view to indicating the nature of the work on which they are engaged, these vessels will show the signals hereinafter mentioned. For the public safety, all other vessels, whether steamers or sailing craft, must endeavor to keep out of the way of vessels displaying these signals and not approach them inside the distances mentioned herein, especially remembering that it is dangerous to pass between the vessels of a pair or group sweeping together.
(c) All vessels towing sweeps are to show:
BY DAY.-A black ball at the fore mast and a black ball at the end of each fore yard.
BY NIGHT.-All around green lights instead of the black balls, and in a similar manner.
(d) Vessels or formations showing these signals are not to be approached nearer than 1,000 meters on either beam and vessels are not to cross astern closer than 1,000 meters. Under no circumstances is a vessel to pass through a formation of minesweepers.
(e) Minesweepers should be prepared to warn merchant vessels which persist in approaching too close by means of any of the appropriate signals from the International Code of Signals.
(f) In fog, mist, falling snow, heavy rainstorms, or any other conditions similarly restricting visibility, whether by day or night, minesweepers while towing sweeps when in the vicinity of other vessels will sound signals for a vessel towing (1 prolonged blast followed by 2 short blasts).

Helicopters Conducting Minesweeping Operations:

(a) The United States is increasingly employing helicopters to conduct minesweeping operations or exercises. When so engaged, helicopters, like vessels, are considerably hampered in their ability to maneuver. Accordingly, surface craft approaching helicopters engaged in minesweeping operations should take safety precautions similar to those described in (b) and (d) above with respect to minesweeping vessels.
(b) Helicopters towing minesweeping gear and accompanying surface escorts, if any, will use all available means to warn approaching ships of the operations or exercises being conducted. Also, measures will be taken where practicable to mark or light the gear or objects being towed.
(c) Minesweeping helicopters are equipped with a rotating beacon which has selectable red and amber modes. The amber mode is used during towing operations to notify/warn other vessels that the helicopter is towing. While towing, the helicopter's altitude varies from 15 to 95 meters above the water and speeds vary from 0 to 30 knots.

(36) MINESWEEPING-CAUTION-ATTENTION IS CALLED TO THE FOLLOWING INSTRUCTIONS (Continued).

(d) General descriptions and approximate dimensions for towed minesweeping gear currently being used in conjunction with helicopters are as follows:

(1) Mechanical sweep gear consisting, in part, of large lengths of submerged cables and explosive cutters. The only items normally visible on the surface are three to five international orange floats, depending upon the quantity of gear in use, which generally define the dimensions of the tow. The maximum width is 100 meters and the maximum distance behind the helicopter is 600 meters.

(2) Acoustical sweep device weighing approximately 70 pounds. This device is towed behind the helicopter on a 250-meter orange polypropylene tow cable. When dead in the water, the gear will rise to the surface, supported by a yellow float.

(3) A hydrofoil platform containing equipment used for magnetic influence sweeping. The platform is towed on the end of a 140-meter cable and trails electrodes in the water which extend 185 meters behind the platform. Very often, the aforementioned acoustical sweep device is towed in conjunction with this platform by attaching it to the end of one of the electrodes by a 30-meter polypropylene tow line. In this configuration, the total length of the tow is 215 and 350 meters, respectively, behind the hydrofoil platform and helicopter. Special care must be exercised when crossing astern of the hydrofoil platform as the towed cable is barely visible, and the attached acoustic device is submerged just beneath the surface and is not visible to surface vessels.

(4) Helicopters employed in minesweeping operations and their tows may function during the day, and in various types of weather conditions. The major danger to any surface vessel is getting the various cables wrapped in its screws. Small craft also are subject to the risk of collision with the hydrofoil platform.

(Repetition NTM 1(36)14) (U.S. NAVY)

(37) UNITED STATES-EXPLOSIVE ORDNANCE-WARNING-GENERAL.

The continental shelf of the United States contains many forms of unexploded ordnance (military weapons), and while some ordnance hazard areas are designated, many unexploded ordnance locations are not known. The types most likely to be encountered are underwater ordnance (weapons) such as torpedoes, mines, depth charges, and aerial bombs, but other ordnance items may be found. In general, any metallic object having fins, vanes, propellers, horns, or possibly plates screwed or bolted to an external surface should be regarded as dangerous. This warning is published for all shipmasters, trawlers, fishermen, divers or persons conducting operations on or near the ocean bottom, and provides instructions on the action to be taken when ordnance items or suspicious objects are encountered:

(1) OBJECTS SNAGGED OR NETTED: Any object which cannot be immediately identified as a non-explosive (inert) item MUST BE TREATED AS AN EXPLOSIVE ITEM. If in any doubt about its identity, TREAT IT AS EXPLOSIVE. Non-explosive naval ordnance items such as practice torpedoes and practice mines will normally be painted bright orange, for ready identification. Any object which is not painted orange may be dangerous and possibly can explode if brought on board or bumped in any way. If an object is brought to the surface of the water and it cannot be immediately identified as an inert item, DO NOT ATTEMPT TO BRING IT ON BOARD OR ALONGSIDE. If possible, release the object immediately and radio the nearest Navy or Coast Guard activity giving position and description of the object. If the object cannot be released, or freed by cutting net or line, the following actions are advised:

(a) stream object as far aft as possible;
(b) notify nearest Navy or Coast Guard activity and stand by for instructions or help;
(c) position crew at forward end of vessel, keeping deckhouse between them and the object astern; exposed personnel should remain under cover if possible;
(d) maintain steerageway as necessary to stay in the area until help or instructions arrive.

If unable to stand by while waiting for instructions because of deteriorating weather or sea conditions or other uncontrollable factors, keep the Navy or Coast Guard activity informed of your vessel's position AND AVOID POPULATED AREAS, OTHER VESSELS, OR SHORE- OR SEA-BASED STRUCTURES.

(2) OBJECTS BROUGHT ON BOARD: If a suspected explosive object is not detected until trawl or net contents have been discharged on board the vessel, take the following actions:

(a) avoid any bump or shock to the object;
(b) secure it in place against movement;
(c) keep it covered up and wet down;
(d) radio nearest Navy or Coast Guard activity and standby for instructions.

If unable to stand by while waiting for instructions because of deteriorating weather or sea conditions or other uncontrollable factors, keep the Navy or Coast Guard activity informed of your vessel's position AND AVOID POPULATED AREAS, OTHER VESSELS, OR SHORE-OR SEA-BASED STRUCTURES.

(37) UNITED STATES-EXPLOSIVE ORDNANCE-WARNING-GENERAL. (Continued).

(3) FLOATING OBJECTS: If a floating object cannot be readily identified as non-explosive, IT MUST BE CONSIDERED TO BE EXPLOSIVE. DO NOT APPROACH, OR ATTEMPT TO RECOVER OR BRING ON BOARD. Report location immediately to the nearest Navy or Coast Guard activity and warn all other ships or craft in the vicinity. Try to keep the object in sight until instructions are received.

(4) NAVAL MINES: Naval mines constitute a risk to shipping, fishing, underwater exploration, and other maritime interests. The different types of mines, the conditions under which they are most likely to be sighted, and the recommended action are as follows:

FLOATING MINES- Consider all floating mines to be live and dangerous. DO NOT TOUCH OR APPROACH. The possibility of drifting mines being camouflaged with seaweed or other innocent appearing floating objects should be borne in mind and avoiding action taken. The following procedures and precautions are recommended:

GROUND MINES- ON THE HIGH SEAS. Report the location of the mine by the most rapid means as soon as circumstances permit, this report is to be similar to that required for any hazard to navigation (See para 5). Mines sighted in anchorage areas or other patrolled water should, if circumstances permit, be kept under observation and reported to the nearest Navy or Coast Guard activity (See para 5). The recovery or handling of the mine should be done only by qualified explosive ordnance disposal personnel. If a mine is drifting down on a vessel at anchor and it cannot be avoided by other means, it is recommended that a stream of water from a fire hose be played near the mine to force it away from the vessel. WARNING: Mines may explode if a stream of water is played near them. Exposed personnel should remain under cover until danger is past.

MOORED MINES- Moored mines may sometimes be seen several feet under the surface if the water is clear, or the mine may be floating on the surface. Often several mines or even a long row of the mines can be seen. Usually the sighting of one or more such mines indicates the presence of a minefield. Approaching the general vicinity of such mines is dangerous and should not ordinarily be undertaken by vessels. When mines are sighted, the location of the mines should be determined as accurately as possible, the area should be buoyed if this is feasible, all ships in the vicinity should be warned, and the appropriate Navy or Coast Guard activity should be notified immediately. Ground mines are normally laid in water so deep that they will not be seen unless the water is very clear. However, in very clear water with a hard white sand bottom, even a camouflaged mine can often be located because of the long, regular shadow it casts. The sighting of such a mine may indicate a minefield in the neighborhood. Approaching the general vicinity of such a mine is very dangerous. If a mine is sighted, the location should be determined as accurately as possible and buoyed, all ships in the vicinity should be warned, and the appropriate Navy or Coast Guard activity should be notified immediately.

BEACHED MINES- Any of the above types of mine may be found on the beach, either thrown up by the waves or mislaid by aircraft. Any mine found beached or floating close inshore should be reported at once to the nearest Navy, Coast Guard, military, or civil authority, and the mine should be kept under guard until the arrival of responsible authorities. No person except qualified explosive ordnance disposal personnel should be allowed closer than 400 yards.

(5) REPORTING OF SUSPICIOUS OBJECTS RESEMBLING MINES: Ships frequently report objects resembling mines but give insufficient information to properly evaluate the reports. As a result, needless time and expense is incurred only to find that they are not mines but other floating objects. HOWEVER, VESSELS SHOULD NOT ATTEMPT TO RECOVER OBJECTS RESEMBLING MINES OR PASS CLOSE ABOARD FOR POSITIVE IDENTIFICATION-KEEP WELL CLEAR. Since mines are a danger to life and property at sea, masters of ships sighting unidentified or suspicious objects are requested to furnish the following information to the nearest Navy or Coast Guard radio station or activity:

(a) Position of object, and how closely it was approached.
(b) Size, shape, condition of painting, and the presence of marine growth.
(c) Whether or not horns or rings are attached.
(d) Whether or not definite identification possible.

(Repetition NTM 1(37)14) (U.S. NAVY)

(38) CAUTION-OIL WELL STRUCTURES IN WATERS CONTIGUOUS TO THE U.S. AND ITS TERRITORIES.

Caution should be exercised when navigating in the waters contiguous to the U.S. and its territories particularly in the Gulf of Mexico, Santa Barbara Channel, California, and Cook Inlet, Alaska, in order to avoid collision with oil well structures and their associated mooring piles, anchor and mooring buoys, etc.

(38) CAUTION-OIL WELL STRUCTURES IN WATERS CONTIGUOUS TO THE U.S. AND ITS TERRITORIES. (Continued).

In general, oil well structures can be identified at night by the display of one or more quick flashing white or red lights, however, ships can expect to encounter unlighted structures as well. Structures may be equipped with a fog signal consisting of a horn sounding one 2-second blast every 20 seconds. Submerged wells may be marked by lighted or unlighted buoys.

Shipping safety fairways have been established through the concentration of oil wells in the Gulf of Mexico and Santa Barbara Channel. Mariners are encouraged to use these fairways and should avoid anchoring within a safety fairway. Certain areas adjacent to shipping safety fairways have been charted as fairway anchorages.

(Repetition NTM 1(38)14) (USCG)

(39) CAUTION REGARDING APPROACH OF SINGLE VESSELS TOWARD NAVAL FORMATIONS AND CONVOYS.

A formation of warships or a convoy is more difficult to maneuver than a single ship. Therefore, the attention of masters is called to the danger of all concerned which is caused by a single vessel approaching a formation of warships or convoy so closely as to involve risk of collision, or attempting to pass ahead of, or through such a formation or convoy. All ships are therefore cautioned to employ the customary manners of good seamanship and, where there is ample sea room, adopt early measures to keep out of the way of a formation of warships or convoy. The fact that in the interests of safety a single vessel should keep out of the way of a formation or convoy does not entitle vessels sailing in company to proceed without regard to the movements of the single vessel. Vessels sailing in formation or convoy should accordingly keep a careful watch on the movements of any single vessel approaching the squadron or convoy and should be ready, in the case the single vessel does not keep out of the way, to take such action as will best aid to avert collision.

(Repetition NTM 1(39)14) (U.S. NAVY)

(40) NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY DISTRIBUTION SYSTEM.

GENERAL INFORMATION AND CUSTOMER ORDERING GUIDANCE.

DEFENSE LOGISTICS AGENCY FOR AVIATION-MAPPING CUSTOMER OPERATIONS (DSCR-QAM).

The Defense Logistics Agency for Aviation is available to assist customers during normal duty hours, Monday through Friday, 0730 to 1730 (except holidays) Eastern Time. After hours messages are recorded for processing on the next business day. The office can respond to inquiries regarding catalog usage, ordering procedures, product availability, disposition of excess stock, subscriptions and many other GGI&S related activities and interests.

Mailing Address:
Defense Logistics Agency for Aviation
Mapping Customer Operations (DSCR-QAM)
8000 Jefferson Davis Highway
Richmond, VA 23297-5339

Message Address:
DSCR RICHMOND VA//DSCR-FAN//
DSN: 695-6500; Fax: 695-6510
Tel: (804) 279-6500; Fax: (804) 279-6510
Toll Free: 1-800-826-0342
E-mail: Mapping Customer Operations Email Form: http://www.aviation.dla.mil/rmf/webmaster/hydroEmail.htm
Web site: www.aviation.dla.mil/rmf/

After Normal Duty Hours and Crisis Support
Pager-DSCR-QAM Duty Officer: Tel. (804) 279-6500
DSN 695-6500
Toll Free 1-800-826-0342

NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY (NGA) OFFICE OF CORPORATE COMMUNICATIONS.

The NGA Office of Corporate Communications is the point of contact for public queries. Phone: 571-557-5400. For assistance with NGA products and services, E-mail: queries1@nga.mil.

(40) NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY DISTRIBUTION SYSTEM. (Continued).

OBTAINING NGA NAUTICAL CHARTS AND PUBLICATIONS.

DoD customers should refer to the ordering procedures contained in the Catalog of Maps, Charts and Related Products. Requests for NGA products from non-DoD U.S. Government Agencies are on a reimbursable basis.

(1) CHARTS

Civilian users can obtain information about ordering NGA paper charts at:
http://www.nauticalcharts.noaa.gov/staff/charts.htm.

DoD users and DoD contractors may direct questions concerning the availability and distribution of announced hardcopy charts to the Defense Logistics Agency (DLA) Mapping Customer Operations at 1-800-826-0342 or 804-279-6500; DSN 695-6500; Fax 804-279-6524, or by visiting http://www.aviation.dla.mil/rmf/index.htm./

NGA standard nautical hardcopy chart products are made available and distributed by three different authorized methods:
1) The mailing and shipping of charts to Department of Defense (DoD) customers and other authorized U.S. Government users by the Defense Logistics Agency (DLA)
2) The posting of selected new charts (as large .pdf print files) to NGA websites for access by Department of Defense (DoD) customers and other authorized U.S. Government users
3) The print-on-demand access of all public release NGA charts by the National Ocean Service (NOS) and official NOS chart agents, on behalf of NGA

The posting of selected new NGA charts (as large .pdf print files) to NGA websites for access by Department of Defense (DoD) customers and other authorized U.S. Government users is normally made the day after NGA clears the New Edition for release and the chart is sent to be printed in mass quantity for DLA stock. The traditional NGA printed paper chart is then usually available some six to eight weeks later from DLA and sent out on automatic distribution. For those charts set for public sale, they are available a week after NGA release from the National Ocean Service at
http://www.nauticalcharts.noaa.gov/staff/charts.htm. Regardless of how the NGA chart is obtained by the customer (downloaded from NGA website, distributed from DLA, or obtained through NOS) each is official, should be put into service immediately, and meets all Federal chart carriage requirements immediately upon its release. Each should also be updated from the dates shown in the lower left corner of the chart through the US Notice to Mariners. For questions, contact NGA at mcdepod@nga.mil.

Through a special arrangement between the National Ocean Service and NGA, all NOAA charts are also available (as large .pdf print files) on the NGA websites for Department of Defense (DoD) customers and other authorized U.S. Government users. These NOAA chart files are updated every week for all Notice to Mariners (NGA, USCG, and Canadian Coast Guard).

The official NGA web sites for downloading selected NGA and NOAA charts are:
- NIPRNet: https://www.geointel.nga.mil/products/dnc/epods/index.htm
- SIPRNet: http://www.geoint.nga.smil.mil/products/dnc1/epods/index.htm
- JWICS: http://www.geoint.nga.ic.gov/products/dnc1/epods/index.htm

(2) PUBLICATIONS

New editions of NGA publications, announced in the Notice to Mariners, are available through electronic access at the Maritime Safety Web site (http://msi.nga.mil/NGAPortal/MSI.portal).

Although most NGA navigational publications are no longer offered in printed form from U.S. Government sources, authorized reproductions of these publications can still be purchased from commercial vendors. Known commercial vendors of authorized reproductions are listed below:

ProStar Publications Inc. (http://www.prostarpublications.com/b1/index.php)
Maryland Nautical (http://mdnautical.com/491-government-publications)
American Nautical Services (http://www.amnautical.com/collections/nga-books)
Landfall Navigation (http://www.landfallnavigation.com/govpub.html)
Islamorada Internacional (Panama Canal) (http://www.islamorada.com/english/nautical_publications/)
Horizon Nautical, Inc. (http://www.horizon-usa.net)
Celestaire (http://www.celestaire.com/Books/software.html)
Paradise Cay Publications (http://www.paracay.com/nautical/index.php)

(40) NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY DISTRIBUTION SYSTEM. (Continued).

This directory represents only that these vendors may offer sale of NGA publications. It is neither exclusive nor exhaustive, and in no way constitutes an endorsement by NGA of the listed vendors, nor the services or products they provide. Vendors of authorized NGA publications that wish to be included in this directory should notify the NGA Maritime Safety Office by e-mail to webmaster_nss@nga.mil or by telephone at 571-557-7103.

For additional information, visit the Products Catalog page at the Maritime Safety Web site
http://msi.nga.mil/NGAPortal/MSI.portal.
(Repetition NTM 1(40)14) (NGA/NOAA)

(41) INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO).

The International Hydrographic Organization (IHO) was originally established in 1921 as the International Hydrographic Bureau (IHB), the present name having been adopted in 1970 as a result of a revised international agreement between the member nations. However, the former name, International Hydrographic Bureau, was retained for the IHO's administrative body of three Directors and a small Staff at the Organization's headquarters in Monaco.

The **Vision** of the IHO is to be the authoritative worldwide hydrographic body which actively engages all coastal and interested States to advance maritime safety and efficiency and which supports the protection and sustainable use of the marine environment.

The **Mission** of the IHO is to create a global environment in which States provide adequate and timely hydrographic data, products and services and ensure their widest possible use

The IHO sets forth hydrographic standards as they are agreed upon by the member nations. All Member States are urged and encouraged to follow these standards in their surveys, nautical charts and publications. As these standards are uniformly adopted, the products of the world's hydrographic and oceanographic offices become more uniform. Much has been done in the field of standardization since the Bureau was founded.

During the 19th century, many maritime nations established hydrographic offices to provide means for improving the navigation of naval and merchant marine vessels by providing nautical publications, nautical charts and other navigational services. Non-uniformity of hydrographic procedures, charts and publications was much in evidence. In 1889, an International Marine Conference was held at Washington, D.C., and it was proposed to establish a "permanent international commission." Similar proposals were made at the sessions of the International Congress of Navigation held at St. Petersburg in 1908 and again in 1912.

In 1919 the hydrographers of Great Britain and France cooperated in taking the necessary steps to convene an international conference of hydrographers. London was selected as the most suitable place for this conference and on July 24, 1919, the First International Conference opened, attended by the hydrographers of 24 nations. The object of the conference was clearly stated in the invitation to attend. It read, "To consider the advisability of all maritime nations adopting similar methods in the preparation, construction, and production of their charts and all hydrographic publications; of rendering the results in the most convenient form to enable them to be readily used; of instituting a prompt system of mutual exchange of hydrographic information between all countries; and of providing an opportunity for consultations and discussions to be carried out on hydrographic subjects generally by the hydrographic experts of the world." In general, this is still the purpose of the International Hydrographic Organization. As a result of the conference, a permanent organization was formed and statutes for its operations were prepared. The International Hydrographic Bureau, now the International Hydrographic Organization, began its activities in 1921 with 18 nations as members. The Principality of Monaco was selected as the headquarters because of its easy communication with the rest of the world and also because of the generous offer of Prince Albert I of Monaco to provide suitable accommodations for the Bureau in the Principality. The IHO, including the 3 Directors and their staff, is housed in its own headquarters which were built and are maintained by the Government of Monaco.

Officers and enlisted men of naval vessels and masters, mates or navigating personnel of merchant ships, including pleasure craft, are welcome to visit the Bureau's Office at 4 quai Antoine 1er, Monte-Carlo.

The works of the IHO are published in both French and English and distributed through various media. The catalogue of Publications page at http://www.iho.int/iho_pubs/IHO-Catalogue.htm contains a list and brief description of all IHO publications. These publications have been arranged under classification criteria agreed by Member States in 2 009 and

(41) INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO). (Continued).

reported in IHO Circular Letter 13/2009. Most IHO publications are free of charge and may be downloaded from the IHO Publications page at http://www.iho.int/iho_pubs/IHO_Download.htm. Inquiries as to the availability of the publications should be made directly to the International Hydrographic Bureau, 4 quai Antoine 1er, B.P. 445, MC 98011 MONACO CEDEX, Principality of Monaco, phone: 377 93 10 81 00, fax: 377 93 10 81 40, email: info@iho.int, web site: http://www.iho.int/srv1

In order that the work of the IHO may be reviewed and future plans developed, conferences are held every five years. They are attended by delegates from member nations.

Presently, the following nations are Member States of the International Hydrographic Organization:

Algeria
Argentina
Australia
Bahrain
Bangladesh
Belgium
Brazil
*Brunei
*Bulgaria
Burma
Cameroon
Canada
Chile
China
Colombia
**Congo, Democratic Republic of the
Croatia
Cuba
Cyprus
Denmark
**Dominican Republic
Ecuador
Egypt
Estonia
Fiji
Finland
France
*Georgia
Germany
Greece
Guatemala
*Haiti
Iceland
India
Indonesia
Iran
Ireland
Italy
Jamaica
Japan
Kuwait
Latvia
Malaysia
*Mauritania
Mauritius
Mexico
Monaco
*Montenegro
Morocco
Mozambique
Netherlands
New Zealand
Nigeria
North Korea
Norway
Oman
Pakistan
Papua New Guinea
Peru
Philippines
Poland
Portugal
Qatar
Romania
Russia
Saudi Arabia
Serbia
*Sierra Leone
Singapore
Slovenia
South Africa
South Korea
Spain
Sri Lanka
Suriname
Sweden
Syria
Thailand
Tonga
Trinidad and Tobago
Tunisia
Turkey
Ukraine
United Arab Emirates
United Kingdom
United States
Uruguay
Venezuela
*Vietnam

* IHO Membership pending
** IHO Membership suspended
(Supersedes NTM 1(41)14) (IHO)

(42) INTERNATIONAL DISTRESS SIGNALS.

1. All seamen should be familiar with the international distress signals and procedures, both for recognition purposes and for self-reliance in the event of distress where captain and officers may have been incapacitated.

2. Short range distress signals, limited to range of visibility or audibility are:
   (a) "SOS" signal made by any audio or visual means.
   (b) International Code of Signals "NC".
   (c) Hoisting any square flag with a ball or anything resembling a ball, above or below it.
   (d) Flames made visible (as a burning oil barrel).
   (e) A rocket parachute flare or hand held flare showing a red light.
   (f) Rockets or shells, throwing red stars fired one at a time at short intervals.
   (g) Orange smoke, as emitted from a distress flare.
   (h) A gun or other explosive signal fired at intervals of about one minute.
   (i) A continuous sounding of any fog-signal apparatus.
   (j) Slowly and repeatedly raising and lowering arms outstretched to each side.

3. Radio distress signals via radiotelephone:
   (a) For MF Radiotelephone. Set transmitter to 2182 kHz (USB) and transmit the radiotelephone alarm signal (if available) briefly wait and then transmit the distress message as outline in (c) below.
   (b) For VHF FM Radiotelephone. Set transmitter to VHF FM Channel 16 and transmit the distress message as outlined in (c) below.
   (c) Transmit the distress message consisting of the word MAYDAY repeated three times followed by the vessel's identification repeated three times. Immediately continue by giving the position; nature of distress; number of people on board; nature of assistance required and any other information which may facilitate rescue authorities. Pause to await acknowledgement and if nothing is heard within one minute, repeat the same again until acknowledged. Speak the distress message clearly and calmly.

4. Radio distress signals via satellite:
   (a) For satellite terminals equipped with a distress button. Activate the button and follow displayed menu instructions.
   (b) For satellite terminals without a distress button. Place a call to nearest Rescue Coordination Center or system operator and provide identification, position, nature of distress, number of persons on board and type of assistance requested.

5. Radio distress signals via Digital Selective Calling: The distress call should be composed to include ship's position information, the time at which the position was taken, and the nature of distress. If the DSC radio is connected to a navigation receiver, position and time-of-position should already be included. The distress call should be transmitted on VHF Channel 70 (156.525 MHz), 2187.5 kHz, or the HF frequencies 4207.5, 6312, 8414.5, 12577 and 16804.5 kHz. An acknowledgment of the distress call should be received on the DSC frequency. Once an acknowledgment has been received, the radio distress procedures via radiotelephone (above) should be followed on the associated voice channel: VHF Channel 16 (156.800 MHz), 2182, 4125, 6215, 8291, 12290 and 16420 kHz. For DSC distress calls on VHF Channel 70 and 2187.5 kHz, the radio distress procedures via radiotelephone should be followed on the associated voice channel if an acknowledgment is not received after 5 min.

6. Simple to follow instructions for the operation of auto alarms, radiotelephone, DSC and satellite communications equipment should be conspicuously posted in the radio rooms of all ships. Procedures outlined here are purposely brief. Complete information on emergency radio procedures is contained in Chapter 4 of Radio Navigational Aids (Pub. 117).

7. Procedures for canceling false distress alerts: If a distress alert is inadvertently transmitted, the following steps shall be taken to cancel the distress alert:
   (a) VHF Digital Selective Calling:
      (1) Reset the equipment immediately;
      (2) Set to Channel 16; and
      (3) Transmit a broadcast message to "All stations" giving the ship's name, call sign or registration number, and MMSI, and cancel the false distress alert.
   (b) MF Digital Selective Calling:
      (1) Reset the equipment immediately;

(42) INTERNATIONAL DISTRESS SIGNALS. (Continued).

(2) Tune for radiotelephony transmission on 2182 kHz; and

(3) Transmit a broadcast message to "All stations" giving the ship's name, call sign or registration number, and MMSI, and cancel the false distress alert.

(c) HF Digital Selective Calling:

(1) Reset the equipment immediately;

(2) Tune for radiotelephony on the distress and safety frequency in each band in which a false distress alert was transmitted; and

(3) Transmit a broadcast message to "All stations" giving the ship's name, call sign or registration number, and MMSI, and cancel the false distress alert frequency in each band in which a false distress alert was transmitted.

(d) INMARSAT ship earth station: Immediately notify the appropriate Rescue Coordination Center that the alert is cancelled by sending a distress priority message by way of the same land earth station through which the false distress alert was sent. Provide ship name, call sign or registration number, and INMARSAT identity with the cancelled alert message.

(e) EPIRB: Once an EPIRB is switched on, whether accidental or intentionally, the user should make every reasonable attempt to communicate with SAR authorities by other means to advise them of the situation before turning the EPIRB off.

(f) General and other distress alerting systems: Notwithstanding paragraphs (a) through (e) of this section, ships may use additional appropriate means available to them to inform the nearest appropriate U.S. Coast Guard rescue coordination center that a false distress alert has been transmitted and should be cancelled.

(Repetition NTM 1(42)14) (IMO/USCG)

(43) WORLDWIDE NAVIGATIONAL WARNING SERVICE (WWNWS).

The Worldwide Navigational Warning Service (WWNWS) was established in 1977 through the joint efforts of the International Hydrographic Organization (IHO) and the International Maritime Organization (IMO). The WWNWS is a coordinated global service for the promulgation by satellite of information on hazards to navigation which might endanger international shipping.

The objective of the WWNWS is the timely promulgation by satellite of information of concern to the ocean-going navigator. Such information includes the following: failure and/or changes to major navigational aids, newly discovered wrecks or natural hazards including icebergs in or near main shipping lanes, hazardous military operations and areas where search and rescue, anti-pollution operations, acts of piracy and cable-laying or other underwater activities are taking place.

For purposes of the WWNWS, the world has been divided into 21 Navigation Warning Areas (NAVAREAS) (see graphic page, I-1.49). A NAVAREA is a geographical sea area established for the purposes of coordinating the broadcast of navigational warnings.

Within each NAVAREA one national authority, designated the NAVAREA Coordinator, has assumed responsibility for the coordination and promulgation of the warnings. Designated "National Coordinators" of other coastal states in a NAVAREA are responsible for collecting and forwarding information to the NAVAREA Coordinator. In the Baltic, a Sub-Area Coordinator has been established to filter information prior to passing to the NAVAREA Coordinator.

NAVAREA Coordinators are responsible for the exchange of information as appropriate with other coordinators, including that which should be further promulgated by charting authorities in Notice to Mariners.

Broadcast schedules appear in an Annex to the International Telecommunication Union "List of Radio-determination and Special Service Stations," Volume II, and in the lists of radio signals published by various hydrographic authorities (in the U.S., Pub. 117). Transmissions usually occur frequently enough during the day to fall within at least one normal radio watch period, and the information is repeated with varying frequency as time passes until either the danger has passed or the information on it has appeared as a Notice to Mariners. Transmission of information over the WWNWS will continue to be affected by the advent of services such as NAVTEX.

(43) WORLDWIDE NAVIGATIONAL WARNING SERVICE (WWNWS). (Continued).

NAVAREA I (United Kingdom)
United Kingdom Hydrographic Office
Admiralty Way
Taunton
Somerset TA1 2DN
United Kingdom
Phone: 44 1823 337900 Ext 3054
Fax: 44 1823 334260
E-mail: navwarnings@btconnect.com
Web site: http://www.ukho.uk/rnw

Baltic Sea Sub-Area Coordinator
Swedish Maritime Administration
BALTICO
SE-601 78 Norrkoping
Sweden
Tel: 46 771 63 06 05
Email: ntm.baltico@sjofartsverket.se
ufs@sjofartsverket.se
Web site: http://www.sjofartsverket.se/baltico

NAVAREA II (France)
Department "Information et Ouvrages Nautiques"
Service Hydrographique et Océanographique de la Marine
13 Rue du Chatellier
BP 30316
29228 Brest Cedex2
France
Tel: 33 2 98 22 15 99 (Chief of Department, Office Hrs)
Tel: 33 2 98 22 16 67 (Duty Officer, H24)
Fax: 33 2 98 22 14 32
Telex : FRANAUT 940861 F
E-mail: coord.navarea2@shom.fr
Web site: http://www.shom.fr/navarea/NavareaIIenVigueur.txt

NAVAREA III (Spain)
Director del Instituto Hidrográfico de la Marina
Plaza de San Severiano, 3
11007 Cádiz
Spain
Tel: 34 956 599409/599414
Fax: 34 956 599396/545347
E-mail: avisosihm@fn.mde.es
ihmesp@fn.mde.es
Web site: http://www.armada.mde.es/ihm/

NAVAREA IV AND XII (United States)
Maritime Safety Office
Mail Stop N64-SH
7500 Geoint Drive
Springfield,
Virginia 22150-7500
United States of America
Tel: 1 571 557 7646/5455
Fax: 1 571 558 3426
E-mail: NAVSAFETY@nga.mil
Web site: http://msi.nga.mil/NGAPortal/MSI.portal

NAVAREA V (Brazil)
Head of Safety of Navigation Information Division
Rua Barão de Jaceguay, s/n°
Ponta d'Areìa - Niteroi - RJ
CEP-24048-900
Brazil
Tel: 55 21 2189-3023/3210
Fax: 55 21 2189-3210/2620-0073
E-mail: vania@chm.mar.mil.br
medeiros.albuquerque@dhn.mar.mil.br
Web site: http://www.mar.mil.br/dhn/chm/avgantes/avradioing.htm

NAVAREA VI (Argentina)
Head of Maritime Safety Department
Servicio Hidrografía Naval
Avenida Montes de Oca 2124
C 1270ABV-Buenos Aires
Argentina
Tel: 54 11 4301-2249/4301-0061/67 Ext 4028
Fax: 54 11 4301-2249
E-mail: snautica@hidro.gov.ar
shn_orgint@hidro.gov.ar
Web site: http://www.hidro.gob.ar/Nautica/radioav.asp

NAVAREA VII (South Africa)
Hydrographer, SA Navy
Hydrographic Office
Private Bag X1
Tokai
7966 Cape Town
Republic of South Africa
Tel: 27 21 787 2408 or 787 2412
FAX: 27 21 787 2233 or 787 2228 (24hrs)
Email: hydrosan@iafrica.com
Web site: http://www.sanho.co.za

(43) WORLDWIDE NAVIGATIONAL WARNING SERVICE (WWNWS). (Continued).

NAVAREA VIII (India)
Joint Director of Hydrography
Maritime Safety Information Services (MSIS)
National Hydrographic Office
107-A, Rajpur Road
P.B. No. 75, Dehradun
Uttarakhand-248 001
India
Phone: 91 135 2747365
Fax: 91 135 2748373
E-mail: msis-inho-navy@nic.in
ncdm-inho-navy@nic.in
(For urgent NAVAREA promulgation)
inho-navy@nic.in
Web site: http://www.hydrobharat.nic.in

NAVAREA IX (Pakistan)
Area Coordinating Office NAVAREA IX
PN Hydrographic Department
11, Liaquat Barracks
Karachi-75530
Pakistan
Phone: 92 21 48506821/48506152/48506151
Fax: 92 21 9201623/9203246
E-mail: hydropk@paknavy.gov.pk
hydropk@bol.edu.pk
Web site: http://www.paknavy.gov.pk/hydro/index.asp

NAVAREA X (Australia)
Emergency Response Division
Australian Maritime Safety Authority
GPO Box 2181
Canberra, ACT, 2601
Australia
Phone: 61 2 6230 6811
Fax: 61 2 6230 6868
E-mail: rccaus@amsa.gov.au
Web site: http://www.amsa.gov.au/search-and-rescue/distress-and-safety-comms/msi/

NAVAREA XI (Japan)
Director, Notices to Mariners Office
Hydrographic and Oceanographic Department
Japan Coast Guard
2-5-18, aomi, koto-ku
Tokyo 135-0064
Japan
Phone: 81 3 3541 3817
Fax: 81 3 3542 7174
E-mail: tuho@jodc.go.jp
keiho-tsuuhou@kaiho.mlit.go.jp
Web site: http://www1.kaiho.mlit.go.jp/jhd-E.html

NAVAREA XIII (Russian Federation)
Chief, Notice to Mariners and Radio Navigational Warnings Division
Department of Navigation and Oceanography
8, 11 Liniya, B-34
St Petersburg 199034
Russian Federation
Phone/Fax: 7 812 717 59 00
E-mail: unio_navarea@mil.ru
Web site: none

NAVAREA XIV (New Zealand)
Land Information New Zealand
New Zealand Hydrographic Authority
P. O. Box 5501
Wellington
New Zealand
Phone: 64 4 460 0110 (office hours)
64 21 243 1577 (24 Hrs.)
64 27 687 9536 (24 Hrs.)
Fax: 64 4 498 3535
E-mail: navareaxiv@linz.govt.nz
Web site: http://www.linz.govt.nz/hydro/nautical-info/navigation-area-14/index.aspx

NAVAREA XV (Chile)
Director, Hydrographic and Oceanographic Service of the Chilean Navy
Errázuriz 254
Playa Ancha
Valparaíso
Chile
Phone: 56 32 22666619
Fax: 56 32 2266542
E-mail: navarea15@shoa.cl
Web site: http://www.shoa.mil.cl

NAVAREA XVI (Peru)
Director
Dirección de Hidrografi a y Navegación
Calle Roca No. 118
Chucuito, Callao -
Peru
Phone: 51-1 465 8312/207 8162/207 8160
Fax: 51-1 207 8178
E-mail: dihidronav@dhn.mil.pe
fpenaranda@dhn.mil.pe
Web site: http://www.dhn.mil.pe

(43) WORLDWIDE NAVIGATIONAL WARNING SERVICE (WWNWS). (Continued).

NAVAREA XVII AND XVIII (Canada)
Manager, Marine Communications and Traffic Services
Canadian Coast Guard
200 Kent Street 5th Floor
Station S041
Ottawa K1A 0E6
Canada
Phone: 1 613 925 0666
Fax: 1 613 925 8902
E-mail: navarea17.18@innav.gc.ca

Administrative matters:
Tel : 1 613 990 3031
E-mail: mctssctmottawa@dfo-mpo.gc.ca

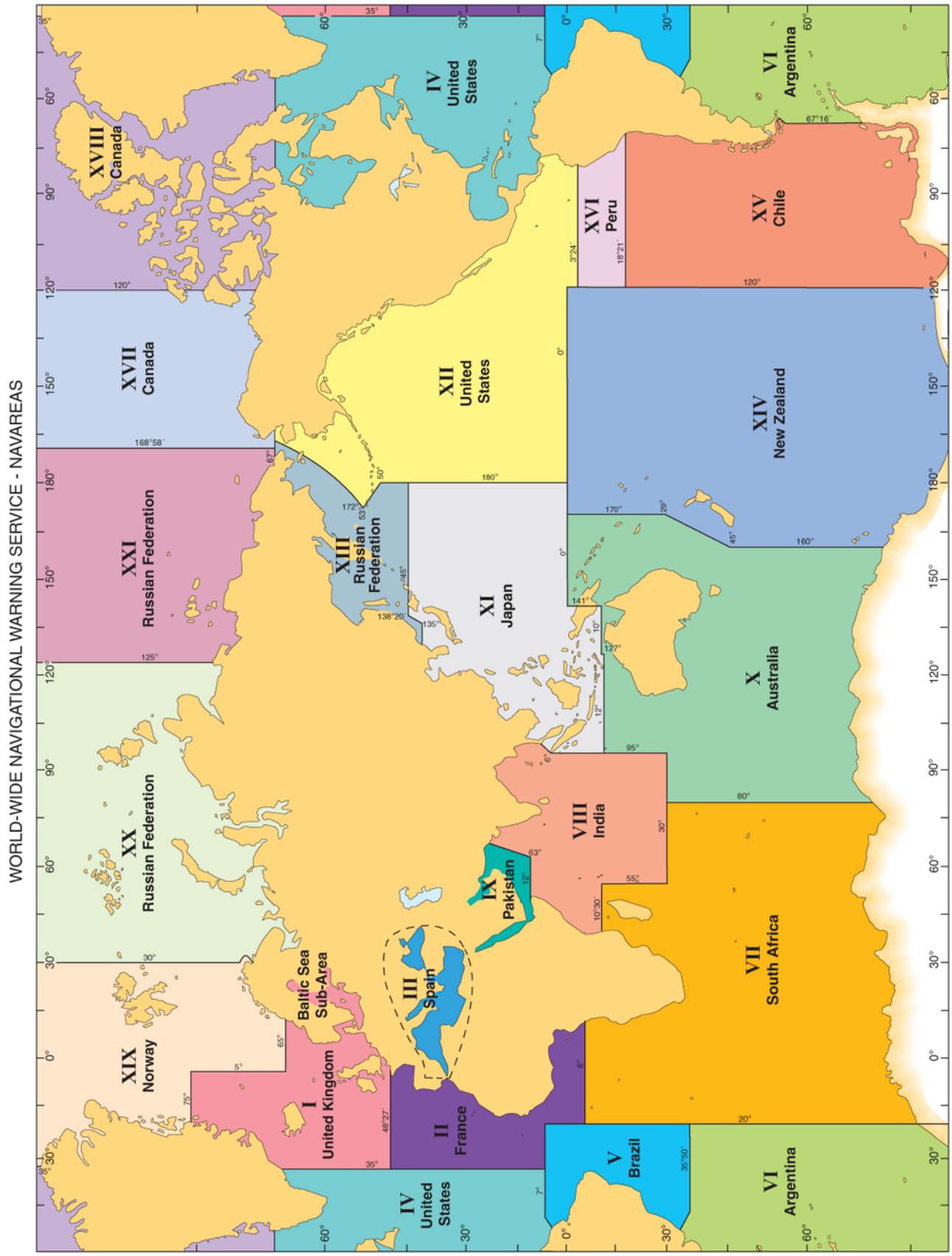
NAVAREA XIX (Norway)
Department of Maritime Safety
Norwegian Coastal Administration
Postbox 1502
6025 Ålesund
Norway
Phone: 47 78 943000
Fax: 47 78 989899
E-mail: navarea19@kystverket.no
Web site: www.navarea-xix.no

NAVAREA XX AND XXI (Russian Federation)
Chief of MSI Division
Federal State Unitary Hydrographic Department 12
Moskovsky pr
St. Petersburg
190031 Russian Federation
Phone: 7 812 570 3466
Fax: 7 812 570 3466
E-mail: ibm@hydrograph.spb.su

Chairman, IHO Worldwide Navigational Warning Service
Mr. Peter Doherty
Mail Stop N64-SH
7500 Geoint Drive
Springfield, VA 22150-7500
Phone: 011 571 557 6746
Fax: 011 571 558 3261
E-mail: Peter.M.Doherty@nga.mil

(Supersedes NTM 1(43)14) (IHO/IMO/NGA)

(43) WORLDWIDE NAVIGATIONAL WARNING SERVICE (WWNWS). (Continued).



(44) WEATHER OBSERVATION REPORTS.

All ships are encouraged to participate in the international Voluntary Observing Ship (VOS) program. For information, and to arrange assistance from a U.S. National Weather Service Port Meteorological Officer (PMO) contact:

Voluntary Observing Ship Program
NOAA/NWS National Data Buoy Center (W/OPS51)
Building 3203
Stennis Space Center, MS 39529-6000
Telephone: (228) 688-1818
Fax: (228) 688-3923
E-mail: vos@noaa.gov
Web site: http://www.vos.noaa.gov

Details on the coding and transmission of weather observations may be found in "Observing Handbook No. 1" provided to ships participating in the U.S. VOS program. The U.S. VOS program also makes available a PC software program known as Amver/SEAS which greatly assists in coding and transmitting VOS observations and Amver position reports.

Detailed information on the dissemination of National Weather Service marine products including radiofax, such as frequency and scheduling information may be found in NGA Publication 117, the British Admiralty List of Radio Signals Volume 3(2), and at http://www.nws.noaa.gov/om/marine/home.htm (includes links to products).

GENERAL INSTRUCTION FOR REPORTING WEATHER OBSERVATIONS

CODED WEATHER MESSAGES: All weather report messages by radio or Inmarsat will be coded in World Meteorological Organization (WMO) ship synoptic code FM13-IX.

STANDARD SYNOPTIC OBSERVATION TIMES: The regular synoptic hours for reporting are 0000, 0600, 1200, and 1800 UTC. However, watch schedules and other ship functions sometimes make it impractical to meet the synoptic weather reporting schedule. Weather observations may also be submitted at the intermediate hours of 0300, 0900, 1500, and 2100 UTC. These should be reported as soon as possible, but no later than three (3) hours after the synoptic observation time.

TIMELINESS AND REPORT VALUE: All weather reports should be transmitted as soon as possible to the National Weather Service. Weather reports can be ingested by computer forecast models for only for a limited time after the reporting hour. Major computer programs are run at all synoptic hours and a few programs are run every three (3) hours. Forecasters look at, and use, all timely reports in making their forecasts and warnings.

SPECIAL WEATHER OBSERVATIONS

TROPICAL STORMS/HURRICANES: Hurricane season has been designated June 1 through November 30 because of the number of tropical storms and hurricanes during the period. Many special programs are in operation during this season and it is requested that the observation schedule, when in the vicinity of a tropical storm or hurricane, be set to transmit weather reports at least every three (3) hours (00, 03, 06, 09, etc.). Hourly reports when within a storm (winds over 48 knots) would be very helpful, if ship routine permits.

SPECIAL REQUESTS FOR OBSERVATIONS: The U.S. National Weather Service may request ships located in areas of suspected storm development to take special observations at more frequent intervals than the routine six (6) hourly synoptic observation times. If your ship happens to be in such an area, your report will be helpful even though conditions may not appear bad enough to warrant a special observation.

OBSERVATIONS DURING STORM CONDITIONS: Whenever TROPICAL STORM, TYPHOON, or HURRICANE conditions are encountered anywhere, "SAFETY OF LIFE AT SEA CONVENTION," Chapter V, requires all ships to take special observations and transmit the report to the closest national meteorological service via the most convenient radio or Inmarsat station. In addition to this requirement, it is highly desirable that weather reports be transmitted hourly, if possible; but in any case, not less frequently than every three (3) hours.

EXTRATROPICAL STORMS: Submit a weather report message as soon as the average wind equals or exceeds 48 knots. Report at least every three (3) hours when under STORM conditions.

COASTAL REPORTS: The weather starts changing as soon as the air moves from land out over the water. Ship weather reporting should continue as close to the coast as ship routine permits. When within 200 miles of the U.S. or Canadian coastlines, reports are requested every three (3) hours.

TRANSMISSION OF WEATHER REPORTS

INMARSAT-B and INMARSAT-C: Instructions may be found in "Observing Handbook No. 1".

(44) WEATHER OBSERVATION REPORTS. (Continued).

EMAIL TRANSMISSIONS: In the event that your ship's Inmarsat equipment fails or you are not mandated to have an Inmarsat system onboard your vessel, weather observations can be e-mailed directly into the NWS gateway system. Send your e-mailed observations to: shipobs@noaa.gov. Place your observation in the body of the message and endyour encoded observation with an equal sign (=). This tells the computer to end transmission. Detailed instructions on setup, addressing, and transmitting the message are listed on the VOS Web site at http://www.vos.noaa.gov/vos_resource.shtml.
The ship is responsible for paying email transmission costs.
(Repetition NTM 1(44)14) (NOAA/NWS)

(45) RADAR BEACONS (RACONs).

Radar beacons (RACONs) are radar responder devices designed to produce a distinctive image on the screens of ship's radar sets, thus enabling the mariner to determine his position with greater certainty than would be possible using a normal radar display alone.

The U.S. Coast Guard operates approximately 90 radar beacons (RACONs) as maritime navigational aids in the Great Lakes, and off the Atlantic, Pacific, and Gulf coasts. RACONs are used to mark and identify points on shore, channel separation, channel entrances under bridges, and uncharted hazards to navigation (the Morse letter "D", dash-dot-dot, has been reserved for this purpose). RACON marks displayed on a radar screen are Morse characters typically of length 1 to 2 miles, always start with a dash, and always extend radially outward from the radar target marked by the beacon. RACON locations and identifications are included on most marine navigation charts.

RACONs should be visible to most commercial shipboard radar systems on vessels 6-20 miles from the RACON installation, regardless of radar size. No additional receiving equipment is required. Some precautions are necessary, however, if use of RACONs is desired. Radars that operate in the 10 cm band (2900-3100 MHz) are usually installed as a second radar on larger vessels, and may not respond to RACONs. The Coast Guard now installs dual band (3 cm and 10 cm) RACONs in most locations. In addition, rain clutter control switches on radars must be switched off or, if necessary, on low to ensure that the RACON is visible. Finally, most RACONs operating in the U.S. are frequency agile RACONs. Pulse correlation circuitry (interference or clutter rejection on some radars) installed on most newer radars, if on, may prevent the radar from displaying some RACONs. This circuitry should be switched off.
(Supersedes NTM 1(45)14) (USCG)

(46) NAVTEX.

NAVTEX is an international automated medium frequency (518 kHz) direct-printing service for promulgation of navigational and meteorological warnings and forecasts, as well as urgent marine safety information to ships. It was developed to provide a low-cost, simple, and automated means of receiving this information aboard ships at sea within approximately 200 nautical miles of shore. NAVTEX receivers may be user adjusted to screen incoming messages to not print certain categories of messages of no interest to a particular user and prevent printing of messages previously received. Mariners who do not have NAVTEX receivers but have SITOR radio equipment can also receive these broadcasts by operating it in the FEC mode and tuning to 518 kHz. Internationally, NAVTEX may also broadcast on the alternate NAVTEX frequencies of 490 and 4209.5 kHz. For further information concerning NAVTEX including broadcast schedules, consult Pub 117, the US Coast Navigation Center web site at http://www.navcen.uscg.gov/?pageName=NAVTEX, or the IMO GMDSS Master Plan.

NAVAREA IV/XII, HYDROLANT, HYDROPAC, HYDROARC and ice information broadcasts are issued over HF SITOR/NBDP (Simplex Telex Over Radio/Narrow Band Direct Printing) from Coast Guard Stations in Boston, Point Reyes, Honolulu and Guam. Broadcasts are made on 6314 kHz, 8416.5 kHz, 12579 kHz, 16806.5 kHz and 22376 kHz. See NGA Pub. 117, Radio Navigational Aids, for schedules.
(Supersedes NTM 1(46)14) (USCG/NWS)

(47) SATELLITE DETECTION OF DISTRESS SIGNALS.

The Cospas-Sarsat system is an international cooperative program using satellites to detect distress beacons operating in the 406.0 to 406.1 megahertz (MHz) frequency range. This system uses low earth orbiting (LEO) and geostationary orbiting (GEO) satellites. Together, these satellites enable distress signals to be received by the Cospas-Sarsat system from anywhere on the planet, 24 hours a day, 7 days a week, in many cases nearly instantaneously.
When a satellite receives a distress signal, it is relayed to a network of ground stations and Mission Control Centers (MCCs). The U.S. MCC is operated by the National Oceanic and Atmospheric Administration (NOAA). The U.S. MCC processes signals originating in the United States areas of responsibility, and sends alert information to the appropriate U.S. Rescue Coordination Center (RCC). There are three types of distress beacons: EPIRBs (Emergency Position Indicating Radio

(47) SATELLITE DETECTION OF DISTRESS SIGNALS. (Continued).

Beacons) for use in the maritime environment, ELTs (Emergency Locator Transmitters) used on aircraft and PLBs (Personal Locator Beacons) for personal use. Some EPIRBs and all ELTs are capable of automatic activation, where PLBs can only be activated manually.

EMERGENCY POSITION INDICATING RADIO BEACON (EPIRB).

The Emergency Position Indicating Radio Beacon (EPIRB) is a device, usually carried aboard maritime craft, which transmits a signal that alerts search and rescue authorities and enables rescue units to locate the scene of the distress. Table 1 provides an overview of the different categories of EPIRBs currently authorized for use in the U.S. It should be noted that classes A, B, and S EPIRBs are no longer permitted for use within the United States as of January 1, 2007. These EPIRBs should be replaced by Cat I or Cat II 406 MHz EPIRBs. Some EPIRBs also have GPS receivers installed, or allow information from external GPS units to be integrated into the distress signal. This GPS-encoded position dramatically improves the location accuracy down to the 100-meter level. For current carriage requirements refer to Navigation and Vessel Inspection Circular No. 3-99; any questions concerning requirements to carry EPIRBs or other safety equipment should be referred to the U.S. Coast Guard Lifesaving and Fire Safety Division, telephone (202) 372-1395.

TABLE 1

CLASS	FREQUENCY	DESCRIPTION	DETECTION
Cat I	406 MHz with 121.5 MHz homing signal	Float free automatically activated beacon	Polar orbiting and geostationary satellites
Cat II	406 MHz with 121.5 MHz homing signal	Manually activated	Polar orbiting and geostationary satellites

PERSONAL LOCATOR BEACON (PLB)

The Personal Locator Beacon (PLB) is a portable, individual-use distress beacon that operates much the same as an EPIRB. These beacons are designed to be carried by an individual person. Unlike some EPIRBs, they can only be activated manually. And like EPIRBs, all U.S. PLBs also have a built-in, low-power homing beacon that transmits on 121.5 MHz. This allows rescue forces to home in on a beacon once the 406 MHz satellite system has provided a "in the ballpark" (about 2-3 miles) position in the immediate area of distress. Some PLBs also have a GPS receiver installed in which the position can be integrated into the distress signal. This GPS-encoded position dramatically improves the location accuracy down to the 100-meter level.

FALSE ALERTS

Distress beacon false alarms are a major problem. The emergency beacon user must be aware of how inadvertent activations can quickly overburden search and rescue resources, resulting in costly responses. Inadvertent ELT, PLB, and EPIRB activations should be reported immediately; for accidental activations of ELT's and PLB's, call the Air Force Rescue Coordination Center at 1-800-851-3051, and for EPIRB's, contact the Coast Guard at 1-855-406-USCG (8724). Minimize false alerts with proper handling, storage, and disposal of distress beacons; understand and comply with manufacturer's operating instructions for your particular distress beacon; and tune a radio to 121.5 MHz to monitor the frequency/detect any inadvertent activation. Again, report any inadvertent activation of distress beacons immediately.

MAINTENANCE

Emergency beacon owners should test their beacons in accordance with manufacturer instructions, and examine them for water tightness, battery expiration date and registration expiration date.

406 MHz emergency beacons can be tested at any time using the beacon's self-test switch only. The 121.5 MHz homing frequency can be detected by an FM radio tuned to 99.5 MHz or an AM radio tuned to any vacant frequency and located close to the emergency beacon.

(47) SATELLITE DETECTION OF DISTRESS SIGNALS. (Continued).

BEACON REGISTRATION

406 MHz beacon registration has been mandatory since 13 September 1994 by Federal Communications Commission regulations. All U.S. coded 406 MHz distress beacons MUST be registered with the National Oceanic and Atmospheric Administration (NOAA) which maintains the U.S. beacon registration database. Registration is free of charge, and must be renewed every two (2) years. When a 406 MHz alert is received, the system automatically checks the beacon registration data base for an ID match and appends vital registration information (when available) to the alert message that is sent to the responsible RCC. Registration information can be used in conjunction with the geostationary satellites immediate alerting capability to allow a SAR response 45-90 minutes sooner than otherwise possible - a significant response advantage. In rare circumstances where the Cospas-Sarsat system is not able to calculate a distress position, registration data may provide the only link to rescue. It is therefore imperative that the information in NOAA's registration database is verified by the beacon owner. Updates or corrections can be made at any time by using the contact information below.

If you purchase a new or a used U.S. coded 406 MHz emergency beacon, you MUST register it with NOAA. If you change any contact information (such as your phone number, address, or your emergency contact information) you MUST update your registration data with NOAA. If you sell your emergency distress beacon you MUST notify NOAA immediately.

You may register or update your beacon information online at http://www.beaconregistration.noaa.gov. You may also submit a 406 MHz emergency beacon registration form via mail or fax to:

SARSAT BEACON REGISTRATION
NOAA
NSOF, E/SPO53
1315 East West Hwy
Silver Spring, MD 20910

Fax: (301) 817-4565
Web site: https://www.beaconregistration.noaa.gov/rgdb

Call (301) 817-4515 or toll-free (888) 212-SAVE (7283) for further information on registering 406 MHz emergency beacons.

Once a beacon is registered, NOAA will send a proof-of-registration letter to the beacon owner to confirm registration and as ready evidence of compliance. EPIRB and PLB owners will also receive a decal that should be placed on the designated location on the beacon. NOAA also contacts all registered beacon owners on a two year schedule to maintain database accuracy. This two year contact is by e-mail only if an e-mail is provided in the registration; if no e-mail is provided in the registration then the contact will be made through the US Postal Service to the registration address. This service is free of charge. Please keep your registration current - IT MAY SAVE YOUR LIFE.

Mariners are reminded that as of 1 January 2007, the operation of 121.5MHz EPIRBs is prohibited and that the Cospas-Sarsat system ceased monitoring of the 121.5 MHz and 243.0 MHz frequencies on 1 February 2009.

(Supersedes NTM 1(47)14) (USCG/NOAA)

(48) HF AND VHF RADIOTELEPHONE AND RADIOTELEX MARINE SAFETY BROADCASTS.

Urgent and routine broadcasts of marine safety information are announced on VHF Channel 16 (156.8 MHz) and made on Channel 22A (157.1 MHz), the ship station transmit frequency portion of Channel 22, of Appendix 18 of the International Telecommunications Union (ITU) Radio Regulations.

The U.S. Coast Guard (USCG) normally broadcasts selected coastal weather and local navigational warnings on VHF FM Channel 22A (157.1 MHz).

Effective August 01, 2013, the United States Coast Guard announced that it will no longer maintain a watch on 2182 kHz, will no longer guard the Digital Selective Calling (DSC) channel 2187.5 kHz, and will no longer transmit Marine Information Broadcasts on 2670 kHz. The minimal use of these channels by mariners for distress and safety coupled with antenna site deterioration, costly upkeep, and extensive maintenance required to support the medium frequency (MF) system have led to a Coast Guard decision to terminate the MF services and direct the public mariner to use more modern safety and distress services which can be more reliably received by the Coast Guard.

(48) HF AND VHF RADIOTELEPHONE AND RADIOTELEX MARINE SAFETY BROADCASTS. (Continued).

The USCG will continue to maintain a continuous watch on VHF FM channel 16 (156.8 MHz) and on existing voice and DSC frequencies in the 4/6/8/12 and 16 MHz bands as described in the Coast Guard Navigation Center website http://www.navcen.uscg.gov/?pageName=cgcommsCall.

Questions and comments concerning VHF marine safety broadcasts should be addressed to the local Coast Guard District staff, or to:

United States Coast Guard
COMMANDANT (CG-652)
Stop 7710
2703 Martin Luther King Jr. Ave. SE
Washington, DC 20593-7710

(Repetition NTM 1(48)14) (USCG)

(49) MARAD ADVISORIES. (In force 23 December 2014).

MARAD Advisories rapidly disseminate information on government policy, danger and safety issues pertaining to vessel operations, and other timely maritime matters. MARAD Advisories are periodically issued by the U.S. Maritime Administration (MARAD) to vessel masters, operators and other U.S. maritime interests. The texts of MARAD Advisories are published in weekly Notice to Mariners No. 1, and can be accessed through the National Geospatial-Intelligence Agency's Maritime Safety Web site (http://msi.nga.mil/NGAPortal/MSI.portal) and through the MARAD Web site (http://marad.dot.gov).

MARAD ADVISORY NO. 00-07 (221500Z NOV 00)
SUBJECT: YEMEN
TO: ALL OPERATORS OF U.S. FLAG AND EFFECTIVE U.S. CONTROL VESSELS

1. The National Geospatial-Intelligence Agency (NGA) requested that the Maritime Administration MARAD) issue HYDROPAC 1694/00(62) as a MARAD Advisory to ensure wider dissemination to the maritime community. Below is HYDROPAC 1694/00(62) in its entirety.
2. Due to recent events in Yemen, mariners are advised to use increased caution when approaching or entering Yemen waters. Special warning 113 is still in effect. See U.S. Notice to Mariners 45/2000 dated November 4, 2000 or the NGA Maritime Safety Web site at http://msi.nga.mil/NGAPortal/MSI.portal.

MARAD ADVISORY NO. 05-01 (221817Z JUL 05)
SUBJECT: THREAT INFORMATION AND MARITIME INDUSTRY REPORTING OF SUSPECTED/ACTUAL TERRORIST INCIDENTS
TO: OPERATORS OF U.S. FLAG AND EFFECTIVE U.S. CONTROLLED VESSELS AND OTHER MARITIME INTERESTS
This MARAD Advisory updates and reiterates information to the maritime industry and vessels regarding sources of threat information and reporting of hostile incidents.

1. The Coast Guard's National Response Center (NRC) should be notified of any suspected domestic terrorist incident, particularly those affecting transportation systems in addition to oil and hazardous substance releases. All reports of suspected or actual incidents are to be reported to the NRC at 800-424-8802 or 202-267-2675. Suspicious activity should also be reported to the local FBI office. The following Web site lists telephone numbers for all the FBI field offices: http://www.fbi.gov/contact/fo/fo.htm.
2. Hostile actions directed at merchant shipping are a present and growing problem. These hostile actions include piracy, theft and terrorism. In order to establish a reliable database of incidents to define the area and degree of the problem, a database has been instituted by the National Geospatial-Intelligence Agency (NGA) as the Anti-Shipping Activity Messages (ASAM) file. This file can be accessed via the internet at NGA's Maritime Safety Web site: http://msi.nga.mil/NGAPortal/MSI.portal. Another excellent threat assessment report produced weekly by the Office of Naval Intelligence (ONI) is the ONI Worldwide Threat to Shipping. This report is also available on the NGA Web site.
3. NGA has also established Ship Hostile Action Report (SHAR) procedures to rapidly disseminate information within the U.S. Government on hostile actions against U.S. merchant ships. The procedures for sending SHAR reports are detailed in NGA Publication 117, Radio Navigational Aids, Edition 2005, on page 4-15. The Maritime Administration (MARAD) urges all vessels to carry Pub 117, which can also be downloaded from NGA's above listed Web site.

(49) MARAD ADVISORIES. (Continued).

4. It should be noted that neither the ASAM nor SHAR reports are a distress message. U.S. and effective U.S. controlled (EUSC) vessels under attack or threat of attack may request direct assistance from U.S. naval forces by following the emergency call-up procedures in Chapter 4, Part II of Pub 117.
5. All U.S.-flag vessels required by MARAD regulation, agreement, or those who voluntarily file Amver position reports, are reminded of the importance in filing voyage and update reports. Those ships operating in the north Arabian Sea, Gulf of Oman, Persian Gulf, Gulf of Aden, Red Sea and the Suez Canal are reminded to file Amver position update reports every 24 hours vice every 48 hours.
6. All U.S.-flag operators are requested to forward this Advisory to their ships by the most expedient means. This Advisory will subsequently be listed in NGA's Web site, as well as MARAD's Web site: http://www.marad.dot.gov/headlines.
7. This Advisory cancels and replaces MARAD Advisories 01-07, 02-05, 02-07 and 03-04.
8. For further information regarding this Advisory, contact the Maritime Administration, Office of Ship Operations, Code MAR-613, Room 2122, 400 7th Street, Washington, DC 20590; Telephone 202-366-5735, or by e-mail to opcentr1.marad@dot.gov.

MARAD ADVISORY NO. 06-01 (281900Z JUL 06)
SUBJECT: ACTIVATION OF THE NATO SHIPPING CENTER IN SUPPORT OF MERCHANT SHIPPING ON THE EASTERN MEDITERRANEAN SEA
TO: OPERATORS OF U.S.-FLAG VESSELS AND OTHER MARITIME INTERESTS

1. The NATO Shipping Center (NSC) in Northwood, UK continues to support NATO Naval forces deployed in the Eastern Mediterranean and has recently activated the NSC due to the recent incidents between Israel and Hezbollah. The NSC was activated to provide advice and guidance to NATO nation merchant ships.
2. The purpose of activating the NSC is to collect and distribute information relevant for the safe passage of vessels in the area off the coast of Lebanon and the Eastern Mediterranean. NSC will compile a situational plot and contribute this information to the NATO Military Commander in the area. Reporting of shipping data is on a voluntary basis.
3. Until further notice, the NSC will be manned continuously to provide better service for ships' masters, owners or managers. The NSC will provide information to ships on the following main communication media:
   - E-mail: shippingcentre@manw.nato.int
   - NSC Web site: http://shipping.manw.nato.int
   - Direct email communication with ships taking part in Operation ACTIVE ENDEAVOUR (OAE) voluntary reporting program.
   - Phone: +44 1923 843574
   - Fax: +44 1923 843575
4. Since the area of concern coincides with the reporting area for Operation ACTIVE ENDEAVOUR, no additional reporting for ships will be established.
5. For further general information regarding this Advisory, contact the Maritime Administration, Office of Ship Operations, Division of Operations Support, Code MAR-613 Room 2121, 400 Seventh Street SW, Washington, DC 20590; Telephone (202) 366-1875, Fax (202) 366-3702.
6. This Advisory cancels MARAD Advisory 02-02 (03 Jun 02).

MARAD ADVISORY NO. 07-01 (051511Z FEB 07)
SUBJECT: REPLACEMENT OF ATP 2 VOL II NAVAL CONTROL OF SHIPPING - ALLIED GUIDE TO MASTERS
TO: OPERATORS OF U.S.-FLAG AND OTHER MARITIME INTERESTS

1. NATO has released a non-classified publication "ATP - 2(B) Vol II - Naval Co-operation and Guidance for Shipping Manual (NCAGS) - Guide to Owners, Operators, Masters and Officers." This publication replaces "ATP-2, Vol II, Allied Naval Control of Shipping Manual - Guide to Masters" and "ATP-2, Vol II, Bridge Supplement." Both of these publications should be destroyed. The new publication can be downloaded from www.ncags.com as listed below from the Norwegian Shipowners' Association, Circular Letter to Members.
2. "Following NATO's operations policy review for merchant shipping, the concept "Naval Co-operation And Guidance for Shipping" (NCAGS) was developed. The concept (approved by the North Atlantic Council on 1 October 2003) replaced the previous cold-war Naval Control of Shipping (NCS).
   Since then NATO's Shipping Working Group (NSWG) has developed the Allied Tactical Publication (ATP) titled "ATP - 2(B) Vol II - Naval Co-operation and Guidance for Shipping Manual (NCAGS) - Guide to Owners, Operators, Masters and Officers" the purpose of which is to provide information to owners and operators, masters and officers regarding the interaction between naval forces and commercial shipping in a military operations area. The publication lists NCAGS principles and procedures and seeks to advance the safety of shipping in times of tension, crisis and conflict.

(49) MARAD ADVISORIES. (Continued).

The new publication supersedes the previous "ATP-2, Vol II, Allied Naval Control of Shipping Manual - Guide to Masters" which shall be destroyed.
As the aim of the NCAGS concept is to facilitate seamless interaction in a military operations area, it is in the industry's own best interest. All shipping companies engaged in international trading are therefore recommended to acquire the document which can be downloaded from www.ncags.com.
It is also available in electronic format (CD) or hard copy from:
FLO/F/MS/EF/PUBL & BILDE/SJO, Boks 63 Haakonsvern, 5886 Bergen, Norway
e-mail: grishaug@mil.no or idavanger@mil.no
www.ncags.com contains a link to NATO Shipping Center which you may find useful."

3. For further general information regarding this Advisory, contact the Maritime Administration, Office of Ship Operations, Division of Operations Support, Code MAR-613 Room 2122, 400 Seventh Street SW, Washington, DC 20590; Telephone (202) 366-5752, Fax (202) 366-3702 or e-mail to opcentr1@marad.dot.gov.

MARAD ADVISORY NO. 10-06 (291725Z MAR 10)
SUBJECT: GUIDANCE TO VESSELS TRANSITING HIGH RISK WATERS

1. This MARAD advisory provides guidance to vessels transiting the high risk waters of the Gulf of Aden, Red Sea, the Indian Ocean and waters off the Horn of Africa (Somalia).
2. This advisory will be published on the MARAD web site at www.marad.dot.gov under the Horn of Africa piracy portal and on the U.S. Coast Guard Homeport site at homeport.uscg.mil/piracy. Other pertinent information is also posted on these web sites.
3. U.S. flag operators with ships in the affected areas are requested to forward this advisory to their ships by the most expeditious means.
4. U.S. flag ships operating in high risk waters are required to comply with U.S. Coast Guard maritime security (MARSEC) Directive 104-6 (current version). Guidance, advisories and links to assist U.S. flag vessels in complying with the MARSEC Directive and in combating piracy may be accessed on homeport at http://homeport.uscg.mil/piracy. Questions may be directed to LCDR James Fogle, U.S. Coast Guard, at phone: 202 372 1038 or e-mail: james.t.fogle@uscg.mil. None of the guidance in this notice is meant to supersede MARSEC Directive 104-6 (current version) or supporting port security advisories.
5. Non U.S. flag vessels, to which the U.S. Coast Guard MARSEC Directive does not apply, should be aware and consider measures directed to U.S. flag vessels. This guidance is available in U.S. Coast Guard port security advisory (PSA) 2-09 on http://homeport.uscg.mil/piracy.
6. The Maritime Security Centre (Horn of Africa) (MSC-HOA), run by the E.U. Naval Force (EUNAVFOR) is a coordination centre tasked to safeguard merchant shipping operating in the region by preventing and deterring acts of piracy in the Gulf of Aden, off the Horn of Africa and in the Somali basin. Vessels should register for access to MSCHOA website at http://www.mschoa.org/. This site provides information and guidance for the shipping community transiting the high risk waters.
7. Combined Maritime Forces (CMF) in cooperation with the European Union Naval Force (EUNAVFOR) Atalanta and the United Kingdom Maritime Trade Office (UKMTO) established the Internationally Recommended Transit Corridor (IRTC) through the GOA. This revised corridor was intended to deconflict commercial transit traffic with Yemini fishermen, provide a measure of traffic separation and allow maritime forces to conduct deterrent operations in the GOA with a greater degree of flexibility. Detailed information on the IRTC can be found at http://www.mschoa.org/. CMF established the Maritime Security Patrol Area (MSPA) in the region. The MSPA was established in support of the International Maritime Organization's (IMO) ongoing efforts to ensure the safety of ships and mariners at sea. The MSPA is a naval military term for use by warships when communicating with each other positioned to maximize deployment of available forces in areas of high risk. Coalition forces patrol the MSPA on a routine basis. Neither the IRTC nor MSPA are marked or defined by visual navigational means. The IRTC is not intended to be a dedicated traffic separation scheme.
8. In accordance with the MARSEC Directive and Port Security Advisory (PSA) 2-09, unless otherwise directed or advised by on-scene military forces, all U.S. flag ships navigating through the GOA shall plan voyages using the IRTC and follow the GOA Group Transit (GT) if speed ranges from 10 to 18 knots. Vessels that make less than 10 knots shall contact UKMTO for routing guidance. Information on IRTC and GOA GT can be found on the MSC-HOA web site.
9. In addition to communications required by the Coast Guard MARSEC Directive, masters should remain in contact with the United Kingdom Maritime Trade Operations (UKMTO) and the United States Maritime Liaison Office (MARLO) to the maximum extent possible. The E.U. has established a web-based resource for ships to receive the latest alerts and to register vessels prior to transiting high risk areas in the region. In accordance with the MARSEC Directive, owners and operators of U.S. flag vessels that operate in the HOA/GOA shall register with the Maritime Security Centre-Horn of Africa (MSC-HOA), at www.mschoa.org. Additionally, they shall establish contact by e-mail or phone with UKMTO at ukmto@eim.ae.

(49) MARAD ADVISORIES. (Continued).

10. In accordance with the U.S. Coast Guard MARSEC directive, U.S. flag vessels that operate in high risk waters must consider supplementing vessel's crew with armed or unarmed security personnel. If transiting the HOA/GOA, all vessels shall supplement vessel's crew with armed or unarmed security personnel based on a piracy-specific vessel threat assessment conducted by the operator. Supplemental security personnel should meet the minimum training requirements and guidelines set forth in PSA (5-09) (Rev. 1).
11. In accordance with the U.S. Coast guard MARSEC Directive and PSA 2-09, as soon as the master thinks a threat is developing, contact UKMTO, phone: 971 50 552 3215. If attacked or boarded, masters should activate the Ship Security Alert System (SSAS). Broadcast attacks immediately on all available radio circuits, adjust speed and maneuver and activate all available defensive measures. Do not immediately surrender upon approach of suspected pirate boats. Attacks have been thwarted in many cases where defensive measures were used and the vessels became difficult targets. An attack has even been successfully thwarted when pirates were able to board a ship but were unable to gain access to the superstructure due to the careful preparations of the crew in securing all access points.
12. Additional guidance regarding practices recommended for mariners operating in vicinity of high risk areas has been published by International Maritime Organization (IMO) revised Maritime Safety Committee (MSC) circulars. These documents can be accessed via IMO website at the following internet address: www.imo.org/safety/mainframe.asp?topic_id=1147.
13. All vessels are advised to check in with UKMTO at least 96 hours prior to entering the IRTC through the GOA. Check in again upon entering the corridor and check out upon exiting the corridor. While in high risk waters off the Horn of Africa it is recommended to report vessel positions to UKMTO a minimum of every six hours.
14. The following is the UKMTO report format:
    a. Ship name:
    b. IRCS:
    c. IMO #:
    d. Cargo:
    e. Last port:
    f. Noon position (GMT):
    g. Next port:
    h. Additional ports:
    i. Security team aboard (y/n):
    j. Reporting via AMVER?:
    k. Publication 117 aboard?:
    l. Present position:
15. Escort service may be requested for vessels by contacting MARLO Bahrain, phone: 973 973 3927 or by e-mail: marlo.bahrain@me.navy.mil
16. If attacked or boarded by pirates, communications must be limited to distress calling and response coordination per the vessel security plan. In accordance with the MARSEC Directive and PSA 2-09, information about the vessel's movement, capabilities or the incident itself should be considered sensitive security information and should not be released to family, friends or the media
17. For further information, contact Maritime Liaison Office (MARLO) Bahrain, phone: 973 1785 3925 or 973 3940 1395 for after hours emergencies (if in doubt of the time, call both until you reach a person) or e-mail: marlo.bahrain@me.navy.mil or the UK Maritime Trade Organization (UKMTO), phone: 971 50 552 3215 or e-mail: ukmto@eim.ae or MSC-HOA phone: 44 0 1923 958545 or e-mail: postmaster@mschoa.org.
18. For further information regarding this advisory, contact Captain Robert Ford, Maritime Administration, Office of Security, Code: MAR-420, Room W25-207, 1200 New Jersey Ave, S.E., Washington, DC 20590, phone: 202 366 0223, fax: 202 366 3954, telex: 7108229426 (MARAD DOT WSH), e-mail: marad.security@dot.gov.
19. For further information on the U.S. Coast Guard MARSEC Directive and PSA 2-09, contact LCDR James Fogle, phone: 202 372 1038 or e-mail: james.t.fogle@uscg.mil.

MARAD ADVISORY NO. 11-03 (081036Z JUN 11)
SUBJECT: UPDATE TO VESSELS TRANSITING TO OR FROM JAPAN OR IN WATERS IN THE VICINITY OF HONSHU

1. This MARAD Advisory updates guidance to vessels transiting to or from ports in Japan or in waters in the vicinity of the northeast coast of the island of Honshu and cancels advisory 2011-02.
2. This advisory will be published on the MARAD web site at www.marad.dot.gov under the Horn of Africa piracy portal and on the US Coast Guard homeport site at homeport.uscg.mil/piracy. Other pertinent information is also posted on these web sites.

(49) MARAD ADVISORIES. (Continued).

3. Mariners are advised to continue to monitor and comply with NAVTEX and NAVAREA XI warnings issued for Japanese waters.
4. Operators and mariners are also advised to review and follow the radiological information on ports and maritime transportation provided on the government of Japan's (GOJ) Ministry of Land, Infrastructure, Transport, and Tourism (MLIT) website: http://www.mlit.go.jp/en/maritime/maritime_fr1_000007.html. Mariners should keep abreast of information being provided by the government of Japan relating to any further potential impacts.
5. Vessels that enter into the Japanese defined "Restricted Area" may be subject to additional screening by the USCG if the U.S. is their first port call after departing the restricted area. The U.S. Coast Guard requires the vessel's master to submit transit information, including the date and total time within the precautionary area, to the cognizant U.S. Coast Guard Captain of the Port using the comment block on the 96-hour advanced Notice of Arrival.
6. This advisory will be published on the MARAD web site at www.marad.dot.gov under the newsroom tab.
7. For further information regarding this advisory, contact Captain Robert Ford, Maritime Administration, Office of Security, Code: MAR-420, Room W25-308, 1200 New Jersey Ave, S.E., Washington, DC 20590, telephone 202-366-0223, facsimile 202-366-3954, tlx ii 710.822.9426 (marad dot wsh), or email: maradsecurity@dot.gov.
8. Cancel Advisory 2011-02.
9. For further information regarding this advisory, contact Captain Robert Ford, Maritime Administration, Office of Security, Code: MAR-420, Room W25-207, 1200 New Jersey Ave, S.E., Washington, DC 20590, phone: 202 366 0223, fax: 202 366 3954, e-mail: maradsecurity@dot.gov.
10. Cancel MARAD 2010-05.

MARAD ADVISORY NO. 11-05 (311400Z AUG 11)
SUBJECT: VESSELS TRANSITING THE HIGH RISK WATERS (HRW) OF THE GULF OF ADEN (GOA), RED SEA, INDIAN OCEAN, ARABIAN SEA AND WATERS OFF THE HORN OF AFRICA (SOMALIA)

1. This MARAD Advisory provides information on the risk to vessels transiting the high risk waters (HRW) of the Gulf of Aden (GOA), Red Sea, Indian Ocean, Arabian Sea and waters off the Horn of Africa (Somalia).
2. This advisory will be published on the MARAD web site at www.marad.dot.gov under the Horn of Africa piracy portal and on the U.S. Coast Guard homeport site at homeport.uscg.mil/piracy. Other pertinent information is also posted on these web sites.
3. U.S.-flag operators with ships in the affected areas are requested to forward this advisory to their ships by the most expeditious means.
4. U.S.- flag ships operating in HRW are required to comply with US Coast Guard Maritime Security (MARSEC) Directive 104-6 (current version). POC is LCDR James Fogle, U.S. Coast Guard, at 202-372-1038 or james.t.fogle@uscg.mil. None of the guidance in this notice is meant to supersede MARSEC Directive 104-6 (current version) or supporting port security advisories.
5. Pirates are attacking vessels, including yachts and other non commercial vessels - such as sailboats, in the Gulf of Aden, Arabian Sea, Indian Ocean, Southern Red Sea, and Mozambique Channel. Pirates are firing automatic weapons and rocket propelled grenades (RPG) in an attempt to board and hijack vessels. If an attack is successful and the vessel is hijacked, pirates direct vessels to the Somali coast and thereafter demand ransom for the safe release of vessels and crew. Pirates use hijacked fishing and merchant vessels to conduct piracy operations as mother vessels to sail far from the Somali coast to attack and hijack vessels in transit or at anchor. Smaller skiffs are launched from the pirate mother vessel to attack targeted vessels.
6. Recent attacks in the Southern Red Sea and to a ship at anchor in Oman should serve to warn all vessels operating in the HRW that the pirates have and will continue to adapt to ship protection measures. The transition between monsoon seasons between Oct through Nov will be more favorable for pirate skiff attacks. Masters and operators should anticipate attacks that may vary from past tactics. In light of the extension of the threat to ports and territorial waters, masters and operators are advised to maintain all applicable defensive and protective measures that are legally permissible during the vessel's time in port or at anchor.
7. Transit by yachts and privately owned sailing vessels through HRW is extremely hazardous and may result in capture by pirates. The Coast Guard advises against all operation of or travel by yacht and pleasure craft in HRW. Vessels that make this passage despite this warning should make contact in advance with the naval authorities. In addition, American citizens aboard should inform the nearest U.S. embassy or consulate of their plans to transit the area and/or update their information via the Smart Traveler Enrollment Program (STEP) on www.travel.state.gov. Basic guidance for transit can be found at http://www.mschoa.org/yachtingguidance/pages/yachtingguidanceone.aspx. If you are due to travel the area of high threat, please inform MSCHOA by emailing postmaster@mschoa.org, with the subject line "yacht vessel movement".

(49) MARAD ADVISORIES. (Continued).

8. Related Coast Guard notice: the U.S. Coast Guard issued a Notice to Mariners advisory for yachts and sailing vessels. For the text of the Coast Guard notice, please go to http://homeport.uscg.mil/piracy.
9. All vessels should register for access to MSCHOA website at http://www.mschoa.org to obtain up to date information of the circumstances and conditions in the region.
10. For further information regarding this advisory, contact Captain Robert Ford, Maritime Administration, Office of Security, Code: MAR-420, Room W25-308, 1200 New Jersey Ave, S.E., Washington, DC 20590, telephone 202-366-0223, facsimile 202-366-3954, tlx ii 710.822.9426 (marad dot wsh), or email: maradsecurity@dot.gov.
11. Cancel Advisory 2011-01.

MARAD ADVISORY NO. 12-01 (181229Z APR 12)
SUBJECT: VESSELS TRANSITING NORTH PACIFIC OCEAN FROM JAPAN TO U.S. WEST COAST

1. This MARAD Advisory provides guidance to vessels transiting the North Pacific Ocean between Japan and the U.S. west coast.
2. This advisory will be published on the MARAD web site at www.marad.dot.gov.
3. The 9.0 magnitude earthquake that occurred March 11, 2011 off the east coast of Honshu, Japan resulted in a debris field in the North Pacific Ocean.
4. Some possible marine debris types include derelict vessels, fishing nets and floats, lumber, cargo containers, and household goods. Because different debris types move with currents and winds differently, the debris may be dispersed over a very broad area between Japan and the west coast of North America. Some general information is available at website http://marinedebris.noaa.gov/info/japanfaqs.html.
5. U.S. flag operators with ships transiting the subject area should advise such vessels to remain vigilant and to monitor all sources of available information affecting safe and secure navigation in this area.
6. Significant debris sightings can be reported to disasterdebris@noaa.gov. Please indicate if information can be displayed on public website.
7. Contact information NOAA: Carey Morishige, phone: 808 532 3207 or e-mail: carey.morishige@noaa.gov.
8. For further information, contact Captain Robert Ford, Maritime Administration, Office of Security, Code: MAR-420, Room W25-308, 1200 New Jersey Ave, S.E., Washington, DC 20590, phone: 202 366 0223, fax: 202 366 3954, TELEX II: 7108229426 (MARAD DOT WSH), or email: maradsecurity@dot.gov.
9. Cancel Advisory 2011-06.

MARAD ADVISORY NO. 13-01 (101751Z JAN 13)
SUBJECT: STRAIT OF HORMUZ

1. Reports from maritime forces and commercial maritime interests indicate concern with the potential for localized disruption to shipping in conjunction with future Iranian naval exercises. During previous exercises Iranian maritime forces conducted boardings and inspections of merchant ships, including those flagged to European nations. The possibility exists that Iran will attempt to conduct boardings and inspections during exercises with limited warnings before commencing the exercise. The most likely location for this activity would be in vicinity of the Strait of Hormuz, particularly in areas closer to claimed Iranian territorial waters.
2. The Maritime Administration intends to notify company security officers via e-mail of the dates of any upcoming exercises.
3. If a U.S. flag vessel is hailed for boarding by the Iranian Navy in international waters, the ship's master should "protest but comply", if circumstances warrant.
4. U.S. flag vessels are advised to report incidents to the COMUSNAVCENT Battlewatch Captain (Maritime Operations Center), phone: 011 973 1785 3879 and MARLO Bahrain, phone: 011 973 3940 1395.
5. MARAD Advisories are published on the MARAD web site at www.marad.dot.gov and the Maritime Safety Information web site: http://msi.nga.mil/NGAPortal/MSI.portal. Under "Broadcast Warnings", select MARAD Advisories.
6. For further information regarding this advisory, contact Captain Robert Ford, Maritime Administration, Office of Security, Code: MAR-420, Room W25-308, 1200 New Jersey Ave, S.E., Washington, DC 20590, phone: 202 366 0223, fax: 202 366 3954, TELEX: 710 822 9426 (MARAD DOT WSH) or e-mail: maradsecurity@dot.gov.
7. Cancel Advisory 2011-07.

MARAD ADVISORY NO. 13-02 (281532Z JAN 13)
SUBJECT: EAST CHINA SEA

1. Currently there is a frequent presence in the East China Sea south of 30 degrees north latitude of Chinese and Japanese maritime law enforcement, or military ships and aircraft. Accordingly, it is recommended that mariners steer clear of any activity by such vessels in the area.

(49) MARAD ADVISORIES. (Continued).

2. To date, there has been no disruption to normal maritime activity. However, reports from numerous sources indicate that the potential exists for maritime forces and commercial maritime interests to encounter disruption to shipping.
3. U.S. flag vessels are advised to immediately report incidents to the COMPACFLT OPCONCEN Pearl Harbor, HI, phone: 808 471 3201/5200; NAVCOMTELSTA Guam, phone: 671 355 5513/5326/5327/5328; NAVCOMTELSTA FAR EAST, phone: 81 311 743 7510; COGARD COMMSTA Kodiak AK, phone: 907 487 5778.
4. MARAD Advisories are published on the MARAD web site at www.marad.dot.gov and the Maritime Safety Information web site: http://msi.nga.mil/NGAPortal/MSI.portal. Under "Broadcast Warnings", select MARAD Advisories.
5. For further information regarding this advisory, contact Captain Robert Ford, Maritime Administration, Office of Security, Code: MAR-420, Room W25-308, 1200 New Jersey Ave, S.E., Washington, DC 20590, phone: 202 366 0223, fax: 202 366 3954, TELEX II: 710.822.9426 (MARAD DOT WSH) or e-mail: maradsecurity@dot.gov.

MARAD ADVISORY NO. 13-03 (131519Z MAR 13)
SUBJECT: GULF OF OMAN, NORTH ARABIAN SEA, GULF OF ADEN, BAB EL MANDEB

1. This MARAD Advisory provides guidance to vessels operating in subject waters. U.S. flag operators with ships in the affected areas are requested to forward this advisory to their ships by the most expeditious means.
2. Elevated regional tensions have increased the risk of potential maritime attacks conducted by extremists.
3. Recommend vessels at anchor, operating in restricted maneuvering environments or at slow speeds be especially vigilant, and report suspicious activity.
4. Vessels transiting high risk waters designated by U.S. Coast Guard MARSEC Directive 104-6 (current version) must comply with its security requirements. Accordingly, vessels should conduct a pre-voyage risk assessment and incorporate appropriate protective measures into their vessel security plans. Additionally, U.S. flag operators should have their protective measures implemented prior to entering high risk waters.
5. U.S. flag vessels that observe suspicious activity in the area are advised to report such suspicious activity or any hostile or potentially hostile action to COMUSNAVCENT Battlewatch Captain, phone: 11 973 1785 3879, e-mail: cusnc.bwc@me.navy.mil. All suspicious activities and events are also to be reported to the U.S. Coast Guard National Response Center in accordance with 33 CFR Part 101.305.
6. A Ship Hostile Action Report (SHAR) should be sent to the National Geospatial-Intelligence Agency (NGA) at http://msi.nga.mil/NGAPortal/MSI.portal as soon as possible following the incident/suspicious activity, including apparent surveillance being conducted by small vessels/boats. Reference NGA Pub 117 for further guidance.
7. MARAD Advisories are published on the MARAD web site at www.marad.dot.gov and the Maritime Safety Information web site at http://msi.nga.mil/NGAPortal/MSI.portal under "Broadcast Warnings", select MARAD Advisories to determine Maritime Advisories that remain in force, consult the maritime administration web site at http://www.marad.dot.gov or the most recent U.S. Notice to Mariners.
8. For further information, contact Captain Robert Ford, Maritime Administration, Office of Security, Code: MAR-420, Room W25-308, 1200 New Jersey Ave, S.E., Washington, DC 20590, phone: 202 366 0223, fax: 202 366 3954, TELEX: 710 822 9426 (MARAD DOT WSH) or e-mail: maradsecurity@dot.gov.
9. Cancel Advisory 2012-02.

MARAD ADVISORY NO. 13-04 (090327Z LUL 13)
SUBJECT: MIDDLE EAST RESPIRATORY SYNDROME CORONAVIRUS

1. As of 05 Jun, 55 people have been confirmed to be infected with a new virus that was initially referred to as Novel Coronavirus (NCoV and is now known as Middle East Respiratory Syndrome Coronavirus (MERS-CoV). More than half of the people infected have died from the virus.
2. Most cases have originated from the Arabian Peninsula (Jordan, Qatar, Saudi Arabia and United Arab Emirates). Several cases have also been reported in Italy, France, the UK and Tunisia. These cases acquired their illness either from travel to the Arabian Peninsula or from close contact with a sick person who had traveled to the area, indicating person-to-person transmission.
3. Infected people have suffered a very severe, pneumonia-like illness. Consider a crew member or passenger as "suspicious" if they have the following:
   a. An acute respiratory infection, which may include fever (over 38c or 100.4f), cough and shortness of breath.
   b. History of travel from the Arabian Peninsula or neighboring countries within 14 days.
   c. Persons who develop severe acute lower respiratory illness who are close contacts of an ill symptomatic traveler who developed fever and acute respiratory illness within 14 days after travel from the Arabian Peninsula or neighboring countries. Close contact is defined as providing care for the ill traveler (e.g., a healthcare worker or family member) or having similar close physical contact or having stayed at the same place (e.g. lived with, visited) as the traveler while the traveler was ill.

(49) MARAD ADVISORIES. (Continued).

4. Suspicious ill crew members and passengers should be isolated in a private cabin until they are evaluated by a doctor to prevent transmission to others. Contact with other passengers and crew should be minimized. If masks are available, the ill crew member or passenger should wear a mask while not in isolation to prevent further spread.
5. Cabin mates and other close contacts of ill persons should be actively monitored for fever and respiratory symptoms for 14 days after the last known exposure.
6. Health care providers should follow the U.S. Centers for Diseases Control (CDC) infection control recommendations for the Severe Acute Respiratory Syndrome (SARS) coronavirus, which can be found at http://www.cdc.gov/coronavirus/mers/downloads/isolation2007.pdf.
7. U.S. foreign quarantine regulations, 42 CFR Part 71.21, require the master of a ship destined for a U.S. port to immediately report the onboard occurrence of any death or any ill person among passengers or crew to the quarantine station with jurisdiction over the port at which the ship will arrive.
   a. Reporting guidance can be found at http://www.cdc.gov/quarantine/travel-industry/cruise/notification-public-health-authorities-ill-passengers-crew-destined-united-states.html.
   b. Information regarding CDC quarantine stations can be found at http://www.cdc.gov/quarantine/quarantinestations.html.
8. Taking these everyday actions can help prevent the spread of germs and protect against colds, flu and other illnesses:
   a. Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand sanitizer.
   b. Avoid touching your eyes, nose and mouth. Germs spread this way.
   c. Avoid close contact with sick people.
9. Prompt medical care is required and may include life support.
10. CDC information is available at http://www.cdc.gov/coronavirus/mers/ and a travel notice is available at http://wwwnc.cdc.gov/travel/notices/watch/coronavirus-arabian-peninsula. However, the CDC, WHO and U.S. Department of State do not recommend any travel or trade restrictions at this time.
11. Additional information is available at http://www.who.int/csr/disease/coronavirus_infections/en/.
12. For further information regarding this advisory, contact Captain Robert Ford, Maritime Administration, Office of Security, Code: MAR-420, Room W25-308, 1200 New Jersey Ave, S.E., Washington, DC 20590, phone: 202 366 0223, fax: 202 366 3954, TELEX: 710 822 9426 (MARAD DOT WSH) or e-mail: maradsecurity@dot.gov.

MARAD ADVISORY NO. 13-05 (241057Z JUL 13)
SUBJECT: HIGH RISK WATERS OF THE GULF OF GUINEA

1. This MARAD Advisory provides guidance to vessels transiting and operating in the waters of the Gulf of Guinea.
2. U.S. flag operators with ships in the affected area are requested to forward this advisory to their ships by the most expeditious means.
3. Pirates/armed groups operating in Gulf of Guinea region continue to carry out attacks on vessels using automatic weapons. Hijackings of tankers for cargo theft (refined petroleum products), robbery of crew, passengers and ships property and kidnappings for ransom (KFR) continue to be the most common type of incidents.
4. During 2011, pirates/armed groups hijacked tankers laden with refined petroleum products for fuel theft off the Nigerian and Benin coasts. In 2012, pirates/armed groups expanded their operations westward and began also hijacking tankers off Togo and the Ivory Coast. In mid-July 2013, pirates/armed groups hijacked a tanker near Port-Gentil off the coast of Gabon and an unidentified group attempted to board a U.S. flag vessel at anchor in Lome, Togo but were repelled by the crew using fire hoses.
5. Pirates/armed KFR groups continue to target small tugs and supply vessels supporting oil drilling and exploration off the Niger Delta, but in recent months have also begun to target merchant vessels (tanker and cargo ships) transiting and operating in the region. Pirates/armed groups have used motherships to support some KFR operations and have operated up to 150 nautical miles from the coast.
6. Pirates/armed KFR groups sometimes fire upon vessels before boarding them. They normally take the master and several other crewmembers off the vessel and demand a ransom in exchange for their safe return.
7. U.S. flag operators with ships in the subject High Risk Waters (HRW) should transit with extreme caution and vigilance.
8. U.S. flag vessels transiting and operating in subject waters must comply with U.S. Coast Guard MARSEC Directive 104-6 (current version) and accordingly, should conduct a pre-voyage risk assessment and incorporate appropriate protective measures into their vessel security plan.
9. A Ship Hostile Action Report (SHAR) should be sent to the National Geospatial-Intelligence Agency (NGA) at http://msi.nga.mil/NGAPortal/MSI.portal as soon as possible following any incident/suspicious activity, including apparent surveillance being conducted by small vessels/boats. Reference NGA Pub 117 for further guidance.
10. MARAD Advisories are published on the MARAD web site at www.marad.dot.gov and the Maritime Safety Information web site at http://msi.nga.mil/NGAPortal/MSI.portal under "Broadcast Warnings", select MARAD Advisories to determine Maritime Advisories that remain in force. Consult the Maritime Administration web site at http://www.marad.dot.gov or the most recent U.S. Notice to Mariners.

(49) MARAD ADVISORIES. (Continued).

11. For further information, contact Captain Robert Ford, Maritime Administration, Office of Security, Code: MAR-420, Room W25-207, 1200 New Jersey Ave, S.E., Washington, DC 20590, phone: 202 366 0223, fax: 202 366 3954, TLX II: 710.822.9426 (MARAD DOT WSH) or e-mail: maradsecurity@dot.gov.
12. For further information on the U.S. Coast Guard MARSEC Directive contact LCDR Aaron Demo, COMMANDANT (CG-CVC-1), 2100 2nd Street S.W., Stop 7581, Washington DC 20593, phone: 202 372 1038 or e-mail: aaron.w.demo@uscg.mil.
13. Cancel MARAD Advisory 2010-07.

MARAD ADVISORY NO. 14-01 (281414Z AUG 14)
SUBJECT: MEDITERRANEAN SEA. OPERATION ACTIVE ENDEAVOR

1. This MARAD Advisory provides guidance to vessels transiting and operating in the waters of the Mediterranean Sea.
2. U.S. flag operators with ships in the affected area are requested to forward this advisory to their ships by the most expeditious means.
3. Under OAE NATO ships are patrolling the Mediterranean sea and monitoring shipping to help deter, defend, disrupt and protect against terrorist activity. The operation, carried out under Article 5 of the NATO charter and consistent with international law, evolved out of NATO's immediate response to the terrorist attacks against the United States of 11 September 2001 and in view of its success, is being continued. See NATO website at http://www.nato.int/cps/en/natolive/topics_7932.htm.
4. Under OAE NATO ships hail vessels and request identification and other information. Boarding of vessels may be requested, and is carried out only with the consent of the master and/or the flag state. Non-compliant vessels are reported to appropriate law enforcement organizations and shadowed until action is taken by a responsible agency/authority or until it enters a country's territorial sea.
5. U.S. flag vessels hailed by NATO warships under OAE should cooperate to the extent possible without jeopardizing the safety and security of the vessel, crew or cargo. In the event the vessel cannot fully cooperate with OAE, provide the hailing warship the vessel name, IMO number and company security officer contact information, and report the circumstances immediately to the company security officer.
6. Report any suspicious activity or information to NATO warships or NATO Shipping Center, phone: 44 192 395 6574, e-mail: info@shipping.nato.int.
7. MARAD Advisories are published on the MARAD web site at www.marad.dot.gov and on the maritime safety information website: http://msi.nga.mil/ngaportal/msi.portal under "Broadcast Warnings", select MARAD Advisories.
8. For further information regarding this advisory, contact captain Robert Ford, Maritime Administration, Office of Security, Code: MAR-420, Room W25-308, 1200 New Jersey Ave, S.E., Washington, DC 20590, phone: 202 366 0223, fax: 202 366 3954, tlx ii: 710.822.9426 (marad dot wsh), or e-mail: maradsecurity@dot.gov.

MARAD ADVISORY NO. 14-02 (041207Z SEP 14)
SUBJECT: EBOLA VIRUS

1. U.S. flag operators are requested to forward this advisory to their ships by the most expeditious means.
2. Ebola, also known as Ebola Virus Disease (EVD) and Ebola hemorrhagic fever, is a rare and deadly disease caused by a viral infection. First discovered in 1976 near the Ebola River in what is now the Democratic Republic of the Congo, the virus affects humans and some animals. Since then, outbreaks have appeared sporadically in several African countries. As of August 28, 2014, Ebola has infected 3,069 and killed more than 1,552 people in four countries (Guinea, Liberia, Sierra Leone and Nigeria) since the current outbreak was first detected in March of this year.
3. Symptoms of Ebola include fever and additional symptoms such as severe headache, muscle pain, vomiting, diarrhea, stomach pain, or unexplained bleeding or bruising. Symptoms may appear anywhere from 2 to 21 days after exposure to Ebola virus, although 8-10 days is the most common.
4. Ebola is spread through direct contact with blood or body fluids (urine, saliva, feces, vomit and semen) from a person who is infected and currently has symptoms of Ebola. Ebola may also be transmitted through contact with objects (e.g., needles) contaminated with blood or body fluids from a symptomatic person or through contact with, or consumption of an animal infected with Ebola. The virus enters the human body through mucous membranes (e.g., eyes, nose or mouth) or through breaks in the skin. People are infectious as long as their blood and secretions contain the virus. Ebola is not airborne and it cannot be transmitted from a person who is not symptomatic.
5. The likelihood of contracting Ebola is very low unless there has been direct contact with the blood or body fluids from a symptomatic person or an animal infected with Ebola, or with a contaminated object. Simply traveling to an area where Ebola is present does not mean a person will be exposed to the virus. Given the unprecedented numbers of cases associated with this outbreak, the U.S. Centers for Disease Control and Prevention (CDC) issued a level 3 warning to avoid non-

(49) MARAD ADVISORIES. (Continued).

essential travel to Sierra Leone, Guinea and Liberia, and a level 2 alert to practice enhanced precautions if traveling to Nigeria or the democratic republic of the Congo. Precautions include practicing careful hygiene, avoiding contact with blood and body fluids of persons sick with Ebola or with items that may have been in contact with such fluids, avoiding contact with wild animals and avoiding raw or undercooked meat. Other precautions are available on the CDC website.

6. The CDC maintains up-to-date web resources which provide information on the current status of the outbreak, preventative steps that can be taken to remain healthy before and during travel, as well as actions that should be taken if a traveler becomes ill at any point. These web resources, along with CDC travel notices, can be found at the following websites: http://wwwnc.cdc.gov/travel/notices and http://www.cdc.gov/vhf/ebola/. Furthermore, U.S. merchant mariners with access to unclassified https://www.intelink.gov can also access force health protection advisories from the National Center for Medical Intelligence (NCMI) for more specific country related information at https://www.intelink.gov/ncmi/.
7. The world health organization (who) recommends that travelers to affected areas avoid all contact with blood, secretions, organs or other body fluids of infected living or dead persons or animals, and advises that persons who have had such contact, or who have an illness consistent with Ebola, should not be allowed to travel except as part of an appropriate medical evacuation. Who does not otherwise recommend any ban on international travel or trade.
8. The U.S. Coast Guard has issued a maritime safety information bulletin on Ebola virus precautions, which includes a reminder to vessel masters to report sick or deceased crew members or passengers to the CDC in accordance with 42 CFR 71.72. Additionally the U.S. Coast Guard reminds owners, operators, agents, masters or persons in charge of the requirement to immediately notify the nearest U.S. Coast Guard sector office or group office of the existence of hazardous conditions on their vessels as required by 33 CFR 160.215. The U.S Coast Guard considers crewmembers infected with Ebola or deceased from illness related to Ebola a hazardous condition as defined by 33 CFR 160.204 definition of "Hazardous Condition". The U.S Coast Guard will check all advance notices of arrival to determine whether a vessel has visited a country impacted by the Ebola virus outbreak within the previous five port calls. The bulletin is available at https://www.uscg.mil/msib/docs/012_14_8-7-2014.pdf.
9. The entire text of this advisory, 2014-02, and all MARAD Advisories are published on the MARAD web site at http://www.marad.dot.gov/news_room_landing_page/maritime_ advisories/advisory_summary.htm and the maritime safety information web site: http://msi.nga.mil/ngaportal/msi.portal under "Broadcast Warnings", select "MARAD Advisories". To determine MARAD Advisories that remain in force consult the maritime administration web site at http://www.marad.dot.gov or the most recent U.S. Notice to Mariners.
10. For further information, contact Captain Robert Ford, Maritime Administration, Office of Security, Code: MAR-420, Room W25-308, 1200 New Jersey Ave, S.E., Washington, DC 20590, phone: 202 366 0223, tlx ii: 710 822 9426 (marad dot wsh), e-mail: maradsecurity@dot.gov.

MARAD ADVISORY NO. 14-03 (141233Z NOV 14)
SUBJECT: EBOLA GUIDANCE UPDATE

1. This MARAD advisory provides guidance to vessels and port operators that visit or receive vessels transiting from West African nations affected by Ebola. U.S. flag operators with ships in the affected area are requested to forward this advisory to their ships by the most expeditious means
2. MARAD Advisory 2014-02 on the Ebola virus remains in effect. MARAD Advisories are published on the MARAD web site at www.marad.dot.gov/news_room_landing_page/maritime_advisories/advisory_summary.htm and on the maritime safety information web site at msi.nga.mil/ngaportal/msi.portal. Select Broadcast Warnings, scroll down to search box and select MARAD Advisories.
3. Federal agencies continue to review and update procedures pertaining to maritime responses to the Ebola crisis. Maritime industry stakeholders should frequently monitor the following websites for up to date information:
   A. Coast Guard: www.uscg.mil/msib/ (see 22 Oct 14 Ebola virus update (change 1)).
   B. Centers for Disease Control and Prevention: wwwnc.cdc.gov/travel/notices and www.cdc.gov/vhf/ebola/ (note in particular interim guidance for monitoring and movement of persons with potential Ebola virus exposure).
   C. Occupational Safety and Health Administration: www.osha.gov/sltc/ebola/standards.html (standards provided are potentially applicable to port workers).
   D. International Maritime Organization: www.imo.org/mediacentre/hottopics/ebola/pages/default.aspx (note in particular Circular Letter Number 3485 on full and effective implementation of maritime security measures to assist in preventing the spread of the Ebola virus disease).
4. For further information regarding this advisory, contact Cameron Naron, Maritime Administration, Director of Security, Code: MAR-420, Room W28-340, 1200 New Jersey Ave, S.E., Washington, DC 20590, phone: 202 366 1883, fax: 202 366 3954, telex ii: 7108229426 (marad dot wsh), or e-mail: maradsecurity@dot.gov.

(Supersedes NTM 1(49)14) (U.S. MARITIME ADMINISTRATION)

(50) NAVIGATION RULES AND REGULATIONS HANDBOOK.

The latest edition of the Coast Guard publication Navigation Rules and Regulations Handbook was promulgated in September 2014. This book replaced Navigation Rules International-Inland (COMDTINST M16672.2D) and contains the International Regulations for Preventing Collisions at Sea, commonly called the 72 COLREGS, and the Inland Navigation Rules (33 CFR 83-90). The new Handbook includes the COLREGS amendments and regulatory changes to the U.S. Code (U.S.C.) and Code of Federal Regulations (CFR) through August 2014. It includes the July 2014 Final Rule which amended the Inland Navigation Rules. The Handbook also includes sections on COLREGS demarcation lines, penalty provisions, alternative compliance, the Vessel Bridge-to-Bridge Radiotelephone Regulations, and Vessel Traffic Services.

PENALTIES: All vessel operators, whether recreational or commercial, are required to understand and follow these Navigation Rules. Violation of the Navigation Rules or negligent operation of a vessel may result in civil penalties up to $5000.

CARRIAGE REQUIREMENT: The operator of each self-propelled vessel 12 meters or more in length is required to carry on board and maintain for ready reference a copy of the Navigation Rules. Electronic carriage is not authorized.

HOW TO ORDER: The Navigation Rules and Regulations Handbook is available for free download at http://www.navcen.uscg.gov/?pageName=navRuleChanges. The Government Printing Office has the publication available via print-on-demand. Several commercial publishers are printing the handbook as well.

CHANGES: Changes are published, as they occur, in the Notice to Mariners and appear in Summary of Corrections (Volume 5). A record of changes is maintained online at: http://www.navcen.uscg.gov/?pageName=navRuleChanges.

For questions concerning the Navigation Rules, you may also submit your questions to the USCG Website http://www.navcen.uscg.gov/?pageName=contactUs&Subject=Navigation or write to:

Commandant (CG-NAV-2)
U.S. Coast Guard
2703 Martin Luther King Jr Ave, S.E., Stop 7418
Washington, D.C. 20593-7418
Telephone: (202) 372-1565.

(Supersedes NTM 1(50)14) (USCG)

(51) IMPROPER USE OF STROBE LIGHTS, SEARCHLIGHTS AND DANGEROUS CARGO LIGHT.

STROBE LIGHTS: The Coast Guard has received reports of the use of white strobe lights as “anticollision” lights and as fishing net markers. A white strobe light is a distress signal in Inland Waters and prohibited under International Rules (except for use as a distress signal on life jackets). Misuse of these lights may result in civil penalties up to $5000.

SEARCHLIGHTS: Fishing vessels using searchlights while setting and recovering gear, and other vessels using searchlights, are reminded that improper use of searchlights violates both Inland and International Navigation Rules. Examples of violations include: (a) leaving searchlights lit constantly while underway, so as to interfere with visibility of navigation lights and (b) shining at other vessels so as to embarrass them and impair the night vision of other mariners.

DANGEROUS CARGO LIGHT: Warning: foreign vessels operating in the Far East, specifically in the Straits of Malacca, commonly use an all around red light to indicate carriage of a dangerous cargo. In addition, these vessels often use deck security lighting underway to deter piracy; this may obscure the vessel’s running lights. U.S. vessels transiting these areas should be aware of these practices and plan accordingly.

(51) IMPROPER USE OF STROBE LIGHTS, SEARCHLIGHTS AND DANGEROUS CARGO LIGHT. (Continued).

NOTE: This notice does not prohibit vessels from using additional lights so long as they cannot be confused with or obscure navigation lights. Mariners are cautioned that all types of high intensity lights, when used at sea, must be properly directed or adequately screened so as to not embarrass another vessel or be misinterpreted. When these lights are not being used for a specific task they should be extinguished.

(Repetition NTM 1(51)14) (USCG)

(52) GUIDELINES FOR WGS DATUM CONVERSION.

1. The following information is provided to assist navigators in converting geographic positions from World Geodetic System 1972 (WGS 72) to World Geodetic System 1984 (WGS 84) and vice versa:
   a. Positions obtained from satellite navigation systems or measured from charts referred to the World Geodetic System 1972 must be moved 0.01 minute eastward and 0.00 minute northward to be placed on the World Geodetic System 1984.

(52) GUIDELINES FOR WGS DATUM CONVERSION. (Continued).

b. Positions obtained from satellite navigation systems (or charts) referred to the World Geodetic System 1984 must be moved 0.01 minutes westward and 0.00 minutes southward to be placed on the World Geodetic System 1972.

2. Individuals who need somewhat more precise values may use the following tables to minimize the error due to the truncation of transformed coordinates.
3. Users with a need for the most accurate transformation from WGS 72 to WGS 84 may use the following transformation equations:

Latitude Shift = (4.5 cos Ø/ a sin 1") + (f sin 2 Ø/sin 1")
= 0.1455 cos Ø + 0.0064 sin 2 Ø seconds northward
Longitude Shift = 0.554 seconds eastward
Where: Ø= latitude
f = difference in flattening of the ellipsoids = 0.3121057×10^7
a = semi-major axis of WGS 72 ellipsoid = 6,378,135 meters.

The datum shift from WGS 84 to WGS 72 is computed using the same equation but the direction of the computed shift is reversed–e.g. the latitude shift is southward and the longitude shift is westward.

4. Since the maximum shift only amounts to approximately 17 meters in longitude and 4 meters in latitude on the ground, the shift need not be used to plot positions on charts at scales smaller than 1:50,000.

POSITIONS REFERRED TO WORLD GEODETIC SYSTEM 1972 MUST BE MOVED AS INDICATED TO BE IN AGREEMENT WITH WORLD GEODETIC SYSTEM 1984

90N	0.0000	MINUTES NORTH AND	0.0092	MINUTES EAST
85N	0.0002	MINUTES NORTH AND	0.0092	MINUTES EAST
80N	0.0005	MINUTES NORTH AND	0.0092	MINUTES EAST
75N	0.0007	MINUTES NORTH AND	0.0092	MINUTES EAST
70N	0.0009	MINUTES NORTH AND	0.0092	MINUTES EAST
65N	0.0011	MINUTES NORTH AND	0.0092	MINUTES EAST
60N	0.0013	MINUTES NORTH AND	0.0092	MINUTES EAST
55N	0.0015	MINUTES NORTH AND	0.0092	MINUTES EAST
50N	0.0017	MINUTES NORTH AND	0.0092	MINUTES EAST
45N	0.0018	MINUTES NORTH AND	0.0092	MINUTES EAST
40N	0.0020	MINUTES NORTH AND	0.0092	MINUTES EAST
35N	0.0021	MINUTES NORTH AND	0.0092	MINUTES EAST
30N	0.0022	MINUTES NORTH AND	0.0092	MINUTES EAST
25N	0.0023	MINUTES NORTH AND	0.0092	MINUTES EAST
20N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
15N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
10N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
5N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
0N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
5S	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
10S	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
15S	0.0023	MINUTES NORTH AND	0.0092	MINUTES EAST
20S	0.0022	MINUTES NORTH AND	0.0092	MINUTES EAST
25S	0.0021	MINUTES NORTH AND	0.0092	MINUTES EAST
30S	0.0020	MINUTES NORTH AND	0.0092	MINUTES EAST
35S	0.0019	MINUTES NORTH AND	0.0092	MINUTES EAST
40S	0.0018	MINUTES NORTH AND	0.0092	MINUTES EAST
45S	0.0016	MINUTES NORTH AND	0.0092	MINUTES EAST
50S	0.0015	MINUTES NORTH AND	0.0092	MINUTES EAST
55S	0.0013	MINUTES NORTH AND	0.0092	MINUTES EAST
60S	0.0011	MINUTES NORTH AND	0.0092	MINUTES EAST
65S	0.0009	MINUTES NORTH AND	0.0092	MINUTES EAST
70S	0.0008	MINUTES NORTH AND	0.0092	MINUTES EAST
75S	0.0006	MINUTES NORTH AND	0.0092	MINUTES EAST

(52) GUIDELINES FOR WGS DATUM CONVERSION. (Continued).

80S	0.0004	MINUTES NORTH AND	0.0092	MINUTES EAST
90S	0.0000	MINUTES NORTH AND	0.0092	MINUTES EAST

POSITIONS REFERRED TO WORLD GEODETIC SYSTEM 1984 MUST BE MOVED AS INDICATED TO BE IN AGREEMENT WITH WORLD GEODETIC SYSTEM 1972

90N	0.0000	MINUTES SOUTH AND	0.0092	MINUTES WEST
85N	0.0002	MINUTES SOUTH AND	0.0092	MINUTES WEST
80N	0.0005	MINUTES SOUTH AND	0.0092	MINUTES WEST
75N	0.0007	MINUTES SOUTH AND	0.0092	MINUTES WEST
70N	0.0009	MINUTES SOUTH AND	0.0092	MINUTES WEST
65N	0.0011	MINUTES SOUTH AND	0.0092	MINUTES WEST
60N	0.0013	MINUTES SOUTH AND	0.0092	MINUTES WEST
55N	0.0015	MINUTES SOUTH AND	0.0092	MINUTES WEST
50N	0.0017	MINUTES SOUTH AND	0.0092	MINUTES WEST
45N	0.0018	MINUTES SOUTH AND	0.0092	MINUTES WEST
40N	0.0020	MINUTES SOUTH AND	0.0092	MINUTES WEST
35N	0.0021	MINUTES SOUTH AND	0.0092	MINUTES WEST
30N	0.0022	MINUTES SOUTH AND	0.0092	MINUTES WEST
25N	0.0023	MINUTES SOUTH AND	0.0092	MINUTES WEST
20N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
15N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
10N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
5N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
0N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
5S	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
10S	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
15S	0.0023	MINUTES SOUTH AND	0.0092	MINUTES WEST
20S	0.0022	MINUTES SOUTH AND	0.0092	MINUTES WEST
25S	0.0021	MINUTES SOUTH AND	0.0092	MINUTES WEST
30S	0.0020	MINUTES SOUTH AND	0.0092	MINUTES WEST
35S	0.0019	MINUTES SOUTH AND	0.0092	MINUTES WEST
40S	0.0018	MINUTES SOUTH AND	0.0092	MINUTES WEST
45S	0.0016	MINUTES SOUTH AND	0.0092	MINUTES WEST
50S	0.0015	MINUTES SOUTH AND	0.0092	MINUTES WEST
55S	0.0013	MINUTES SOUTH AND	0.0092	MINUTES WEST
60S	0.0011	MINUTES SOUTH AND	0.0092	MINUTES WEST
65S	0.0009	MINUTES SOUTH AND	0.0092	MINUTES WEST
70S	0.0008	MINUTES SOUTH AND	0.0092	MINUTES WEST
75S	0.0006	MINUTES SOUTH AND	0.0092	MINUTES WEST
80S	0.0004	MINUTES SOUTH AND	0.0092	MINUTES WEST
90S	0.0000	MINUTES SOUTH AND	0.0092	MINUTES WEST

(Repetition NTM 1(52)14) (NGA)

(53) ANTI-SHIPPING ACTIVITY MESSAGES.

The Anti-Shipping Activity Message (ASAM) database, a part of the Maritime Safety Web site is a National Geospatial-Intelligence Agency service for mariners providing reports of hostile actions directed against ships. The ASAM database was developed at the request of the U.S. Interagency Working Group on Piracy and Maritime Terrorism. It contains random reports of various forms of aggression against shipping around the world. Events are categorized by date and by geographic area and are based on the NGA subregion system. The user can submit an ASAM, with the full particulars of an incident to be reported, or search the existing ASAM database by user-defined queries via the Maritime Safety Web site (http://msi.nga.mil/NGAPortal/MSI.portal). Upon receipt of the ASAM at NGA, the text is reviewed and evaluated for further action, edited, and stored in the ASAM database for access by all customers.

(53) ANTI-SHIPPING ACTIVITY MESSAGES. (Continued).

The database can be used as a voyage planning tool by providing cautionary information to ship owners and masters concerning security conditions in and near ports and narrow channels around the world. ASAM's can also be downloaded as KMZ, Arc Shape and/or personal Geodatabase zip files.

Examples of ASAM Reports in this file include the ACHILLE LAURO incident, robberies of ships transiting the Malacca Straits, attacks on fishing boats and merchants ships coasting off Western Sahara, and certain events occurring in and around the Persian Gulf.

When sending a hostile action report the user of ASAM should provide NGA with as much of the following information as is possible:

1. Date of Occurrence;
2. Geographic Location;
3. Known or Suspected Aggressor;
4. Victim (Ship's) Name;
5. A detailed description of the occurrence being reported.

For further information on the ASAM database, users may contact (571) 557-8080 or write:

MARITIME SAFETY OFFICE
MAIL STOP N64-SH
NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
7500 GEOINT DRIVE
SPRINGFIELD, VA 22150-7500

Note that the ASAM file is only an indicator of hostile actions reported to NGA and is not a complete listing of all hostile actions that have occurred worldwide. NGA strongly urges the mariner to assist in the population of the ASAM database by sending reports of hostile actions.

(Supersedes NTM 1(53)14) (NGA/SHG)

(54) CAUTION ON ANNOUNCEMENT OF NEW CHARTS AND PUBLICATIONS.

CAUTION: DO NOT USE A NEW CHART OR PUBLICATION UNTIL IT IS ANNOUNCED IN NOTICE TO MARINERS. There may be occasions when a new edition of a chart or publication is received prior to the official announcement of its release being published in Notice to Mariners. Since Notice to Mariners corrections are for specific editions of products, it is imperative that the user neither discard the previous edition nor use the new edition until this official announcement is received. Further, since Notice to Mariners corrections are for specific editions of products, it is critical that the user update only the specifically-referenced product edition. Additionally, users of the NGA Web site are advised that announcements of new editions in this system appear approximately one week ahead of the date of the published Notice to Mariners.

CAUTION: ANNOUNCEMENT OF ELECTRONIC CHARTS WILL OCCUR SOME SIX TO EIGHT WEEKS BEFORE THE NEW PRINTED VERSION IS AVAILABLE.

NGA standard nautical hardcopy chart products are made available and distributed by three different authorized methods:

1) The mailing and shipping of charts to Department of Defense (DoD) customers and other authorized U.S. Government users by the Defense Logistics Agency (DLA)

2) The posting of selected new charts (as large .pdf print files) to NGA websites for access by Department of Defense (DoD) customers and other authorized U.S. Government users

3) The print-on-demand access of all public release NGA charts by the National Ocean Service (NOS) and official NOS chart agents, on behalf of NGA

The posting of selected new NGA charts (as large .pdf print files) to NGA websites for access by Department of Defense (DoD) customers and other authorized U.S. Government users is normally made the day after NGA clears the New Edition for release and the chart is sent to be printed in mass quantity for DLA stock. The traditional NGA printed paper chart is then usually available some six to eight weeks later from DLA and sent out on automatic distribution. For those charts set for public sale, they are available a week after NGA release from the National Ocean Service at http://www.nauticalcharts.noaa.gov/staff/charts.htm. Regardless of how the NGA chart is obtained by the customer (downloaded from NGA website, distributed

(54) CAUTION ON ANNOUNCEMENT OF NEW CHARTS AND PUBLICATIONS. (Continued).

from DLA, or obtained through NOS) each is official, should be put into service immediately, and meets all Federal chart carriage requirements immediately upon its release. Each should also be updated from the dates shown in the lower left corner of the chart through the US Notice to Mariners. For questions, contact NGA at mcdepod@nga.mil.

Through a special arrangement between the National Ocean Service and NGA, all NOAA charts are also available (as large .pdf print files) on the NGA websites for Department of Defense (DoD) customers and other authorized U.S. Government users. These NOAA chart files are updated every week for all Notice to Mariners (NGA, USCG, and Canadian Coast Guard). The official NGA web sites for downloading selected NGA and NOAA charts are:

- NIPRNet: https://www.geointel.nga.mil/products/dnc/epods/index.htm
- SIPRNet: http://www.geoint.nga.smil.mil/products/dnc1/epods/index.htm
- JWICS: http://www.geoint.nga.ic.gov/products/dnc1/epods/index.htm

(Repetition NTM 1(54)14) (NGA/SHG)

(55) GLOBAL POSITIONING SYSTEM (GPS) AND DIFFERENTIAL GPS (DGPS) INFORMATION.

The Global Positioning System (GPS) is a satellite-based radionavigation system with continuous worldwide coverage. It provides position, navigation, and timing (PNT) signals to users across the globe. GPS is operated and controlled by the U.S. Department of Defense (DoD) under United States Air Force (USAF) management. The USAF develops, maintains, and operates the space and control segments. Although originally intended for military use only, United States Code has established that the GPS Standard Positioning Service (SPS) will be available for peaceful civil, commercial, and scientific uses on a continuous worldwide basis free of direct user fees. The U.S. Department of Transportation is the Government's interface for civil users of GPS and works closely with the U.S. Coast Guard to disseminate information to the public. In an effort to meet the needs of civil users, the Coast Guard established the Navigation Information Service (NIS), as a part of the Coast Guard Navigation Center (NAVCEN) located in Alexandria, Virginia. The information provided includes: Planned, current, or recent satellite outages, Constellation changes, Operational advisory messages, System status, USCG radionavigation systems, YUMA/SEM Almanac data, Federal radionavigation policy and systems, and GPS testing notices. Whenever possible, advance notice of GPS satellite outages will be provided by the DoD and made available by the U.S. Coast Guard. The DoD provides at least 48-hour advance notice for any planned disruption of the Standard Positioning Service (SPS) in peacetime. The NIS advisory services are updated whenever new information is received. NIS services are described below:

1. GPS constellation and status information is available on the NAVCEN website at http://navcen.uscg.gov. The NIS voice recording provides current GPS system status and can be reached at (703) 313-5907. This status recording provides forecasted outages, historical outages, and other changes in the GPS constellation are included as time permits. Additionally, watchstanders are available 24 hours a day for assistance via phone (703) 313-5900.
2. The NIS disseminates GPS operational advisory information through USCG broadcast stations using VHF-FM voice and NAVTEX broadcasts. The broadcasts provide GPS users in the marine environment with satellite advisory information that could affect GPS navigational accuracy. Information is provided in message format via an established system of message dissemination. NIS provides the GPS Operational Advisory Broadcast information to NGA for broadcast in NAVAREA, HYDROLANT, HYDROPAC and HYDROARC messages. These messages are generally geared to the deep draft mariner. NGA also publishes a Weekly Notice to Mariners (NTM) containing USCG Marine Information Broadcasts and NGA broadcast warnings for a seven-day period. NAVCEN also publishes GPS information on a weekly basis in the individual CG District Local Notices to Mariners.

To comment on any of these services or ask questions about GPS status, contact the NIS at:

COMMANDING OFFICER
USCG NAVCEN MS 7310
7323 TELEGRAPH ROAD
ALEXANDRIA, VA 20598-7310
Phone: (703) 313-5900
Fax: (703) 313-5920
GPS Status Recording: (703) 313-5907
Email: TIS-PF-NISWS@uscg.mil
Website: http://navcen.uscg.gov

(55) GLOBAL POSITIONING SYSTEM (GPS) AND DIFFERENTIAL GPS (DGPS) INFORMATION. (Continued).

The Civil GPS Service Interface Committee (CGSIC) was established to address issues and problems that relate to the civil use of GPS. The CGSIC is the official interface between civil GPS users and the GPS operators in DoD. The CGSIC consists of a General Committee, an Executive Panel, and four Subcommittees:

1. Timing
2. International Information
3. U.S. States and Local Government
4. Survey, Mapping, and Geo-Sciences

The U.S. Department of Transportation, Research and Innovation Technology Administration (RITA), Chairs the CGSIC. The U.S. Coast Guard Navigation Center (NAVCEN) is the Deputy Chair and administrator. Points of contact are:

CGSIC EXECUTIVE SECRETARIAT
COMMANDING OFFICER
USCG NAVCEN MS 7310
7323 TELEGRAPH ROAD
ALEXANDRIA, VA 20598-7310
Phone: (703) 313-5930
Fax: (703) 313-5920
E-mail: Rick.Hamilton@uscg.mil

The CGSIC meets annually and is open to anyone interested in civil GPS issues. Membership in CGSIC is free and there is no fee to attend a CGSIC meeting. Summary records of CGSIC meetings are available on the CGSIC portion of the GPS.gov website. Information from CGSIC members and meetings is provided to United States GPS authorities for consideration in GPS policy development and GPS service operation. Visit the CGSIC website at http://www.gps.gov/cgsic/.

NAVCEN operates the Nationwide Differential GPS (NDGPS) Service consisting of a centralized control station and 85 remote broadcast sites. NDGPS is an all-weather system that broadcasts correction signals on marine radio-beacon frequencies to improve the accuracy and integrity of GPS-derived positions. In all established coverage areas, the Coast Guard DGPS Service provides 10-meter (2 dRMS) accuracy and GPS/DGPS out of tolerance alarms within 10 seconds of detection. Typically, the positional error of a NDGPS position is 1 to 3 meters, greatly enhancing harbor entrance and approach navigation. NDGPS services provide single coverage for approximately 92% of the lower 48 states and dual coverage for 65%. The established coverage areas are the continental U.S., the Great Lakes, Puerto Rico, and portions of Alaska and Hawaii.

Information concerning NDGPS status, including planned/unplanned system outages, is disseminated through local USCG Broadcast Notices to Mariners, NAVTEX broadcasts, and internet postings at http://www.navcen.uscg.gov/?pageName=dgpsSiteInfo&currentOutages.

(Repetition NTM 1(55)14) (USCG)

(56) DIGITAL SELECTIVE CALLING DISTRESS ALERT.

Digital Selective Calling (DSC) is a capability offered with some VHF and HF maritime radios, intended to initiate calls and provide distress alert information to the U.S. Coast Guard and other rescue coordination centers. DSC is a major element of the Global Maritime Distress and Safety System (GMDSS), an International Maritime Organization-mandated telecommunications system required on vessels subject to the provisions of the Safety of Life at Sea Convention (SOLAS). All SOLAS vessels are required to interconnect their GPS with their DSC radios to provide an accurate position in the event of sending a distress alert. The interconnection of the DSC radio with the GPS is required for SOLAS vessels and is required by the International Telecommunications Union for non-SOLAS vessels.

Coast Guard Communications Stations and other select Coast Guard Stations operate VHF, HF and DSC, and can be reached using the Maritime Mobile Service Group Identity (MMSI) 003669999. The United States has not declared GMDSS Sea Area A1 as yet. After careful consideration, the United States has determined it will NOT declare a GMDSS Sea Area A2 now or in the future. Continue listening on the working channel to ensure communications between the Coast Guard and ship in distress is established. In the event communications are not heard between the vessel in distress and the Coast Guard, advise the Coast Guard by any means available.

(Repetition NTM 1(56)14) (USCG)

(57) VESSEL SQUAT IN SHALLOW WATER.

The following discussion is primarily aimed towards mariners who are navigating ocean-going commercial vessels on approaches to ports, where water depths are beginning to shoal (less than 3 times the ship's draft). The discussion describes the phenomenon of "squat" and is intended to help mariners recognize circumstances where it could significantly affect the navigational draft of their vessels.

In August 1992, a 950-foot passenger liner transiting past Martha's Vineyard ran over two uncharted boulders at a speed of nearly 25 knots. The vessel's deepest calculated draft was 32 ft 4 inches at the bow; the general charted water depth in the area was 39 feet, although the water depths over the boulders were determined to be 33.4 and 34.2 feet. One major contributing factor was that neither the master nor pilot adequately judged the considerable squatting effect caused by the high-speed transit in relatively shallow waters (which were only about 1.22 times the ship's draft). The casualty investigation determined that squat had increased the bow draft by at least 2.7 feet.

DISCUSSION OF SQUAT: The term "squat" describes the combination of sinkage (overall settling of the hull) and trim (the bow up/down rotation of the hull). This phenomenon occurs in waters of any depth, but is particularly affected by proximity to the sea floor. Therefore, the effects of squat become more pronounced in shallow and/or restricted waters (such as canals or dredged channels). As a ship moves forward in shallow water, the displaced water must quickly flow around and under the hull to fill the void left behind. This accelerated water flow affects the pressure distribution along the hull. Consequently, the vessel squats, effectively increasing its draft and trim. Depending upon the vessel's speed and hull form, the ship may trim by either the bow or the stern. Generally, full-bodied hulls (where the block coefficient C_b is greater than 0.7, such as tankers) tend to trim by the bow, whereas fine-bodied hulls (such as container ships) tend to trim by the stern.

SHALLOW WATER EFFECTS: Shallow water affects a ship in two manners: squat (which increases the effective draft at bow and/or stern), and maneuverability (which reduces maneuvering responses compared to open, deep water performance). These effects increase with vessel speed and decreasing water depth.

CALCULATION OF SQUAT: Squat is a function of the vessel's speed through the water, the ratio of ship draft to water depth, the ratio of cross-sectional areas of the hull and channel, the block coefficient of the hull, and other factors. Formulas for predicting squat for any particular ship are complex and may not be practical for direct use by mariners. However, a useful "rule of thumb" can be used as long as mariners understand its limitations, as discussed below. In general, shallow water effects can begin to appear when water depth is less than 3 times the vessel's draft, and can become significant when the water depth is less than 1.5 times the draft. For a ship in unrestricted shallow water (i.e., not within the confines of a dredged channel or canal), a conservative rule-of-thumb for estimating squat is:

$S = 0.033C_bV^2$

[where: S = squat (*ft*), V = ship speed, including any head current (*knots*), and C_b = block coefficient of hull]. For example: at 15 knots, the squat for a container ship (C_b = 0.60) proceeding against a 1-knot head current would be approximately 5.1 feet and for a tanker (C_b = 0.85) would be approximately 7.2 feet.

The estimated squat should be added to the deepest calculated draft of the vessel (bow or stern). This rule-of-thumb conservatively overestimates the squat of a ship and is therefore considered to be safe for operational decisions.

However, the above rule-of-thumb equation is valid only when the ship's speed is not excessive for the water depth. Specifically, the speed must be less than:

$V<2.52 \times SQRT(d)$

[where V = ship speed (*kts*), and *SQRT(d)* = square root of the water depth *"d"* (*ft*)]. For example: in 50 feet of water, the above squat estimate is valid only if the ship's speed is less than 17.8 knots. If the ship's speed is faster than the limiting speed, then the squat prediction is no longer reliable and a greater squat should be assumed.

As the ship moves into shallower water, the limiting speed will decrease. For example, in 30 feet of water, the limiting speed for the rule-of-thumb decreases to 13.8 knots. Therefore, if the ship maintains a constant speed as it proceeds into shallower water, it may eventually exceed the limiting speed and experience a significant increase in squat:

If the block coefficient C_b is not known, it may be approximated as follows:

$C_b = 35Disp/(LxBxT)$

[where Disp = full-load displacement (*long tons*), L = length between perpendiculars (*ft*), B = beam (*ft*), and T = full load draft (*ft*)]. For example, the block coefficient C_b of a container ship 810'L x 106'B x 36'T with a full-load displacement of 51,710 Ltons is approximately 0.59.

(57) VESSEL SQUAT IN SHALLOW WATER. (Continued).

UNDERKEEL CLEARANCE: When evaluating the underkeel clearance in shallow waters, mariners are advised to also take into account the wave-induced motions of the ship (heave and pitch), the uncertainty within their own draft & trim calculations, as well as a prudent margin for uncertainty in the charted water depths (even modern hydrographic surveys may not locate all sea floor obstructions or the shallowest depths). In particular, sudden changes in water depth (such as passing over a shoal area) can cause transient squat effects that can be more substantial than predicted. Similarly, sudden changes in ship speed (acceleration or deceleration) can also cause transient changes in squat. For broad-beamed ships with a relatively "tender" rolling periods (such as modern, post-Panamax container ships), rolling motions can significantly increase drafts at the bilges, in addition to the effects of squat.

MANEUVERABILITY AND SPEED: n addition to squat, mariners should also be aware that shallow water may increase turning diameter of the vessel. Modeling of tankers has shown an increase in turning diameter of 60% to 100% in water less than 1.25 times the ship's draft. Hydrodynamic effects such as yawing and sheering should also be taken into account in shallow and restricted waters, especially when passing another vessel.

Also, the vessel will require substantially more revolutions to maintain the same speed (during sea trials with a 270-foot destroyer drawing 8 feet of water, the ship required 400 rpm to reach 22 knots in 100 feet of water, but nearly 500 rpm to maintain the same speed in 45 feet of water).

RESTRICTED WATERS: When the ship is transiting shallow restricted waters (such as a dredged channel within a shallow bay), the hydrodynamic flow around the hull is confined by the banks of the channel, creating a different pressure distribution and aggravating the squat condition (usually by increasing the stern squat). The squat estimated by the above "rule of thumb" should be doubled. Maneuverability is also further degraded; which is of particular concern when passing (meeting or overtaking) another vessel in the waterway or when maneuvering near banks or in channel curves.

RECOGNIZING SHALLOW WATER EFFECTS: Signs that a ship has entered shallow water conditions can include one or more of the following:

- Vibration increases suddenly,
- Engine loads down and revolutions decrease,
- Wavemaking increases, especially at the bow,
- Ship becomes more stable and slower to respond to controls,
- Echo sounders indicate a change in clearance or depth,
- The shaft horsepower (shp) speed decreases at the same engine revolutions,
- Water flow around the ship changes, and water color darkens (possibly indicating entrained mud).

REGULATIONS: The Code of Federal Regulations (CFR) requires that the person directing the movement of the vessel set the vessel's speed with consideration for the tendency of the vessel underway to squat and suffer impairment of maneuverability when there is small underkeel clearance [33 CFR 164.11(p)(3)]. In addition, the International Maritime Organization recommends that ships be provided with a bridge poster, a pilot card, and a maneuvering booklet. These should include information on the squat and maneuvering characteristics for that particular vessel [see also USCG Navigation Safety Inspection Circular 7-89].

For more information, contact:

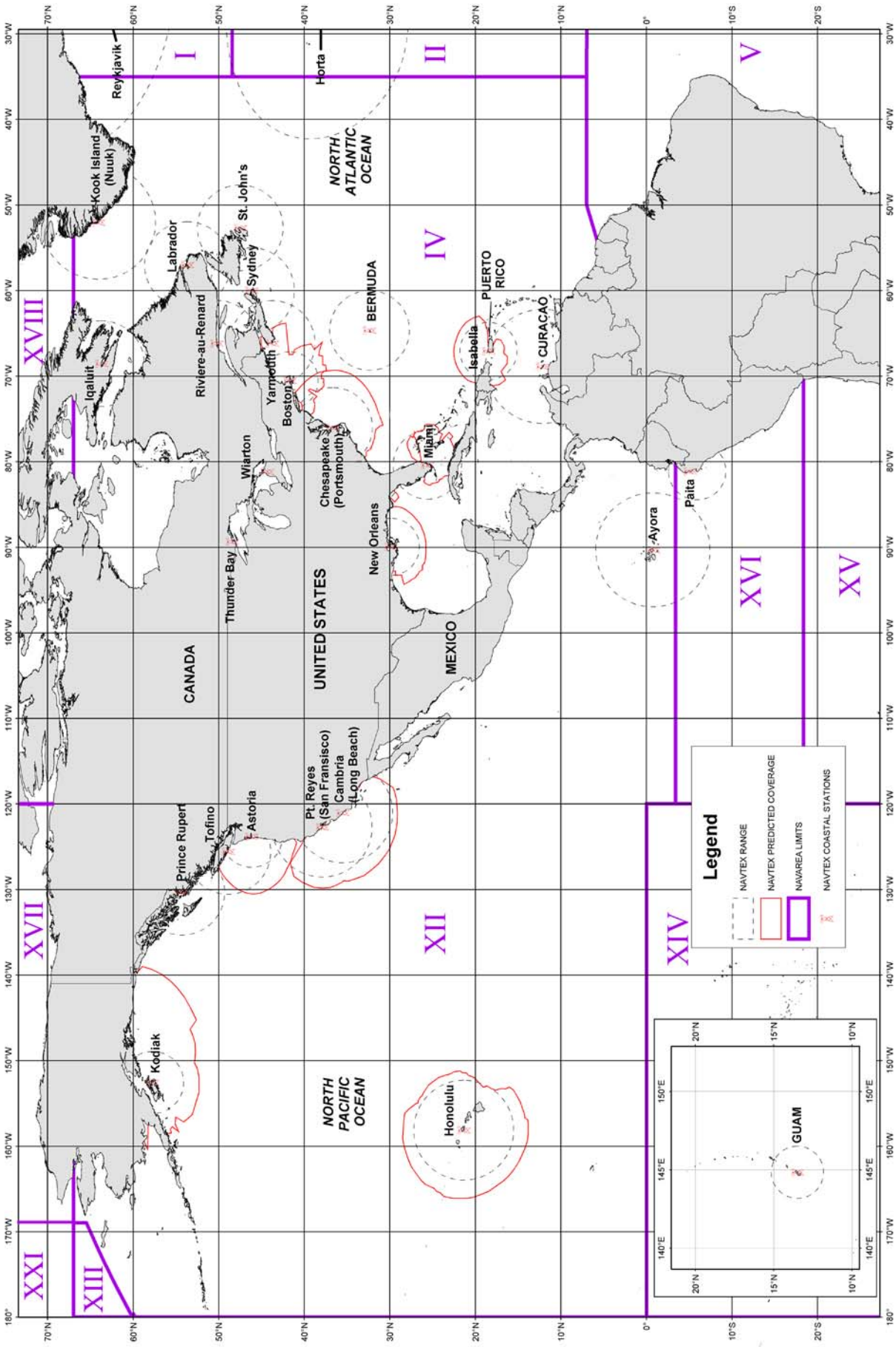
Commandant, U.S. Coast Guard
Naval Architecture Division (CG-ENG-2)
2703 Martin Luther King Jr Ave, S.E.
Washington, D.C. 20593-7509
Telephone: (202) 372-1370

(Repetition NTM 1(57)14) (USCG)

(58) PROMULGATION OF MARITIME SAFETY INFORMATION BY U.S. INFORMATION PROVIDERS.

The purpose of this information is to provide mariners with the details of the promulgation of Maritime Safety Information (MSI) via the Global Maritime Distress and Safety System (GMDSS) by U.S. information providers, namely the National Geospatial-Intelligence Agency (NGA), the U.S. Coast Guard (USCG), and the National Weather Service (NWS).

Mariners should consult PUB 117, the SafetyNet Users Handbook (available at http://www.iho.int/mtg_docs/International_Organizations/IMO/SafetyNET.pdf); IMO GMDSS Master Plan, or the U.S. Coast Guard Navigation Center web site at http://www.navcen.uscg.gov.
(Repetition NTM 1(58)14) (USCG)


Reykjavik
Horta
Kook Island (Nuuk)
NORTH ATLANTIC OCEAN
St. John's
Labrador
Sydney
BERMUDA
PUERTO RICO
Isabella
CURACAO
Iqaluit
Riviere-au-Renard
Yarmouth
Boston
Chesapeake (Portsmouth)
Miami
Wiarton
New Orleans
Thunder Bay
Ayora
Paita
CANADA
UNITED STATES
MEXICO
Prince Rupert
Tofino
Astoria
Pt. Reyes (San Fransisco)
Cambria (Long Beach)
Kodiak
NORTH PACIFIC OCEAN
Honolulu
GUAM
I
II
IV
V
XVI
XV
XIV
XII
XVII
XVIII
XXI
XIII
Legend
NAVTEX RANGE
NAVTEX PREDICTED COVERAGE
NAVAREA LIMITS
NAVTEX COASTAL STATIONS

(59) COAST GUARD SAFETY INFORMATION AVAILABLE ON INTERNET.

The United States Coast Guard Navigation Information Service (NIS), operated by the USCG Navigation Center, provides information for all radionavigation and maritime telecommunications systems. The NIS is staffed 24 hours a day, 7 days a week, providing general information and as appropriate current operational status, and effective policies for Global Positioning System (GPS), Nationwide Differential GPS (NDGPS), Universal Shipborne Automatic Identification System (AIS), Long Range Identification and Tracking (LRIT), and the Global Maritime Distress and Safety System (GMDSS), including NAVTEX, Digital Selective Calling (DSC), Inmarsat SafetyNET, and other Maritime Safety Information (MSI) broadcasts. Access to this information can be made directly, at no charge, via the Internet at http://www.navcen.uscg.gov.

The NIS also disseminates Safety Broadcasts (BNM), Local Notice to Mariners (LNM) and the latest GPS Notice Advisory to Navstar Users (NANU). NANU notices can also be obtained via e-mail subscription through the USCG Navigation Center Web site (http://cgls.uscg.mil/mailman/listinfo/nanu). LNMs can also be obtained via e-mail subscription through the USCG Navigation Center Web site at http://www.navcen.uscg.gov/?pageName=LNMlistRegistration or via an RSS Feed at http://www.navcen.uscg.gov/?pageName=feeds. In addition, the NIS investigates all reports of degraded or loss of GPS, NDGPS, AIS, or LRIT service. Mariners are encouraged to report all degradation, outages, or other incidents or anomalies of radionavigation services to the U.S Coast Guard Navigation Center at http://navcen.uscg.gov or phone (703) 313-5900.
(Repetition NTM 1(59)14) (USCG)

(60) NATIONAL OCEAN CLAIMS.

The following list shows national claims of maritime jurisdiction. Publication of this material is solely for information relative to the navigational safety of shipping and in no way constitutes legal recognition by the United States. The information has been compiled from the best available sources.

Country	Territorial Sea	Contiguous Zone	Fisheries or Economic Zone	Continental Shelf
Albania	12*	---	15	Defined by coordinates, 200m or E
Algeria	12*	24	32-52	Equidistant
Angola	12	24	200	200NM or CM
Antigua and Barbuda**	12*	24	200	200NM or CM
Argentina	12* (1)	24	200	200NM or CM
Australia	12 (2)	24	200	200NM or CM
Bahamas, The**	12	---	200	200m or E
Bahrain	12	24	---	---
Bangladesh	12*	18 (3)	200	CM
Barbados	12*	---	200	200NM or CM
Belgium	12	24	Defined by coordinates (4)	Equidistant (4)
Belize	12 (5)	---	200	---
Benin	12 (82)	---	200 (82)	200 (82)
Bosnia and Herzegovina	--- (6)	---	---	---

(60) NATIONAL OCEAN CLAIMS. (Continued).

Brazil	12* (7)	24	200 (7)	200NM or CM
Brunei	12	---	200 (8)	200NM or CM (83)
Bulgaria	12 (9)	24	200	200m or E (9)
Burma	12* (10)	24 (10)	200	200NM or CM
Cambodia	12*	24 (11)	200	200NM (11)
Cameroon	12	24	200 (12)	200NM or CM
Canada	12 (13)	24	200	200NM or CM
Cape Verde**	12*	24	200	200NM
Chile	12	24	200	200/350NM (14)
China	12*	24 (15)	200 (15)	200NM or CM
Colombia	12	---	200	200NM
Comoros**	12	---	200	200NM or CM
Congo, Republic of the (Brazzaville)	12*	---	200	200NM or CM
Congo, Democratic Republic of the (Kinshasa)	12	24	200 (16)	200NM/350NM (16)
Cook Islands	12	---	200	200NM or CM
Costa Rica	12	---	200 (17)	200NM or CM
Côte d'Ivoire	12	---	200	200NM or CM
Croatia	12*	---	200 (18)	200m or E
Cuba	12 (19)	24	200	200NM or CM
Cyprus	12	24	200 (89)	200m or E
Denmark	12* (20)	24	200	200m or E
Djibouti	12 (21)	24	200	---
Dominica	12	24	200	---
Dominican Republic**	12 (22)	24	200	200NM or CM
Ecuador	12	---	200	200NM (23)
Egypt	12* (24)	24 (24)	200 (89)	200m or E
El Salvador	12 (25)	24	200	200NM
Equatorial Guinea	12	---	200	200NM or CM

(60) NATIONAL OCEAN CLAIMS. (Continued).

Eritrea	12 (26)	---	(26)	---
Estonia	12 (27)	---	Defined by coordinates	Defined by coordinates
Fiji**	12	24	200	200m or E
Finland	12* (28)	14	Defined by coordinates	200m or E
France	12 (29)	24	200 (29)	200m or E
Gabon	12	24	200	200NM or CM
Gambia, The	12	18	200	200NM or CM
Georgia	12	24	Defined by coordinates; Equidistant (30)	Defined by coordinates; Equidistant (30)
Germany	12	---	200	200m or E
Ghana	12	24	200	200NM or CM
Greece	6 (31)	---	---	200m or E
Grenada	12*	---	200	200NM
Guatemala	12 (32)	---	200	200m or E
Guinea	12	---	200	200NM or CM
Guinea-Bissau	12	---	200	200NM or CM
Guyana	12*	24	200	200NM or CM
Haiti	12 (33)	24 (33)	200	E
Honduras	12 (34)	24	200	200NM or CM
Iceland	12	---	200	200NM or CM
India	12*	24 (35)	200	200NM or CM
Indonesia**	12* (36)	--- (84)	200	200NM or CM
Iran	12*	24 (37)	--- (37)	--- (37)
Iraq	12	--- (85)	---	(not specified)
Ireland	12	24	200	Partially defined by coordinates
Israel	12	---	Equidistant	E

(60) NATIONAL OCEAN CLAIMS. (Continued).

Italy	12 (38) (86)	24	Equidistant	200m or E
Jamaica**	12	24	200	200NM or CM
Japan	12 (39)	24	200	200NM or CM
Jordan	3	---	---	---
Kenya	12 (40)	---	200	200m or E
Kiribati**	12	---	200	200m or E
Korea, North (DPRK)	12* (41)	50 (41)	200	200NM
Korea, South (ROK)	12* (42)	24	200	200NM or CM
Kuwait	12	---	---	Defined by coordi-nates
Latvia	12 (43)	---	200 (90)	200m or E
Lebanon	12	---	Defined by coordinates	---
Liberia	12	24	200	200m or E
Libya	12* (44)	---	Equidistance (91)	CS
Lithuania	12*	Defined by coordinates	(45)	---
Madagascar	12	24	200	200NM (46)
Malaysia	12 (47)	---	200	200m or E
Maldives**	12*	24	200	200NM or CM
Malta	12*	24	25	200m or E
Marshall Islands**	12	24	200	---
Mauritania	12 (48)	24	200	200NM or CM
Mauritius	12*	24	200	200NM or CM
Mexico	12 (49)	24	200	200NM or CM
Micronesia, Federated States of	12	---	200	200NM or CM
Monaco	12	(88)	12 (88)	(88)
Montenegro	12* (50)	---	---	200m or E
Morocco	12	24	200	200m or E

(60) NATIONAL OCEAN CLAIMS. (Continued).

Mozambique	12	24	200	200NM or CM
Namibia	12	24	200	200NM or CM
Nauru**	12	24	200	200
Netherlands	12* (51)	24	Defined by coordinates	200NM or CM
New Zealand	12 (52)	24	200 (52)	200NM or CM
Nicaragua	200*/12* (87)	25*/24 (87)	200	200m or CM
Nigeria	12*	---	200	200m or E
Niue	12	---	200	---
Norway	12 (53)	24 (53)	200	200NM or CM
Oman	12*	24	200	200NM or E
Pakistan	12* (54)	24 (54)	200	200NM or CM
Palau	12	24	200	200NM or CM
Panama	12 (55)	24	200	200NM or CM
Papua New Guinea**	12	---	200	200m or E
Peru	200 (56)	---	200	200
Philippines**	12 (57)	---	200	E
Poland	12* (58)	---	200 (58)	not specified
Portugal	12 (59)	24	200	200m or E
Qatar	12	24	Equidistant; defined by coordinates (60)	Equidistant; defined by coordinates (60)
Romania	12*	24	200	200m or E
Russia	12 (61)	24	200	200NM or CM
Saint Kitts and Nevis	12	24	200	200NM or CM
Saint Lucia	12	24	200	200NM or CM
Saint Vincent and the Grenadines**	12*	24	200	200m
Samoa	12	24	200	200m
Sao Tome and Principe**	12	---	200	200NM or CM

(60) NATIONAL OCEAN CLAIMS. (Continued).

Saudi Arabia	12 (62)	24 (62)	not specified	not specified
Senegal	12	24	200	Natural Prolongation; or 200NM
Seychelles**	12*	24	200	200NM or CM
Sierra Leone	12	24	200	200NM or CM
Singapore	12 (63)	---	--- (63)	---
Slovenia	12* (64)	---	Defined by coordinates (64)	Defined by coordinates (64)
Solomon Islands**	12	---	200	200NM or CM
Somalia	200*	---	200	200NM or CM
South Africa	12	24	200	200NM or CM
Spain	12 (65)	24	200 (65)	200NM or CM
Sri Lanka	12* (66)	24 (66)	200	200NM or CM
Sudan	12*	18 (67)	---	200m or E
Suriname	12	---	200	200NM or CM
Sweden	12 (68)	---	Equidistant	200m or E
Syria	12*	24	200	200m or E
Tanzania	12	---	200	200NM or CM
Thailand	12 (69)	24	200	Defined by coordinates
Timor-Leste	12	24	200	200NM or CM
Togo	30	---	200	200NM or CM
Tonga	12 (70)	---	200	200m or E
Trinidad and Tobago**	12	24	200	200NM or CM
Tunisia	12 (71)	24	--- (72)	---
Turkey	6-12 (73)	---	200 (73)	---
Tuvalu**	12	24	200	200NM
Ukraine	12 (74)	---	200	200m or E
United Arab Emirates	12*	24	200 (75)	200NM or Equidistant

(60) NATIONAL OCEAN CLAIMS. (Continued).

United Kingdom	12	---	200 (76)	200NM or CM
United States	12	24	200 (77)	200NM or CM
Uruguay	12 (78)	24	200	200NM or CM
Vanuatu**	12	24	200	200NM or CM
Venezuela	12	15 (79)	200	200m or E
Vietnam	12* (80)	24 (80)	200	200NM or CM
Yemen	12* (81)	24 (81)	200	200NM or CM

Abbreviations:

CS - Continental Shelf (no specified limits)
CM - Continental Margin
E - Limit of Exploitation
m - meters (depth)
NM - nautical miles

* Indicates a state which requires advance permission or notification for innocent passage of warships in the territorial sea. The United States does not recognize this requirement.

** Indicates an archipelagic state.

FOOTNOTES

The numbers presented in the table reflect a claim regarding the breadth of a zone contained in national legislation - regardless of whether this legislation contains an additional specific reference to the need for delimitation of maritime boundaries with adjacent or opposite states. Therefore there are instances where a state claim exceeds the maximum possible breadth due to the distance to opposite states.

Security Zone - A state claim to control activity beyond its territorial sea for security reasons unrelated to that state's police powers in its territory, including its territorial sea. This Summary lists only those Security Zones which presently claim to restrict navigation and overflight activities conducted exclusively beyond their claimed territorial seas. A claim of right of surveillance beyond the territorial sea or a claim of the right of "hot pursuit" in enforcing violations of law which occur in a state's territorial sea, inland waters, or land territory does not constitute a claimed Security Zone.

Fishery zones not extending beyond a claimed territorial sea or EEZ are encompassed within the territorial sea or EEZ and not listed separately.

Many coastal nations have established straight baselines or have asserted historic waters claims. These footnotes mention some of the more significant ones. It exceeds the scope of this Summary, however, to provide an exhaustive list of baseline and historic waters claims. Accordingly, users should refer to other sources of information to obtain a complete compendium of maritime claims.

1. Argentina. Claims San Matias Gulf (Golfo San Matias), Nuevo Gulf (Golfo Nuevo) and San Jorge Gulf (Golfo San Jorge) as internal waters and claims, jointly with Uruguay, the Rio de la Plata estuary as internal waters.

2. Australia. Claims Anxious, Rivoli, Encounter and Lacepede Bays as historic waters.

3. Bangladesh. Contiguous Zone also considered a Security Zone. Nuclear-powered vessels and vessels transporting nuclear materials or other radioactive substances are required to give notice prior to entering territorial sea.

4. Belgium. EEZ limits set by coordinates found in the Act concerning the EEZ of Belgium in the North Sea of April 1999. Fishery zone and CS extend to median line equidistant from baseline of neighbors.

(60) NATIONAL OCEAN CLAIMS. (Continued).

5. Belize. From the mouth of the Sarstoon River to Ranguana Cay, Belize's territorial sea is 3NM; according to Belize's Maritime Areas Act, 1992, the purpose of this limitation is "to provide a framework for the negotiation of a definitive agreement on territorial differences with the Republic of Guatemala."

6. Bosnia and Herzegovina. No information on maritime claims is available.

7. Brazil. Claims to require permission for more than 3 warships of same flag to be in territorial sea at same time. Military exercises can be carried out in EEZ only with Brazil's consent.

8. Brunei. 200NM or median EEZ.

9. Bulgaria. In territorial sea and internal waters, foreign submarines shall be required to navigate on the surface. Innocent passage of warships limited to designated sea lanes. CS limits will be established by agreement between states with adjacent or opposite coasts on Black Sea on basis of international law.

10. Burma. Claims as internal waters all waters inside a 223NM baseline closing Gulf of Martaban as well as waters inside straight baselines connecting coastal islands. Contiguous Zone also considered a Security Zone.

11. Cambodia. Contiguous Zone also considered a Security Zone. Continental Shelf: "All activities by foreigners", for "whatever end" are regulated. The U.S. does not recognize these claims.

12. Cameroon. EEZ will stretch from the external boundary of the territorial sea to the limit placed under its jurisdiction by international law.

13. Canada. Claims as internal waters all waters between its islands in the Arctic; also claims Hudson Bay as a historic bay.

14. Chile. Claimed continental shelves for Easter Island and Sala y Gomez Island, extending 350 nautical miles from their respective baselines.

15. China. Claims right to create safety zone around any structure in EEZ, right to require prior authorization to lay submarine cables and pipelines, and right to broad powers to enforce laws in the EEZ. Contiguous Zone also considered a Security Zone.

16. Congo. Congo, Dem. Rep. of the. Claimed 200nm EEZ as allowed under the 1982 Law of the Sea Convention; 1983. Recommends coordination with neighboring states; 1992. Claims 350nm Continental Shelf measured from baseline, or to 100nm from 2,500m isobath; 2009.

17. Costa Rica. Permit required for foreign flag fishing vessels to transit Costa Rican waters.

18. Croatia. Requires 24hr notice in advance of a foreign warship exercising innocent passage. Prohibits more than three foreign warships from transiting the territorial sea in innocent passage.

19. Cuba. Claims straight baselines enclosing varying distances of water between Cape Frances (Cabo Frances), the Isle of Pines (Isla de la Juventud) (notable are those enclosing 21-35.6N and 79-50.5W), Breton Cay (Cayo Breton) and Cape Cruz (Cabo Cruz) as internal waters.

20. Denmark. No prior notification required in straits, unless more than 3 warships at once. Includes Greenland and Faroe Islands. Straight baselines have the effect of enclosing waters between the Faroe Islands. Drogden and Hollænderdyb claimed as internal waters. 3NM territorial sea for Greenland. 12NM territorial sea for Faroe Islands.

21. Djibouti. Nuclear-powered vessels and vessels transporting nuclear materials or other radioactive substances are required to give notice prior to entering territorial sea.

22. Dominican Republic. Claims Samana, Ocoa, Neiba, Escocesa and Santo Domingo Bays as historic bays; Samana, Ocoa and Neiba bays qualify as juridical bays.

(60) NATIONAL OCEAN CLAIMS. (Continued).

23. Equador will make use of its right to extend its continental shelf to a distnce of 350NM from the baselines of the Galapagos Archipelago

24. Egypt. Contiguous Zone also considered a Security Zone. Claims right to prior permission for entry of nuclear-powered vessels or vessels carrying nuclear materials and foreign ships carrying hazardous or other wastes.

25. El Salvador. Claims Gulf of Fonseca (Golfo de Fonseca) as a historic bay.

26. Eritrea; Concerning Territorial Sea and EEZ: Adopted certain provisions of Ethiopian Proclamation No. 137. Jurisdiction clamed to the limit of the pearl and sendentary fishery grounds

27. Estonia. Nuclear-powered ships must apply for permission 30 days in advance to enter territorial sea. Innocent passage prohibited for ships carrying radioactive materials, explosives and marine pollutants defined as hazardous and certain oil and fertilizer products unless those cargoes are loaded or unloaded in an Estonian port.

28. Finland. In the Gulf of Finland territorial sea is 3NM.

29. France. Territorial sea limits apply to all French dependencies. EEZ claim includes the following French dependencies: Clipperton Island, French Guiana, French Polynesia, French Southern and Antarctic Lands, Guadeloupe, Glorioso Islands, Juan de Nova Island, Europa Island, Bassas da India, Martinique, New Caledonia, St. Pierre and Miquelon, Tromelin Island, and Wallis and Futuna.

30. Georgia. National legislation establishes the limits only by reference to the delimitation of maritime boundaries with adjacent or opposite states.

31. Greece. Territorial airspace claim extends to 10NM for control of civil aviation.

32. Guatemala. Claims Gulf of Amatique (Bahia de Amatique) as a historic bay.

33. Haiti. Draws territorial sea limits in a manner which implies straight baselines including across the mouth of the Gulf of Gonave (Golfe de la Gonave). Contiguous Zone also considered a Security Zone.

34. Honduras. Claims Gulf of Fonseca (Golfo de Fonseca) as a historic bay.

35. India. Contiguous Zone also considered a Security Zone. Claims Gulf of Mannar and Palk Bay as historic waters.

36. Indonesia. Submarines must navigate above water level and show national flag. Nuclear vessels and vessels carrying nuclear material must carry documents and adhere to international special preventative measures.

37. Iran. Claims security jurisdiction in Contiguous Zone. EEZ and CS extend to median line equidistant from baseline of neighbors.

38. Italy. Claims the Gulf of Taranto (Golfo di Taranto) as a historic bay.

39. Japan. Claims straight baselines. A high seas corridor remains in 5 “international straits”: Tsugaru Strait (Tsugaru-kaikyo), La Perouse Strait, Osumi Strait (Osumi-kaikyo) and East and West channels of Tsushima.

40. Kenya. Established straight baseline system. Claims Ungwana Bay as a historic bay.

41. Korea, North (DPRK). Measures claims from claimed straight baselines, not coastline. Claims a 50/200NM Security Zone within which all foreign vessels and aircraft are banned without permission; it extends to 50NM in the Sea of Japan and to the limit of EEZ in the Yellow Sea.

42. Korea, South (ROK). Claims straight baselines. A high seas corridor remains in Korea Strait.

(60) NATIONAL OCEAN CLAIMS. (Continued).

43. Latvia. Banned foreign warships with nuclear powered engines or cargo from entering territorial seas or ports without providing 30 days prior notice and permission.

44. Libya. Claims the Gulf of Sidra as a historic bay. All merchant ships required to give prior notice of innocent passage.

45. Lithuania. EEZ limit established by reference to the delimitation by agreement with states with adjacent or opposite coasts.

46. Madagascar. CS 200NM or 100NM from 2500m-depth isobath.

47. Malaysia. Prior authorization requirement for nuclear-powered ships or ships carrying nuclear material to enter the territorial sea.

48. Mauritania. Claims 89NM straight baseline from Cape Blanc (Cap Blanc) to Cape Timiris (Cap Timiris).

49. Mexico. No more than 3 foreign warships will be authorized in Mexican ports on each coast at the same time, and no more than one in any given port. Port calls by more than one training vessel can be authorized only if permission is requested three months in advance. Nuclear-powered and nuclear-armed ships are not allowed to enter Mexican territorial waters or dock in Mexican ports.

50. Montenegro. No official information on maritime claims is available. This information corresponds to the limits and claims of the previous national entity, Serbia and Montenegro, and is therefore not authoritative.

51. Netherlands. Considers the Westerschelde internal waters through which passage requires prior permission. Includes Aruba and the Netherlands Antilles.

52. New Zealand. Includes Tokelau. Prohibits entry of nuclear-powered and nuclear armed ships into its ports.

53. Norway. Territorial sea claim includes Jan Mayen and Svalbard. Contiguous Zone claim applies only to Norway.

54. Pakistan. Foreign supertankers, nuclear-powered ships and ships carrying nuclear materials are required to give prior notification for entry into territorial sea. Contiguous Zone also considered a Security Zone.

55. Panama. Claims Gulf of Panama as a historic bay.

56. Peru. The 200nm limit is called the ‘Maritime Dominion’ of Peru. Peru claims sovereignty and jurisdiction without prejudice to the freedom of international communication, "in conformity with the laws and treaties ratified by the state.”

57. The Philippines declared 33 islands, cays, shoals and reefs, contained in a delimited area (Kalayaan) of the Spratly Islands, to be Philippine territory; Presidential Decree No. 1596

58. Poland. Claims a closing line across Gulf of Gdansk and a fishing zone to the median line in the Baltic. EEZ is determined by lines connecting extreme points of specified lateral limits.

59. Portugal. Established straight baselines for various areas along continental coast and Madeira and Azores island groups. Claims Tagus and Sado estuaries and associated bays as historic waters.

60. Qatar. Extends to median line with neighboring states.

61. Russia. In a Joint Statement with Ukraine declared that the Sea of Azov and Strait of Kerch are historic internal waters of the two nations.

62. Saudi Arabia. Claims power to regulate nuclear-powered vessels in the territorial sea and to require prior authorization for such vessels. Contiguous Zone also considered a Security Zone.

63. Singapore. Singapore has stated that it will negotiate agreed maritime boundary delimitations with neighboring countries whose territorial sea and exclusive economic zone claims overlap with Singapore’s.

(60) NATIONAL OCEAN CLAIMS. (Continued).

64. Slovenia. Foreign warships require 24-hour advance notice for innocent passage through territorial sea and must use designated sea lanes only. Territorial Sea and Continental Shelf boundaries are defined by coordinates through agreements w/ the former Yugoslavia.

65. Spain. Claims to control transit passage by aircraft and exercise pollution control over vessels in international strait. Claims 200NM Economic Zone in Atlantic only. Fishery zone in the Mediterranean defined by coordinates.

66. Sri Lanka. Contiguous Zone also considered a Security Zone. Claims Palk Bay, Palk Strait and Gulf of Mannar as historic waters.

67. Sudan. Contiguous Zone also considered a Security Zone.

68. Sweden. Territorial sea claim is less than 12NM (but varying) in certain areas of the Skagerrak, the Kattegat and the Baltic.

69. Thailand. Claims inner Gulf of Thailand as a historical bay to 12°35'45"N.

70. Tonga. Claims 12NM territorial sea for Minerva Reef.

71. Tunisia. Claims straight baselines enclosing Gulf of Tunis (Khalij Tunis) and Gulf of Gabes (Khalij Gabes) as internal waters.

72. Tunisia. EEZ limits to be fixed in coordination with neighboring states.

73. Turkey. Claims a 12NM territorial sea in the Black Sea and in the Mediterranean and a 6NM territorial sea in the Aegean. EEZ is claimed in the Black Sea.

74. Ukraine. In a Joint Statement with Russia declared that the Sea of Azov and Strait of Kerch are historic internal waters of the two nations.

75. United Arab Emirates. EEZ extends to agreed CS boundaries or to median lines.

76. United Kingdom. Fishery claims include Ascension, Bermuda, British Virgin Islands, Cayman Islands, Ducie and Oeno Atolls, Henderson Island, Pitcairn Island, St. Helena, Tristan da Cunha, Turks and Caicos Islands. Has also established a fishing zone around the Falkland/Malvinas Islands; although 200NM wide, the zone is only enforced to a distance of 150NM. Established Environment (Protection and Preservation) Zone for the British Indian Ocean Territory.

77. United States. EEZ applies to Northern Marianas (consistent with the Covenant), American Samoa, Guam, Puerto Rico, U.S. Virgin Islands and other U.S. possessions and territories.

78. Uruguay. Claims, jointly with Argentina, the Rio de la Plata estuary as internal waters.

79. Venezuela. Claims 15NM Security Zone.

80. Vietnam. Claims half of the Gulf of Tonkin as historic internal waters and uses straight baselines for measuring the territorial sea. Baselines purport to enclose portions of the South China Sea up to approximately 75NM in width as internal waters. Contiguous Zone also considered a Security Zone.

81. Yemen. Claims notice requirement for warships, nuclear-powered vessels and vessels transporting nuclear materials or other radioactive substances prior to entering the territorial sea. Contiguous Zone also considered a Security Zone.

82. Benin. In December 1998, a representative of the Benin Foreign Ministry provided an informal statement to U.S. State Department that Benin now claims a 12nm Territorial Sea and a 200nm-EEZ. However, the 1976 decree remains on the UN Law of the Sea website, and the UN continues to list the claim as 200nm.

83. Brunei. Claims continental shelf, but has not published delimitation.

(60) NATIONAL OCEAN CLAIMS. (Continued).

84. Indonesia. Claimed to restrict "stopping, dropping anchor, and/or cruising about without legitimate reason" in high seas "adjoining Indonesian territorial waters; "adjoining officially interpreted to extend up to 100 miles seaward of Indonesian territorial waters. This claim is not recognized by the U.S.

85. Iraq. Mentions Contiguous Zone, but does not declare coordinates or width.

86. Italy. Closed Strait of Messina to vessels 10,000 tons or more carrying oil and other pollutants. This prohibition is not recognized by the U.S.

87. Nicaragua. Has claimed a 200NM Territorial Sea since 1979, and a 25NM Security Zone since 1983. Upon ratification of LOS Convention in 2000, Nicaragua declared it would amend domestic law to conform to LOS Convention. Current status of the claim is uncertain.

88. Monaco. Sovereign rights over the seas beyond Territorial Sea limit, in accordance with conditions prescribed in international convention on the law of the sea.

89. Egypt. Cyprus and Egypt signed an agreement on the delimitation of their respective exclusive economic zones.

90. Latvia. Delimitation agreement with Sweden.

91. Libya. Delimitation agreements with neighboring states.

92. Congo, Republic of the. Reportedly rolled back the 200nm Territorial Sea limit back to 12nm during the LOS ratification in 2008.

(Supersedes NTM 1(60)14) (DEPT. OF STATE/NGA)

(61) U.S. ECONOMIC SANCTIONS.

NOTE: *This section is meant to alert mariners and trade professionals to the existence of U.S. sanctions and does not have the force of law. Sanctions are based on U.S. foreign policy and national security concerns and are primarily administered by the U.S. Treasury Department's Office of Foreign Assets Control ("OFAC"). OFAC administers sanctions programs against targeted foreign countries, as well as terrorists, international narcotics traffickers, proliferators of weapons of mass destruction and others. The Department of Commerce administers sanctions regarding the exportation of goods and technology (sometimes shared authority with OFAC). Additionally, the State Department also administers secondary sanctions that involve certain activities of foreign individuals and firms. The regulations governing OFAC administered sanctions programs are found in chapter V of title 31, Code of Federal Regulations. For current details about OFAC and U.S. sanctions, it is important to visit the Treasury Department's sanctions website at: http://www.treas.gov/ofac.*

U.S. mariners and shippers may face a variety of risks relating to OFAC sanctions. Take, for example, the hijacking of a vessel by OFAC-designated parties who may be operating as pirates off the coast of Somalia. Payment of ransom to obtain release of the vessel may be complicated by the application of U.S. sanctions to U.S. persons, including financial institutions, involved in any ransom payment. Or perhaps cargo is unknowingly transshipped on an OFAC-designated Islamic Republic of Iran Shipping Lines (IRISL) vessel. If the shipping agent or cargo owners are U.S. persons or the financing for the transaction comes from a U.S. person, sanctions penalties may apply to the shipping transaction. Finally, imagine a ship transporting a perishable cargo from South America to ports-of-call along the Atlantic seaboard. The vessel is northbound for a final destination at a large Mid-Atlantic port in the United States. As the vessel makes its way through the Caribbean, it stops in various locations, including Santiago de Cuba in order to perform minor repairs. Upon leaving Santiago de Cuba, it continues north, for its primary destination in the United States. In accordance with U.S. law, the vessel provides advanced identification to the final port of entry. Upon learning that the vessel has just left Cuban territory and was not engaged in licensed or exempt trade with Cuba, the vessel is instructed that it will not be allowed to enter any U.S. port for a period of 180 days. Not only could this result in substantial economic loss because of the delay in unloading the perishable cargo, but the vessel owner or charterer could be assessed a civil penalty for an unauthorized stop in Cuba. These are examples of numerous potential business risks for U.S. mariners and shippers relating to economic and trade sanctions administered by OFAC.

OFAC JURISDICTION

OFAC is the primary enforcement agency for economic and trade sanctions applicable to U.S. persons located anywhere in the world or to activity within U.S. borders. OFAC regulations apply to: All U.S. citizens and permanent resident aliens located

(61) U.S. ECONOMIC SANCTIONS. (Continued).

anywhere in the world, any individual located in the United States, U.S.-registered vessels and other vessels subject to U.S. jurisdiction, all companies organized in the United States, all foreign branches and representative offices of U.S. companies, as well as all individuals and entities located in the United States (including domestic affiliates of foreign companies) as well as those exporting goods or services from the United States or those who deal in "blocked property" in the United States. Foreign subsidiaries of U.S. companies are subject to U.S. sanctions against Cuba and Iran and certain shipping transactions by foreign persons involving Iran are also subject to OFAC jurisdiction.

Every shipping company may potentially be affected by OFAC regulations. A vessel may be subject to U.S. jurisdiction, depending on its ownership or its location. If a vessel meets any of the following definitions it is subject to U.S. jurisdiction, and hence, OFAC regulations:

- It is a U.S. flag vessel;
- It is owned or controlled by any U.S. company or companies;
- It is within U.S. territorial waters;
- In accordance with sanctions against Cuba and Iran, the vessel is owned or controlled by a foreign subsidiary of U.S. a U.S. company.

SANCTIONS REQUIREMENTS

OFAC administers more than twenty primary sanctions programs. These primary sanctions programs fall into three general categories of programs, which are (i) comprehensive programs; (ii) limited programs; and (iii) list-based or "targeted" programs. Comprehensive programs are OFAC's most robust programs and consist of the Cuba, Iran, Sudan and Syria programs. These comprehensive programs have generally broad-reaching prohibitions on any dealings with the governments and geographical area of named countries. Comprehensive programs contain few exceptions to their prohibitions. They do contain some general licenses that authorize certain transactions that would otherwise be prohibited. Limited programs contain fewer prohibitions than the comprehensive programs. List-based programs are targeted programs that prohibit certain illicit activity and dealings with entities and individuals that are sanctioned by OFAC. For instance, sanction prohibitions include facilitating trade, providing maritime transportation, vessel chartering, brokerage services, and maritime insurance or reinsurance that directly or indirectly benefit sanctioned parties. The restrictions include, but are not limited to, transactions relating to:

- Shipments of goods to or from countries subject to trade sanctions;
- Carriage of passengers to or from Cuba;
- Carriage of passengers who are blocked Cuban nationals;
- Shipments of goods in which there is an interest of a sanctioned government or a Specially Designated National (SDN) (an SDN is a person sanctioned or designated by OFAC) or, in the case of Cuba, an interest of any Cuban national;
- The purchase of services or bunkering at ports located within a country subject to trade sanctions, or from an SDN that operates a port facility;
- Transshipments through the United States of cargo from or destined for countries or SDN subject to trade sanctions;
- Shipments aboard vessels owned or controlled by sanctioned countries or SDN;
- The financing, chartering or insuring of a vessel that is directly or indirectly owned by an SDN;
- The certification, flagging or classification of a designated vessel or a vessel owned by an SDN;
- Knowingly providing shipping services that transport goods to or from Iran that could materially contribute to the proliferation of weapons of mass destruction or support acts of international terrorism.

SANCTIONS ENFORCEMENT

OFAC does not require the establishment of any specific sanctions compliance policies, programs, or procedures, but the potential damage to national security, substantial civil and criminal penalties, and the potential harm to a mariner's reputation offer considerable incentive to develop and maintain appropriately tailored OFAC compliance programs. OFAC's Economic Sanctions Enforcement Guidelines, published at 74 Fed. Reg. 57,593 (Nov. 9, 2009), and available on OFAC's website, set forth the General Factors that OFAC will consider in determining appropriate administrative action in response to apparent violations of U.S. sanctions by U.S. persons.

(61) U.S. ECONOMIC SANCTIONS. (Continued).

OFAC LICENSING

OFAC has the authority to authorize transactions that are otherwise prohibited by issuing licenses to allow certain transactions. OFAC issues two types of licenses-general licenses and specific licenses. General licenses can be found on OFAC's website or in the regulations administered by OFAC. General licenses are publically available for all U.S. persons to use. These general licenses are self-selecting, meaning that the U.S. person must determine if the proposed transaction falls within the scope of the license, and general licenses are self-executing, meaning that once the parties determines that the activity is authorized, the parties may move forward with the authorized transaction. Specific licenses are issued on a case-by-case basis to explicitly named licensees (and those acting ordinary or incidental to the license). For some sanctions programs, OFAC may authorize commercial exports of agricultural commodities, medicine and medical devices pursuant to the Trade Sanctions Reform and Export Enhancement Act of 2000. Provisions may also exist for licensing the exportation of other items, including civil aviation equipment. The OFAC Licensing Division can be reached by telephone (202) 622-2480 and by fax (202) 622-1657.

SECONDARY SANCTIONS-IRAN

In 1996 Congress first put in place "secondary sanctions" applicable to foreign persons and firms who deal with Iran by enacting the Iran Sanctions Act (ISA). The ISA involves "secondary" sanctions in that the United States does not have direct jurisdiction over the foreign persons and firms but may deny them access to the U.S. marketplace if they are found to have engaged in the Act's triggering activity. Originally the ISA's triggering activity was limited to investment of more than $20 million in one year in Iran's energy sector. As U.S. foreign policy toward Iran has evolved since 1996, the ISA was been amended to broaden the scope of triggering activity. The U.S. State Department has primary responsibility for ISA.

The Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010 ("CISADA") was the first substantial amendment to the ISA. CISADA specifically targets activities of non-U.S. companies and individuals who provide services that support the importation of refined petroleum products to Iran. Non-U.S. firms found to be engaging in such services, including shipping companies, charterers and other maritime service providers, can be denied access to the United States economy and financial system. In 2012 Congress expanded sanctionable activity under secondary sanctions to include ownership of a vessel used to transport Iranian crude oil, concealment of the Iranian origin of crude oil on a vessel, engaging in a deceptive transaction to circumvent sanctions on Iran or Syria, or facilitating the transport of goods to Iran for use in the development of weapons of mass destruction or to promote international terrorism. In 2013 secondary sanctions were expanded yet again to block all property of non-U.S. persons found to have provided significant support for any activity on behalf of or benefiting a person in the Iranian energy, shipping, or shipbuilding sectors.

OFAC has issued a series of FAQs on its website regarding these new provisions. One such FAQ provides in part that the secondary sanctions targeting Iran shipping sector and includes the following:

- The provision of crude and product tankers to Iran;
- The provision of registry, flagging, or classification services of any kind;
- The supervision of and participation in the repair of ships and their parts;
- The inspection, testing, and certification of marine equipment materials and components;
- The carrying out of surveys, inspections, audits and visits, and the issuance, renewal or endorsement of the relevant certificates and documents of compliance, as they relate to ships and shipping; and
- Any other goods or services relating to the maintenance, supply, bunkering, and docking of vessels flying the flag of the Islamic Republic of Iran, or owned, controlled, chartered, or operated directly or indirectly by, or for or on behalf of the Government of Iran (GOI) or an Iranian person.

For a more detailed description of the evolution of secondary sanctions since enactment of the ISA in 1996 see Congressional Research Report, Iran Sanctions at: http://www.fas.org/sgp/crs/mideast/RS20871.pdf.

OFAC OUTREACH

It is important to review the various sanctions regulations and be aware of which programs and prohibitions apply to particular business operations. U.S. sanctions programs and Iranian secondary sanctions are nuanced. What may be prohibited with regard to one sanctions program may be permitted or licensable for another. As a result, if prohibitions do apply,

(61) U.S. ECONOMIC SANCTIONS. (Continued).

determine if the program contains an exemption or a general license for your proposed transaction, and if there are no exemptions or general licenses, then consider applying for a specific license or decline engaging in the proposed transaction.

Sanctions programs and secondary sanctions may be subject to frequent change. To ensure continued compliance, it is important that the maritime community remain up-to-date on the latest program provisions. OFAC provides ongoing educational or "Outreach" events throughout the year to help explain sanctions requirements and new sanctions programs. A list of currently scheduled Outreach events is available on OFAC's website. For up-to-date information or questions on sanctions, visit OFAC's webpage at: www.treas.gov/ofac, subscribe to OFAC's email or RSS notification services, or contact OFAC's Compliance Hotline at: 1-800-540-6322.
(Repetition NTM 1(61)14) (DEPT. OF TREASURY)

(62) MARITIME INDUSTRY REPORTING OF A SUSPECTED OR ACTUAL TERRORIST INCIDENT.

In addition to oil and hazardous substance releases, the National Response Center (NRC) must be notified of any suspected or actual terrorist incident (e.g., chemical, radiological, biological, or etiological discharge into the environment) anywhere in the United States and its territories, particularly one affecting transportation systems. Coast Guard units that receive reports of suspected or actual incidents should ensure such reports are reported to the NRC at 800-424-8802 or (202) 267-2675. Individuals are encouraged to visit the NRC Web site (http://www.nrc.uscg.mil) for reporting requirements and other helpful information.
(Repetition NTM 1(62)14) (USCG)

(63) ELECTRONIC VESSEL NOTICE OF ARRIVAL (eNOA) SUBMISSION.

The Coast Guard's Notice of Arrival (NOA) rule was published in February 2003 and requires ships to submit accurate vessel, crew, passenger, and cargo information to the Coast Guard's National Vessel Movement Center (NVMC) prior to arrival in a U.S. port or place. Time frames for submitting this information are based on a vessel's voyage time. Failure to submit a NOA prior to arrival in a U.S. port or place is a violation of the regulation and may result in civil or criminal penalties or denial of a vessel to enter port. Even if a NOA is submitted, failure to submit one using the methods specified in the regulation or without accurate or complete data may result in significant delays, so industry is reminded to be familiar with submission requirements.

Vessels and their respective maritime stakeholders should review the NOA regulations found in 33 Code of Federal Regulations (CFR) Part 160, Subpart C, to ensure submission of complete and accurate reports and minimize any disruption to trade.

The regulation requires NOAs to be submitted to the NVMC via multiple means to include email, or one of three electronic methods. The electronic methods are an easy way to complete the requirements and comply with the regulation. All required information can be entered via the electronic Notice of Arrival and Departure (eNOAD), available on the NVMC Web site at http://www.nvmc.uscg.gov, and consisting of the following three formats:

- A Web site that can be used to submit NOA information directly to the NVMC;
- Raw eXtensible Markup Language (XML) formatted documents that conform to the eNOAD schema, provided for those interested in creating their own application; this format would draw information from their existing systems to submit, via web service, XML formatted data to comply with NOA requirements;
- A Microsoft InfoPath template, designed for those wanting to input NOA data offline (when not connected to the Internet) for submission later via their Internet connection or as an email attachment to the NVMC.
- An XLS Workbook 7.0 for 33 CFR 160 reporting requirements and an XLS OCS Workbook 1.0 for 33 CFR 146 requirements, both available under the Downloads tab of the NVMC website.

Vessels should remember that the eNOAD serves as a collection for the Coast Guard's Notice of Arrival requirements and U.S. Custom *and* Border Protection's (USCBP) Advanced Passenger Information System (APIS) requirements, which were published on 5 April 2005. Submissions received through one of the three eNOAD formats fulfill both agencies' requirements. Submitting a NOA via fax, telephone, or regular email does not meet CBP vessel APIS requirements published in 19 CFR Part 4.

On January 13, 2011 the U.S. Coast Guard issued a final rule for 33CFR 146 to establish Notice of Arrival ("NOA") requirements for "units" (i.e. U.S. and foreign flag vessels, floating facilities, and mobile offshore drilling units ("MODUs") engaging in Outer Continental Shelf ("OCS") activities in order to enhance U.S. maritime domain safety and security awareness on the OCS. Previously, only MODUs were required to make NOA reports offshore; this new regulation became effective February 14, 2011 and can be found at www.nvmc.uscg.gov under the Regulations tab.

(63) ELECTRONIC VESSEL NOTICE OF ARRIVAL (eNOA) SUBMISSION. (Continued).

The responsibility for ensuring that an NOA/D report is provided to the NVMC remains with the vessel owner/operator or agent. The NVMC Web site www.nvmc.uscg.gov offers information on both agencies' requirements, methods of submission, and frequently asked questions (FAQs). The NVMC can be contacted at sans@nvmc.uscg.gov or by telephone at 1-800-708-9823 or 304-264-2502 for more information. For NOA regulatory issues, contact the U.S. Coast Guard Headquarters Advance NOA Program Manager LCDR Mike Lendvay at 202-372-1218. The U.S. Customs and Border Protection submission and regulation guide may be found at the USCBP web site
http://www.cbp.gov/linkhandler/cgov/travel/inspections_carriers_facilities/apis/air_vessel_guides/vessel_guide.ctt/
vessel_guide.pdf. The CBP Questions/Customer Service General Inquiries phone number is 1-877-CBP-5511 (1-877-227-5511).
(Repetition NTM 1(63)14) (USCG)

(64) AMERICA'S WATERWAY WATCH.

The U. S. Coast Guard and the Coast Guard Auxiliary national awareness program, America's Waterway Watch, asks those who work, live, or recreate on or near the water to be aware of suspicious activity that might indicate threats to our country's homeland security. Americans are urged to adopt a heightened sensitivity toward unusual events and individuals they may encounter in or around ports, docks, marinas, riversides, beaches, or communities.

Anyone observing suspicious activity is asked to note details and contact the National Response Center at 1-877 24 WATCH (9-2824). In the case of immediate danger to life or property, call local authorities at 911. The Coast Guard cautions people not to approach or challenge anyone acting in a suspicious manner.

Suspicious activities include:
- People appearing to be engaged in surveillance of any kind;
- Unattended vessels or vehicles in unusual locations;
- Lights flashing between boats;
- Unusual diving activity;
- Unusual number of people onboard a vessel;
- Unusual night operations;
- Recovering or tossing items into/onto the waterway or shoreline;
- Operating in or passing through an area that does not typically have such activity.

Watch for vessels and individuals in locations:
- Under and around bridges, tunnels, or overpasses;
- Near commercial areas or services like ports, fuel docks, cruise ships, or marinas;
- Near industrial facilities like power plants and oil, chemical, or water intake facilities;
- Near military bases and vessels, other government facilities, or security zones.

More information, downloadable file of brochures, decals, posters, and wallet size cards are available at:
http://aww.uscg.mil/. Additionally, the Coast Guard has partnered with the Nationwide Suspicious Activity Reporting Initiative (NSI) to develop online, maritime specific, suspicious activity identification and reporting training. This training can be accessed at http://nsi.ncirc.gov/hsptregistration/maritime/.

For more information about the America's Waterway Watch program, contact Mr. Ryan Owens at (202) 372-1108.
(Supersedes NTM 1(64)14) (USCG)

(65) LOSS OF INMARSAT-C SAFETY MESSAGES.

This advisory notifies users of Inmarsat-C ship earth stations that urgent marine information, weather warning and navigational warning broadcast messages, distress-related messages, as well as routine messages may be lost if a printer is not connected to and maintained with the Inmarsat-C terminal, or if floppy drive maintenance is not regularly performed on the terminal. Additionally, certain non-GMDSS-approved software (e.g., windows-based software) may freeze up if this maintenance is not performed.
(Repetition NTM 1(65)14) (USCG)

(66) AUTOMATIC IDENTIFICATION SYSTEM. NEW AIS ENCODING GUIDANCE FROM THE US COAST GUARD.

Automatic Identification System (AIS) is a maritime navigation safety communications system standardized by the International Telecommunication Union (ITU), adopted by the International Maritime Organization (IMO), that: provides vessel information, including the vessel's identity, type, position, course, speed, navigational status and other safety-related information automatically to appropriately equipped shore stations, other ships, and aircraft; receives automatically such information from similarly fitted ships; monitors and tracks ships; and exchanges data with shore-based facilities. (47 CFR §80.5).

***Notice*.** The Coast Guard continues to see an unacceptable number of AIS users who are not updating their Navigational Status or accurately broadcasting static or voyage related information-MMSI, name, dimensions, static draft, destination, ETA, etc. AIS users should particularly remember to update their Navigational Status when at anchor or moored, which reduces the AIS reporting rate to once every 3 minutes vice every 2-10 seconds, and mitigates network congestion.

AIS users are compelled to properly operate their AIS at all times (33 CFR §164.46). Not doing so could subject the user and owner to civil penalties not to exceed $40,000.

(***Alert*.** Voluntary use of AIS Class B devices continues to grow. Although all Class A devices will receive Class B dynamic data (i.e. position, course, and speed), some older Class A models are unable to render this information on their AIS display(s) and/or receive Class static data (i.e. vessel name, callsign). Therefore, the Coast Guard cautions new AIS Class B users to not assume that they are seen by other AIS users or that all their information is available to all Class A users. Further, the Coast Guard strongly exhorts effected users to update their devices (e.g. AIS Class A, electronic chart systems, radar, multi-function displays) in order to view this stream of valuable AIS information. For a listing of Coast Guard type-approved AIS Class A devices which require an update in order to properly display AIS Class B information or a cross-comparison table of AIS Class A vs. AIS Class B characteristics see AIS FAQ #13 and #14, respectively, at the website listed below.

***Warning*.** AIS is another available means (i.e. radar) to determine risk of collision; however, assumptions should not be made on the basis of AIS information alone and as with any source of navigation information, it should not be solely relied upon in making navigational and collision-avoidance decisions (also see Navigation Rule 7). Further, while AIS allows for safety related ship-to-ship text messaging to communicate with others, e.g. passing arrangements, these communications do NOT relieve users from the requirements set forth in the Vessel Bridge-to-Bridge Radiotelephone regulations (33 CFR §26) nor do they relieve a vessel from the sound or display signals requirements of the Navigation Rules.

***Report*:** To report a problem or for further information regarding AIS, including plans to extend U.S. carriage requirements to most commercial ships transiting U.S. navigable waters, visit http://www.navcen.uscg.gov/?pageName=AIS or contact cgnav@uscg.mil.

(Repetition NTM 1(66)14) (USCG)

(67) CELLULAR TELEPHONE USE FOR MARITIME DISTRESS NOTIFICATION.

Cellular telephone ownership and coverage areas have expanded greatly in recent years. Many areas in the coastal maritime environment have some cellular service coverage. The Coast Guard has seen a significant increase in distress notifications via cellular telephone call from the mariner.

The Coast Guard urges mariners to regard cellular telephone capability as a backup to, not a replacement for, VHF-FM radio capability or other internationally recognized maritime distress signal. While the Coast Guard responds to cellular calls the same as any other distress notification, cellular telephones have a number of inherent disadvantages when used in a maritime search and rescue environment. These include:

- Other mariners in the local area cannot hear the call;
- Maritime coverage areas for cellular service are sporadic since most coverage is not designed to cover the marine environment;
- To contact a Coast Guard unit directly, the caller must have a list of phone numbers;
- 911 operators may or may not know proper procedures for handling a maritime distress case;
- Responding rescue forces cannot use direction finding equipment to locate the distressed mariner;
- Cell phones usually have limited battery endurance;
- Responding rescue forces my not have the ability to call the cellular telephone from the rescue platform.

If a mariner makes a distress call by cellular telephone, in addition to the information requested for any distress notification (such as location, type of vessel, type of distress, number of persons, etc.), it is important that the mariner also provide his/her cellular telephone number and a land based backup number.

(Repetition NTM 1(67)14) (USCG)

(68) DISCOLORED WATER.

Discolored water is an area of seawater having a color distinctly different from the surrounding water. These observations will normally be of seawater having a color other than the blues and greens typically seen. Variations of the colors – including red, yellow, green and brown, as well as black and white have been reported. This may be due to dumping (pollution), the existence of shoals, or underwater features such as submerged volcanoes. In near-shore areas, discoloration often results from disturbance of sediment, e.g., disturbances by propeller wash. Discolorations may appear in patches, streaks, or large areas and may be caused by concentrations of inorganic or organic particles or plankton.

In normally deep waters, discolored water can be a strong indication of undersea growth of coral reefs, submerged volcanoes, seamounts, pinnacles and the like. As these features grow in size and dimension, their only indication may be in the form of discolored water on the surface of the sea. Mariners must be prudent in such waters, as they will normally be in areas that are not well surveyed and outside of established routes for oceangoing vessels.

NGA does not maintain a database of such occurrences worldwide. In areas of active submerged volcanoes, discolored water is a common occurrence and all such reports are charted or included in a Notice to Mariners correction. Mariners are urged to submit new reports of discolored water to the nearest NAVAREA Coordinator via coast radio stations (for NAVAREA IV and NAVAREA XII, by e-mail to navsafety@nga.mil). Reports can also be submitted via the NGA Maritime Safety Web site (http://msi.nga.mil/NGAPortal/MSI.portal).

The legend "Discolored water" appears on many NGA charts, particularly those of the Pacific Ocean where underwater volcanic activity is known to occur. In such areas, shoal water or discolored water may suddenly appear where only deep water has been historically depicted. Most of these legends remain on the charts from the last century, when very few deep sea soundings were available and less was known about the causes of discolored water. Few reports of discolored water have proved on examination to be caused by shoals. Nonetheless, due to the isolated areas normally in question, mariners should always give prudent respect to what may lie beneath the surface.

Today, such reports can be compared with the accumulated information for the area concerned. A more thorough assessment can be made using imagery if the water conditions and depth (roughly less than 100 feet) allow.

Mariners are therefore encouraged, while having due regard to the safety of their vessels, to approach sightings and areas of discolored water to find whether or not the discoloration is due to shoaling. If there is good reason to suppose the discoloration is due to shoal water, a report should be made as noted above.

Volcanic activity. On occasion, volcanic eruptions may occur beneath the surface of the water. These submarine eruptions may occur more frequently and may be more widespread than has been suspected in the past. Sometimes the only evidence of a submarine eruption is a noticeable discoloration of the water, a marked rise in sea surface temperature, or floating pumice.

Mariners witnessing submarine volcanic activity have reported trails of steam with a foul sulfurous odor rising from the sea surface and unusual sounds heard through the hull, including shocks resembling a sudden grounding. A subsea volcanic eruption may be accompanied by rumbling and hissing, as hot lava meets the cooler sea.

In some cases, reports of discolored water at the sea surface have been investigated and found to be the result of newly-formed volcanic cones on the sea floor. These cones can grow rapidly and constitute a hazardous shoal in only a few years.

Variations in Color. The normal color of the sea in the open ocean in middle and low latitudes is an intense blue or ultramarine. The following variations in appearance occur elsewhere:

- In coastal regions and in the open sea at higher latitudes, where the minute floating animal and vegetable life of the sea (plankton) is in greater abundance, the blue of the sea is modified to shades of green and bluish-green. This discoloration results from a soluble yellow pigment discharged by the plant constituents of the plankton.
- When plankton is found in dense concentrations, the color of the organisms themselves may discolor the sea, giving it a more or less intense brown or red color. The Red Sea, Gulf of California, the region of the Peru Current, South African waters, and the Malabar Coast of India are particularly liable to this variation, seasonally.
- Plankton is sometimes exterminated suddenly by changes in sea conditions, producing a dirty brown or grayish-brown discoloration. This occurs on an unusually extensive scale at times off the Peruvian coast, where the phenomenon is called "Aguaje."

(68) DISCOLORED WATER. (Continued).

- Larger masses of animate matter, such as fish spawn or floating kelp may produce other kinds of temporary discoloration.
- Mud carried down by rivers produces discoloration which, in the case of the great rivers, may affect a large sea area, such as the Amazon River outfall. Soil or sand particles may be carried out to sea by wind or dust storms, and volcanic dust may fall over a sea area. In all such cases, the water is more or less muddy in appearance.
- Submarine earthquakes may also produce mud or sand discoloration in relatively shallow water, and crude oil has sometimes been seen to gush up. The sea may be extensively covered with floating pumice after a volcanic eruption.
- Isolated shoals in deep water may make the water appear discolored, the color varying with the depth of the water. The play of the sun and cloud on the sea may often produce patches appearing at a distance convincingly like shoal water.

Visibility. The distance at which coral reefs can be seen is dependent upon the observer's height of eye, the state of the sea, and the relative position of the sun. When the sea is glassy calm, it is extremely difficult to distinguish the color difference between shallow and deep water. The best conditions for sighting reefs result from a relatively high position, with the sun above 20 degrees elevation and behind the observer, and a sea ruffled by a slight breeze. Under these conditions, with a height of eye of 10-15 meters it is usually possible to sight patches at a depth of less than 6-8 meters from a distance of a few hundred yards.

The use of polarized lenses is strongly recommended, as they make the variations in color of the water stand out more clearly.

If the water is clear, patches with depths of less than 1 meter will appear to be light brown in color; those with depths of 2 meters or more appear to be light green, deepening to a darker green for depths of about 6 meters, and finally to a deep blue for depths over 25 meters. Cloud shadows and shoals of fish may be quite indistinguishable from reefs, but it may be possible to identify them by their movement.

The edges of coral reefs are usually more uniform on their windward or exposed sides and are therefore more easily seen, while the leeward sides are frequently characterized by detached coral heads that are more difficult to see clearly. Water over submerged coral reefs is normally a light blue.

Due to the uncertainty of what discolored water may indicate, mariners are always urged to exercise extreme caution when in its vicinity. New reports of discolored water should be reported immediately with resulting chart, publication and radio/ satellite warnings issued as appropriate.
(Repetition NTM 1(68)14) (NGA)

(69) INTERNATIONAL MARITIME BUREAU (IMB) MARITIME SECURITY HOTLINE.

The International Maritime Bureau (IMB) Piracy Reporting Center has established a dedicated hotline for seafarers, port workers, shipping agents, shipyard personnel, brokers, stevedores, and all concerned parties to report any information that they may have seen, heard, known of, etc., relating to maritime crime and/or security, including terrorism, piracy and other illegal activities. Maritime crime and security concerns us all and with your help, the IMB can try to minimize the risks and help save lives and property. All information received will be treated in strict confidence and will be passed on to the relevant authorities for further action.

The IMB Maritime Security Hotline can be contacted 24 hours a day at:

E-mail: imbsecurity@icc-ccs.org
Telephone: 603 2031 0014
Fax: 603 2078 5769
Web site: www.icc-ccs.org/piracy-reporting-centre/24-hour-maririme-security-hotline
(Supersedes NTM 1(69)14) (IMB)

(70) TRANSPORTATION WORKER IDENTIFICATION CREDENTIAL (TWIC).

TWIC was established by Congress through the Maritime Transportation Act of 2002 (MTSA) and is administered by the Transportation Security Administration (TSA) and U.S. Coast Guard (USCG). TWICs are tamper-resistant biometric credentials issued to credentialed merchant mariners operating onboard MTSA regulated vessels, as well as workers who require unescorted access to secure areas of facilities, vessels, and outer continental shelf facilities.

To obtain a TWIC, an individual must visit an enrollment center where they will pay the enrollment fee, provide biographic Information, a complete set of fingerprints, and sit for a digital photograph. Pre-enrollment is highly encouraged as it is designed to save the applicant time and provides the ability to make an appointment. TSA's “OneVisit” program allows applicants to choose to have their TWIC cards mailed directly to their home, or other location, instead of returning to an enrollment center to pick up their TWIC. This applies to new or renewed enrollment cards or replacements for lost, stolen, or damaged cards. If you choose to receive your card by mail you will only be required to make one visit to an enrollment center to complete the enrollment process. When you receive your card it will be activated and ready to use. A mailer with the card's preset Personal Identification Number (PIN) will be sent to you separately. If you receive your card by mail and want to change your preset PIN you can visit any enrollment center to have it set to your selected PIN at no cost. You may also select your PIN if you choose to pick up your card at an enrollment center.

For more information on the TWIC program including enrollment locations please visit TSA's websites at http://www.tsa.gov/stakeholders/transportation-worker-identification-credential-twic%C2%AE.
(Supersedes NTM 1(70)14) (USCG)

(71) LONG RANGE IDENTIFICATION AND TRACKING (LRIT) SYSTEM.

Long Range Identification and Tracking (LRIT) system regulatory requirements can be found in the U.S. Code of Federal Regulations, Title 33: Navigation and Navigable Waters, Part 169 – Ship Reporting Systems. General regulation and special LRIT announcements can be found on the U.S. Coast Guard’s Homeport website: http://homeport.uscg.mil under the Domestic Vessels section. Specific LRIT system requirements can be found on the U.S. Coast Guard’s Navigation Center website which can also be accessed thru Homeport or directly at: http://www.navcen.uscg.gov/?pageName=lritMain.

The LRIT system provides for the global identification and tracking of ships worldwide. LRIT requirements were developed by the International Maritime Organization (IMO) and implemented in the Safety of Life at Sea (SOLAS) 1974 Convention under Regulation V/19-1. The U.S. Coast Guard serves as the Administration for adopting, implementing and enforcing LRIT regulatory and system requirements. The LRIT system consists of the ship borne LRIT information transmitting equipment, the Communication Service Provider(s), the Application Service Provider(s), the LRIT Data Center(s), including any related Vessel Monitoring System(s), the LRIT Data Distribution Plan and the International LRIT Data Exchange. LRIT data serves many purposes including, but not limited to: navigation safety, maritime security and domain awareness, environmental protection, vessel traffic services, search and rescue, weather forecasting and prevention of marine pollution.

The U.S. Coast Guard operates an International Data Exchange (IDE) in support of the IMO and international maritime member state countries. Also, the U.S. Coast Guard maintains a National Data Center (NDC) that monitors vessels that are 300 gross tons or greater on international voyages and either bound for a U.S. port or traveling within 1000 nautical miles of the U.S. coast.

Operators of U.S. flagged vessels subject to 33 CFR Part 169 LRIT regulations are encouraged to contact the U.S. Coast Guard from the websites listed above to discuss LRIT regulatory and conformance testing requirements. Vessels with existing GMDSS, SSAS, or LRIT capable equipment can demonstrate compliance with LRIT regulations through issuance of a Conformance Test Report (CTR) issued by the Application Service Provider (ASP). Vessels purchasing new LRIT stand-alone equipment with U.S. Coast Guard type approval (http://cgmix.uscg.mil/equipment/) along with a CTR is needed to demonstrate compliance with the LRIT regulations.

On behalf of the United States, the U.S. Coast Guard recognizes CLS America as the U.S. testing ASP. Previously issued CTRs issued by Pole Star Space Applications Limited will remain valid. For more information on scheduling an LRIT conformance test, please visit the U.S. Coast Guard Navigation Center’s website and contact page at: http://www.navcen.uscg.gov/?pageName=lritConformanceTestSched, enter your contact information, and enter “Test Scheduling” in the comments field. A U.S. Coast Guard representative associated with the LRIT service provider will reply.
(Repetition NTM 1(71)14) (USCG)

(72) COUNTER-PIRACY.

Under the authority of the U.S. Code of Federal Regulations (CFR), Title 33: Navigation and Navigable Waters, Part 101.405 – Maritime Security Directives, the U.S. Coast Guard issued MARSEC Directive 104-6 (Series) to provide direction to U.S. flagged vessels operating on high risk waters.

The general requirements include: the conduct of vessel specific threat assessments, measures taken to harden the vessel, consideration to utilizing security personnel, and submittal of a piracy annex to the Vessel Security Plan (VSP) for U.S. Coast Guard review and approval. MARSEC Directive 104-6, Annex 1, addresses special requirements for commercial vessels operating on the Horn of Africa and Gulf of Aden waters.

The U.S. Coast Guard and U.S. Maritime Administration (MARAD) maintain counter-piracy websites with detailed information including, but not limited to: anti-piracy guidelines, piracy reports, port security advisories, joint agency initiatives and international efforts on deterring piracy. U.S. Coast Guard piracy information can be obtained on Homeport at:
http://homeport.uscg.mil/piracy and MARAD's site at:
http://www.marad.dot.gov/news_room_landing_page/horn_of_africa_piracy/horn_of_africa_piracy.htm.
(Repetition NTM 1(72)14) (USCG)

(73) SPACE WEATHER IMPACTS.

There is a growing potential that space weather events including geomagnetic and solar radiation storms will adversely impact mariners near the 11-year sunspot cycle's projected peak in 2013-2014. Such events can disrupt satellite communication and navigation systems including Inmarsat and GPS, HF radio, and very occasionally VHF radio. There is also the potential that these systems can be interrupted indirectly as terrestrial networks and power systems can be affected as well. Conversely, some HF communications can improve, usually for those frequencies above 15 MHz. The impacts will usually be greater at higher latitudes. The northern lights are a phenomenon related to space weather. For an introduction to space weather activity, see NOAA's Space Weather Prediction Center's Education and Outreach page
http://www.swpc.noaa.gov/content/education-and-outreach. Notice of these and other events may be issued on an experimental basis within NOAA marine weather forecasts at a frequency intended to minimize the number of false alerts. Mariners should keep in mind that the state of science is such that neither these events nor the actual impacts can be forecast with certainty. For further information on space weather see www.swpc.noaa.gov.
(Supersedes NTM 1(73)14) (NOAA)

(74) MARINER'S SAFETY ENDANGERED WHEN VHF RADIO DISTRESS ALERTS BY DIGITAL SELECTIVE CALLING (DSC) LACK LOCATION AND IDENTIFICATION INFORMATION.

As the Coast Guard's new marine radio network Rescue 21 becomes operational throughout the U.S., rescue centers can now receive instant distress alerts from commonly used DSC-capable VHF marine radios. However, approximately 90% of VHF DSC distress alerts received by the Coast Guard do not contain position information, and approximately 60% do not contain a registered identity. The Coast Guard cannot effectively respond to a DSC distress alert sent from such a radio. This means that search and rescue efforts may normally be suspended when:

- no communications with the distressed vessel can be established,
- no further information or means of contacting the vessel can be obtained from other sources, and
- no position information is known.

HELP THE COAST GUARD HELP YOU

First: Obtain a Maritime Mobile Installation Identity (MMSI) and enter it into your radio. MMSI numbers are issued by the Federal Communications Commission (FCC) if your vessel otherwise requires a station license, or BOATUS (http://www.boatus.com/mmsi), Sea Tow (http://www.seatow.com/mmsi), or the U.S. Power Squadrons (http://www.usps.org/php/mmsi). Ensure any information originally provided is updated as changes occur. FCC regulations require DSC-equipped radios "use MMSI assigned by the Commission or its designees" (47 CFR 80.103(b)).
Then: Interconnect your radio to a GPS receiver using a two-wire NMEA 0183 interface on all DSC equipped marine radios and on most GPS receivers. Instructions should be provided in the radio and GPS operator's manual. Further information is provided and will be routinely updated at http://www.navcen.uscg.gov/?pageName=mtDsc.
(Repetition NTM 1(74)14) (USCG)

411 54Ed. 8/13 LAST NM 49/14 1/15
Add Submarine cable [L30.1] joining 29°55′N 80°42′W
29°44′N 80°23′W
29°45′N 80°13′W
(See 43/14-411)
(NTM0024/2014)

11009 39Ed. 4/11 LAST NM 49/14 1/15
Add Submarine cable [L30.1] joining 29°54.7′N 80°41.5′W
29°46.8′N 80°29.9′W
29°44.4′N 80°23.3′W
29°45.7′N 80°17.7′W
29°45.1′N 80°12.8′W
(See 43/14-11009)
(NTM0024/2014)

★11392 8Ed. 8/14 NEW EDITION 1/15
(NOS)

★11480 41Ed. 11/10 LAST NM 49/14 1/15
Add Submarine cable [L30.1] joining 30°17.8′N 81°23.4′W
30°17.9′N 81°21.3′W
30°16.3′N 81°17.2′W
30°15.5′N 81°14.4′W
30°14.7′N 81°07.7′W
30°14.2′N 81°06.2′W
30°11.3′N 81°01.8′W
29°54.4′N 80°41.9′W
29°46.8′N 80°29.9′W
29°44.4′N 80°23.3′W
29°45.7′N 80°17.7′W
29°44.9′N 80°11.5′W
(NTM0024/2014)

★11488 28Ed. 9/12 LAST NM 49/14 1/15
Add Submarine cable [L30.1] joining 30°17′49″N 81°23′25″W
30°17′52″N 81°21′19″W
30°17′38″N 81°20′16″W
30°16′17″N 81°17′14″W
30°15′29″N 81°14′22″W
30°15′09″N 81°10′46″W
30°14′39″N 81°07′41″W
30°14′13″N 81°06′14″W
30°13′30″N 81°04′49″W
30°11′17″N 81°01′45″W
30°10′40″N 81°01′00″W
(NTM0024/2014)

11489 39Ed. 5/11 LAST NM 45/14 1/15
(Side B)
Add Submarine cable [L30.1] between
30°17′49.2″N 81°23′24.6″W
30°17′50.5″N 81°22′03.1″W
(NTM0024/2014)

★11490 20Ed. 1/11 LAST NM 47/14 1/15
Add Submarine cable [L30.1] joining
30°17′49.2″N 81°23′24.6″W
30°17′51.6″N 81°21′19.2″W
30°17′37.8″N 81°20′16.2″W
30°16′16.8″N 81°17′14.4″W
30°16′00.9″N 81°16′16.7″W
(NTM0024/2014)

11496 11Ed. 7/20/13 LAST NM N49/14 N1/15
Add Submarine cable [L30.1] joining 30°17.8′N 81°23.4′W
30°17.9′N 81°21.3′W
30°16.3′N 81°17.2′W
30°15.5′N 81°14.4′W
30°14.7′N 81°07.7′W
30°14.2′N 81°06.2′W
30°11.3′N 81°01.8′W
29°54.4′N 80°41.9′W
29°46.8′N 80°29.9′W
29°44.4′N 80°23.3′W
29°45.7′N 80°17.7′W
29°45.1′N 80°12.8′W
(NTM0024/2014)

11520 45Ed. 9/13 LAST NM 43/14 1/15
Add Pilot station symbol [T1.1] 34°35.5′N 76°40.1′W
Pilot station symbol [T1.1] 34°37.5′N 76°39.4′W
(NOS)

11525 8Ed. 5/18/13 LAST NM N44/14 N1/15
Add Pilot station symbol [T1.1] 34°35.5′N 76°40.1′W
Pilot station symbol [T1.1] 34°37.5′N 76°39.4′W
(NOS)

11534 38Ed. 9/13 LAST NM 44/14 1/15
(Side A)
Add Light "A" Fl 4s 7ft (Priv) 33°55′17″N 77°59′46″W
(31/14 CG5)

★11537 39Ed. 4/13 LAST NM 47/14 1/15
(Left Panel)
Add Submarine pipeline [L40.1] between
34°08′42″N 77°57′37″W
34°09′06″N 77°56′36″W
(Note: Submarine cable remains)

(Right Panel)
Add Light "A" Fl 4s 7ft (Priv) 33°55′17″N 77°59′46″W
(NOS; 31/14 CG5)

11543 24Ed. 10/12 LAST NM 43/14 1/15
Add Pilot station symbol [T1.1] 34°35′32″N 76°40′03″W
Pilot station symbol [T1.1] 34°37′31″N 76°39′24″W
(NOS)

11544 41Ed. 12/13 LAST NM 23/14 1/15
Add Pilot station symbol [T1.1] 34°35′32″N 76°40′03″W
Pilot station symbol [T1.1] 34°37′31″N 76°39′24″W
(NOS)

11545 65Ed. 5/13 LAST NM 34/14 1/15
Add Pilot station symbol [T1.1] 34°37′31″N 76°39′24″W
(NOS)

★11547 39Ed. 12/13 LAST NM 34/14 1/15
Add Pilot station symbol [T1.1] 34°35′31.8″N 76°40′03.0″W
Pilot station symbol [T1.1] 34°37′31.2″N 76°39′24.0″W
(NOS)

12200 51Ed. 6/14 LAST NM 47/14 1/15
Delete GONG from buoy "8" 37°50.6′N 75°12.1′W
(31/14 CG5)

12201 27Ed. 5/4/13 LAST NM N47/14 N1/15
Delete Gong from buoy "No 8" 37°50.6′N 75°12.1′W
(31/14 CG5)

★12210 39Ed. 7/13 LAST NM 47/14 1/15
Delete GONG from buoy "8" 37°50′37″N 75°12′06″W
(31/14 CG5)

12211 45Ed. 5/13 LAST NM 34/13 1/15
Delete GONG from buoy "8" 37°50′37″N 75°12′06″W
(31/14 CG5)

12225 60Ed. 11/11 LAST NM 52/14 1/15
Change Designation of light "1" to "1E" 37°50′24″N 75°58′16″W
Light "1" to "1W" Fl G 2.5s 15ft 4M
37°49′51″N 76°00′12″W
Red sector of light to 110°-192° 37°47′17″N 75°58′24″W
(NOS; 31/14 CG5)

★12228 33Ed. 10/11 LAST NM 4/13 1/15
Change Designation of light "1" to "1E" 37°50′24″N 75°58′16″W
Light "1" to "1W" Fl G 2.5s 15ft 4M
37°49′51″N 76°00′12″W
Red sector of light to 110°-192° 37°47′17″N 75°58′24″W
(NOS; 31/14 CG5)

12280 11Ed. 2/14 LAST NM 51/14 1/15
(Right Panel)
Change Light "1" to "1W" Fl G 2.5s 4M 37°49.9′N 76°00.2′W
Red sector of light to 110°-192° 37°47.3′N 75°58.4′W
(NOS; 31/14 CG5)

★14839 37Ed. 10/09 LAST NM 27/14 1/15
Add Tabulation of controlling depths from
Subsection I-3

Tabulation of controlling depths from
Subsection I-3 41°28′06.0″N 81°43′16.6″W
Note: First appearance of new depth tabulation
on chart
(See 27/14-14839)
(NOS)

14846 14Ed. 11/10 LAST NM 38/14 1/15
(Page 1)
Add Tabulation of controlling depths from
Subsection I-3
(See 38/14-14846)

(Page 4)
Delete Purple solid line (channel separator) between
41°37′47.3″N 83°31′54.4″W
41°37′33.9″N 83°31′58.1″W

Change Legend to "UPPER TURNING BASIN (J)
(see tabulation sheet 1)" 41°37′30.9″N 83°32′22.1″W
(See 33/14-14846)

(Page 5)
Change Legend to "LOWER TURNING BASIN (F)
(see tabulation sheet 1)" 41°40′07.0″N 83°30′02.9″W

(Page 6)
Delete Purple solid line (channel separator) between
41°41′50.4″N 83°27′51.9″W
41°41′46.4″N 83°27′48.5″W

Purple solid line (channel separator) joining
41°41′41.0″N 83°28′03.9″W
41°41′51.0″N 83°27′51.2″W
41°42′18.0″N 83°26′54.5″W

Change Legend to "(see tabulation sheet 1)
WIDENING WEST SIDE (K)"
41°41′55.4″N 83°27′44.0″W

Add Legend "ENTRANCE CHANNEL (C)"
41°42′47.9″N 83°25′45.1″W

Purple solid line (channel separator) between
41°41′40.4″N 83°28′04.5″W
41°41′37.8″N 83°28′00.5″W

(Page 7)
Delete Legend "ENTRANCE...1)" 41°45′02.6″N 83°20′59.7″W

Purple solid line (channel separator) between
41°44′38.0″N 83°21′57.9″W
41°44′33.8″N 83°21′54.4″W

Legend "(see...1)" 41°44′14.1″N 83°22′41.5″W

Purple solid line (channel separator) between
41°41′49.9″N 83°27′51.5″W
41°41′46.4″N 83°27′48.5″W

Purple solid line (channel separator) joining
41°41′40.9″N 83°28′03.5″W
41°41′50.8″N 83°27′50.3″W
41°42′17.8″N 83°26′54.4″W

Change Legend to "WIDENING WEST SIDE (K)
(see tabulation sheet 1)" 41°41′55.4″N 83°27′48.4″W

Legend to "REACH (E)
(see tabulation sheet 1)" 41°41′19.7″N 83°28′26.0″W

Add Purple solid line (channel separator) between
41°45′05.4″N 83°20′59.9″W
41°45′01.2″N 83°20′56.5″W

Legend "ENTRANCE CHANNEL (B)
(see tabulation sheet 1)" 41°45′12.4″N 83°20′38.9″W

Purple solid line (channel separator) between
41°41′40.7″N 83°28′03.7″W
41°41′38.3″N 83°28′00.0″W
(NOS)

★14847 31Ed. 2/05 LAST NM 38/14 1/15
Delete Legend "ENTRANCE...tabulation)"
41°44′46.0″N 83°21′36.0″W

Purple solid line (channel separator) between
41°44′38.4″N 83°21′58.3″W
41°44′34.3″N 83°21′54.8″W

Purple solid line (channel separator) between
41°41′50.6″N 83°27′52.0″W
41°41′46.6″N 83°27′48.7″W

Purple solid line (channel separator) joining
41°41′40.4″N 83°28′04.7″W
41°41′50.6″N 83°27′52.0″W
41°42′22.3″N 83°26′45.2″W

Purple solid line (channel separator) between
41°38′28.2″N 83°32′01.9″W
41°38′28.6″N 83°31′57.9″W

Purple solid line (channel separator) between
41°37′47.2″N 83°31′54.5″W
41°37′33.8″N 83°31′58.1″W
(See 33/14-14847)

Change Legend to "WIDENING WEST SIDE (K)
(see tabulation)" 41°41′57.8″N 83°27′40.5″W
Legend to "LOWER TURNING BASIN (F)
(see tabulation)" 41°40′06.7″N 83°30′02.5″W
Legend to "UPPER TURNING BASIN (J)
(see tabulation)" 41°37′26.6″N 83°32′20.6″W

Add Purple solid line (channel separator) between
41°41′40.7″N 83°28′04.0″W
41°41′38.1″N 83°28′00.6″W

Tabulation of controlling depths from
Subsection I-3
(Supersedes 38/14-14847)

(Continuation)
Delete Purple solid line (channel separator) between
41°49′11.2″N 83°12′17.5″W
41°49′06.6″N 83°12′14.0″W

Purple solid line (channel separator) between
41°46′52.4″N 83°17′12.7″W
41°46′48.2″N 83°17′09.2″W

Purple solid line (channel separator) between
41°44′38.4″N 83°21′58.3″W
41°44′34.3″N 83°21′54.8″W

Change Legend to "ENTRANCE CHANNEL (C)
(see tabulation)" 41°45′16.5″N 83°20′30.9″W

Add Purple solid line (channel separator) between
41°47′24.3″N 83°16′04.9″W
41°47′20.0″N 83°16′01.4″W

Legend "ENTRANCE CHANNEL (B)
(see tabulation)" 41°46′27.5″N 83°18′00.0″W

Purple solid line (channel separator) between
41°45′05.4″N 83°20′59.9″W
41°45′01.2″N 83°20′56.5″W
(NOS)

★14883 44Ed. 1/14 LAST NM 38/14 1/15
Relocate Light from 46°10′55.8″N 84°05′46.1″W to
46°10′55.8″N 84°05′45.3″W
(40/14 CG9)

★14930 26Ed. 11/12 LAST NM 45/14 1/15
Relocate Light from 42°06′58.8″N 86°29′40.7″W to
42°06′59.1″N 86°29′40.3″W
Light from 42°06′47.5″N 86°29′04.4″W to
42°06′47.8″N 86°29′04.0″W
(40/14 CG9)

16576 4Ed. 9/03 LAST NM 37/14 1/15
Substitute Depth 104 fathoms for 04 fathoms
58°05′16″N 153°31′32″W
(NOS)

16580 14Ed. 1/08 LAST NM 37/14 1/15
Substitute Depth 2 fathoms Rk [K14.2] for 5½ fathoms Rk 56°48.3′N 154°06.9′W

Add Dangerous submerged rock [K13] 56°55.8′N 153°35.0′W
(NOS)

★**16590** 11Ed. 9/07 LAST NM 31/14 1/15
Delete Depth 5½ fathoms Rk 56°48′16″N 154°06′54″W

Substitute Depth 1¼ fathoms Rk [K14.2] for 5½ fathoms 56°55′48″N 153°35′01″W

Add Depth 2 fathoms Rk [K14.2] 56°48′17″N 154°06′51″W
(NOS)

★**16592** 11Ed. 7/14 LAST NM 48/14 1/15
Substitute Depth 1¼ fathoms Rk [K14.2] for 5½ fathoms 56°55′48″N 153°35′01″W
(NOS)

★**16723** 16Ed. 9/14 NEW EDITION 1/15
(NOS)

43365 5Ed. 12/13/97 LAST NM 17/11 1/15
Delete Buoy 58°18′55″N 8°36′18″E
(20(52177)14 Stavanger)

43371 13Ed. 4/17/99 LAST NM 52/14 1/15
Delete Light 59°41′07″N 10°32′17″E
(20(52179)14 Stavanger)

43374 2Ed. 10/26/13 LAST NM N3/14 N1/15
Delete Light 59°41′07.1″N 10°32′17.3″E
Beacon 59°41′04.1″N 10°32′07.7″E
(20(52179)14 Stavanger)

44015 9Ed. 10/3/09 LAST NM 51/14 1/15
Add Depth 21 meters Wk [K26] 54°52.9′N 17°33.1′E
Depth 23 meters Wk [K26] 54°54.4′N 17°31.3′E
(25(515, 516)13 Gdynia)

44182 5Ed. 7/18/09 LAST NM N52/14 N1/15
Delete Restricted area in vicinity 59°19′17.8″N 18°03′53.0″E
Restricted area in vicinity 59°19′22.7″N 18°03′53.0″E
"Entry Prohibited" area in vicinity 59°18′33.2″N 18°02′36.0″E
Legend "Works in progress (2008)" 59°18′37.6″N 18°02′45.3″E

Add Double dashed line with legend "Tunnel" [D16] between 59°19′16.3″N 18°03′54.8″E
59°19′25.6″N 18°03′49.3″E

Buoy Y, spar, "X" topmark, Fl Y 3s [Q130.6] 59°21′14.6″N 18°06′50.7″E
Buoy Y, spar, "X" topmark, Fl Y 3s [Q130.6] 59°21′12.2″N 18°06′51.5″E

"Pier under construction (2013)" area [F32] bound by shore and dashed line joining
59°21′11.9″N 18°06′37.7″E
59°21′13.0″N 18°06′50.1″E
59°21′13.7″N 18°06′50.0″E
59°21′12.6″N 18°06′37.4″E
and delete all hydrography within above area
(451(8727), 462(8944), 468(9019)13 Norrkoping)

44340 13Ed. 5/10/14 LAST NM N43/14 N1/15
Change Visibility (range) of range light, front to 7/5M 59°17.6′N 24°07.0′E
(11(164)14 Tallinn)

44446 1Ed. 6/13/09 LAST NM N51/14 N1/15
Add AIS [S17.1] to range light, rear 55°43′39.9″N 21°05′44.0″E

(Plan A)
Add AIS [S17.1] to range light, rear 55°43′40.0″N 21°05′44.9″E
(3(82)14 Klaipeda)

44462 5Ed. 7/2/11 LAST NM N49/14 N1/15
(Panel A)
Add Depth 9 meters Foul [K31.1] 54°31′36.3″N 18°33′20.9″E

(Panel B)
Add Depth 6.7 meters Foul [K31.1] 54°22′28.1″N 18°39′12.5″E
(19(405), 20(422)13 Gdynia)

44463 10Ed. 4/16/11 LAST NM N49/14 N1/15
Substitute Depth 14.1 meters for 14.6 meters 54°32.11′N 18°36.08′E

Change Height of light to 39m 54°36.00′N 18°48.77′E
Shape of buoy "OR-1" to pillar 54°29.10′N 18°34.35′E
Shape of buoy "OR-2" to pillar 54°28.86′N 18°34.19′E

Add Depth 14.2 meters 54°32.11′N 18°35.44′E
"X" topmark to buoy "WYSYP GDYNIA" 54°33.21′N 18°42.34′E
(20(428), 21(443-445)13 Gdynia)

44465 4Ed. 6/28/14 LAST NM N49/14 N1/15
Add Depth 14.1 meters 54°32′07″N 18°36′05″E
(21(444)13 Gdynia)

44481 2Ed. 2/22/97 LAST NM 51/14 1/15
Substitute Depth 21 meters Wk [K26] for wreck 54°52.9′N 17°33.1′E

Add Depth 23 meters Wk [K26] 54°54.4′N 17°31.3′E
(25(515, 516)13 Gdynia)

52180 14Ed. 7/31/99 LAST NM 34/14 1/15
Delete Topmark from buoy (wavemeter) 38°15.4′N 13°19.9′E

Add Wreck [K29] 38°16.4′N 13°22.2′E
(3(9)06, 7(3)10 Genova)

52200 8Ed. 3/20/99 LAST NM 5/13 1/15
Add AIS [S17.1] to light 39°03.6′N 8°28.5′E
AIS [S17.1] to light 39°11.2′N 9°08.8′E
AIS [S17.1] to light 38°52.8′N 8°50.7′E
AIS [S17.1] to light 39°08.8′N 8°13.5′E
(20(8)13 Genova)

53061 11Ed. 7/16/11 LAST NM N52/14 N1/15
Substitute Dangerous wreck [K28] (PA) for depth 20 meters Wk 43°11′42″N 5°13′30″E
(13(80)14 Brest)

53063 9Ed. 5/17/03 LAST NM 52/14 1/15
Add Chartlet, depicting changes in hydrography, topography and aids to navigation, from Subsection I-3 43°24′54.0″N 4°50′42.0″E

Note
"Seaplane Landing Area
Port of Fos, particularly Docking Basin No. 2, and its approaches are used to draw water for fighting forest fires." 43°24′49.3″N 5°01′32.1″E
(45(31)11 Brest; Fr CH 6684)

53110 1Ed. 7/22/89 LAST NM 24/12 1/15
(Panel A)
Add AIS [S17.1] to light 40°50.0′N 8°23.8′E

(Panel B)
Add AIS [S17.1] to light 39°08.8′N 8°13.2′E
and delete AERO R Bn

AIS [S17.1] to light 40°33.8′N 8°09.8′E
AIS [S17.1] to light 40°50.0′N 8°23.8′E
(20(7, 8)13 Genova)

53120 14Ed. 7/3/99 LAST NM 11/14 1/15
Change Light to Fl(2) 10s 22m 11M 41°18.0′N 9°24.0′E

Add Wreck [K29] 41°08.6′N 9°35.1′E
AIS [S17.1] to light 41°18.4′N 9°20.5′E
AIS [S17.1] to light 41°09.2′N 9°31.3′E
(19(7), 20(7)13, 2(3)14 Genova)

53130 1Ed. 9/9/89 LAST NM 52/11 1/15
Change Light to Fl(2) 10s 11M 41°18.3′N 9°23.9′E
Light to L Fl 5s 24m 15M AIS 40°55.2′N 9°33.9′E

Add Wreck [K29] 41°08.6′N 9°35.1′E
AIS [S17.1] to light 39°10.7′N 9°09.1′E
AIS [S17.1] to light 39°55.7′N 9°43.2′E
AIS [S17.1] to light 41°18.5′N 9°20.5′E
AIS [S17.1] to light 41°09.2′N 9°31.5′E
AIS [S17.1] to light 40°31.5′N 9°49.7′E
AIS [S17.1] to light 40°55.6′N 9°44.3′E
(19(7), 20(7, 8)13, 2(3)14 Genova)

53161 8Ed. 3/30/96 LAST NM 51/14 1/15
Add Submarine pipeline (sewer) [L41.1] between
40°46′52″N 14°22′10″E
40°46′29″N 14°21′34″E
(1(12)08 Genova)

53180 10Ed. 1/21/95 LAST NM 26/14 1/15
Add AIS [S17.1] to light 38°15.3′N 15°43.0′E
AIS [S17.1] to light 39°21.7′N 16°01.9′E
AIS [S17.1] to light 39°32.6′N 15°53.1′E
AIS [S17.1] to light 38°57.1′N 16°09.4′E
AIS [S17.1] to light 38°37.0′N 15°49.7′E

Wreck [K29] 38°16.4′N 13°22.2′E
Buoy Y, spherical, Fl(5) Y 20s [Q130.6]
38°15.5′N 13°20.0′E
(3(9)06, 7(3)10, 12(15)13 Genova)

53183 14Ed. 6/25/11 LAST NM N11/14 N1/15
Add AIS [S17.1] to light 38°15′22.8″N 15°42′52.0″E
(12(15)13 Genova)

53191 1Ed. 3/6/10 LAST NM N17/10 N1/15
Add AIS [S17.1] to light 37°34′36.9″N 15°10′33.8″E
AIS [S17.1] to light 37°29′20.3″N 15°05′06.5″E

(Plan)
Add AIS [S17.1] to light 37°29′20.3″N 15°05′06.5″E
(12(15)13 Genova)

53200 7Ed. 8/13/05 LAST NM 9/14 1/15
Add AIS [S17.1] to light 38°15.3′N 15°43.0′E
AIS [S17.1] to light 37°14.4′N 15°15.3′E
AIS [S17.1] to light 37°34.6′N 15°10.5′E
AIS [S17.1] to light 37°29.3′N 15°05.0′E
(12(15)13 Genova)

53201 7Ed. 5/19/12 LAST NM N51/14 N1/15
Substitute Depth 5.2 meters for 5.7 meters 37°13′35.7″N 15°13′00.6″E
Depth 3.8 meters for 4.8 meters 37°12′41.1″N 15°13′24.1″E
Depth 11.9 meters for 14.2 meters
37°13′12.3″N 15°11′54.0″E
Depth 11.8 meters for 14.5 meters
37°14′26.2″N 15°12′52.4″E

Depth 9.5 meters for 12 meters 37°14′00.1″N 15°11′43.8″E
and extend depth contour (10-meter) and blue
tint E to enclose

Add AIS [S17.1] to light 37°14′36.0″N 15°15′22.8″E
(21(10)12, 12(15)13 Genova)

53212 3Ed. 9/4/04 LAST NM 51/14 1/15
Add AIS [S17.1] to light 37°14′36.1″N 15°15′22.6″E
(12(15)13 Genova)

53242 12Ed. 5/18/96 LAST NM 43/10 1/15
Delete Platform "PALERMO 1" 38°06′26.4″N 13°24′09.6″E
(23(10)06 Genova)

53244 2Ed. 7/27/96 LAST NM 43/10 1/15
Add Dashed line (harbor limit) [N49] between
38°07′57.0″N 13°22′40.2″E
38°07′52.4″N 13°22′25.8″E

Dashed line (harbor limit) [N49] between
38°07′07.3″N 13°22′29.6″E
38°07′21.5″N 13°22′48.4″E
(21(11)13 Genova)

53262 8Ed. 10/11/03 LAST NM 40/10 1/15
Add AIS [S17.1] to light 39°11′04.5″N 9°08′49.7″E

"Works in progress (2013)" area [F32] bound
by shore and dashed line joining 39°11′34.8″N 9°03′37.2″E
39°11′28.8″N 9°03′52.2″E
39°11′35.4″N 9°03′59.4″E
39°11′42.6″N 9°03′48.6″E
(15(6), 20(8)13 Genova)

53263 1Ed. 1/24/98 LAST NM 5/13 1/15
Add AIS [S17.1] to light 39°03′29″N 8°28′25″E
AIS [S17.1] to light 38°52′40″N 8°50′43″E
(20(8)13 Genova)

53264 5Ed. 9/2/95 LAST NM 17/03 1/15
Add AIS [S17.1] to light 39°03′30″N 8°28′26″E
(20(8)13 Genova)

53266 4Ed. 4/14/90 LAST NM 5/13 1/15
Add AIS [S17.1] to light 39°08.78′N 8°13.40′E
(20(8)13 Genova)

53268 4Ed. 2/10/96 LAST NM 5/13 1/15
Substitute Buoy Y, can, "X" topmark, Fl Y 3s for beacon
39°12′32″N 9°10′38″E

Add AIS [S17.1] to light 39°11′05″N 9°08′52″E
AIS [S17.1] to light 38°52′39″N 8°50′46″E
(17(15), 20(8)13 Genova)

53269 5Ed. 5/4/96 LAST NM 5/13 1/15
Add AIS [S17.1] to light 39°03′30″N 8°28′27″E
AIS [S17.1] to light 39°08′48″N 8°13′25″E
(20(8)13 Genova)

53279 4Ed. 6/17/06 LAST NM 7/12 1/15
Delete Buoy 41°12′36.8″N 9°24′45.2″E
Buoy 41°12′36.6″N 9°25′19.2″E
Buoy 41°12′40.9″N 9°25′41.5″E
Depth 21 meters 41°11′33.1″N 9°23′40.0″E
Depth 18 meters 41°12′43.3″N 9°26′12.5″E
Depth 9.8 meters Wk 41°12′09.4″N 9°26′12.0″E

Substitute Depth 8.8 meters for 14 meters 41°12′41.5″N 9°26′00.9″E
and extend depth contour (10-meter) S to
enclose

Depth 6 meters for 11.1 meters 41°11′34.5″N 9°23′44.4″E
and extend depth contour (10-meter)
W to enclose

Depth 8 meters for 11.2 meters 41°12′51.4″N 9°26′06.8″E
and extend depth contour (10-meter)
S to enclose

Depth 4.8 meters for 7.7 meters 41°12′49.4″N 9°25′56.4″E
and extend depth contour (5-meter)
SE to enclose

Depth 9.4 meters for 11.6 meters 41°12′24.6″N 9°26′26.4″E
and extend depth contour (10-meter)
SW to enclose

Depth 25 meters for 28 meters 41°11′31.2″N 9°23′34.5″E
Depth 11.8 meters for 15 meters 41°11′37.2″N 9°23′43.0″E
Depth 26 meters for 29 meters 41°11′39.0″N 9°26′08.7″E

Add Depth 6.1 meters 41°11′40.5″N 9°23′41.5″E
and extend depth contour (10-meter)
S to enclose

Depth 19 meters 41°11′36.7″N 9°23′39.5″E
Depth 18 meters 41°11′34.2″N 9°23′39.7″E
Depth 18 meters 41°11′32.5″N 9°23′40.2″E
and extend depth contour (20-meter)
W to enclose above depths (3)

Depth 3.1 meters 41°12′55.3″N 9°26′04.4″E
and extend depth contour (5-meter)
SW to enclose

(continued on next page)

53279 (Continued)
Depth 7.4 meters 41°12′43.8″N 9°26′13.4″E
and extend depth contour (10-meter)
W to enclose

Buoy G, spar, cone topmark, Fl G 4s
41°12′37.4″N 9°24′44.4″E
Buoy YB, spar, double cone topmark points
downward, VQ(6) + L Fl 10s [Q130.3]
41°12′36.4″N 9°25′20.8″E
Buoy BRB, spar, double ball topmark, Fl(2) 6s
[Q130.4] 41°12′40.0″N 9°25′43.4″E

AIS [S17.1] to light 41°09′17.9″N 9°31′24.0″E
(20(7)13, 2(4, 5), 4(4), 20(11)14 Genova)

53281 5Ed. 10/6/12 LAST NM N52/12 N52/14
Add AIS [S17.1] to light 40°33′40″N 8°09′47″E
AIS [S17.1] to light 40°50′09″N 8°23′49″E
(20(7)13 Genova)

53282 9Ed. 1/15/11 LAST NM N45/12 N1/15
(Panel A)
Add AIS [S17.1] to light 40°50′09.7″N 8°23′50.2″E

(Panel B)
Change Light to L Fl W 5s 24m 15M AIS
40°55′13.8″N 9°34′00.4″E
(20(7)13 Genova; UKHO LL)

53283 5Ed. 3/5/11 LAST NM N22/11 N1/15
Change Light to L Fl W 5s 24m 15M AIS
40°55′14.0″N 9°34′00.7″E

Add AIS [S17.1] to light 40°55′34.0″N 9°44′09.1″E
(20(7)13 Genova)

53284 4Ed. 3/28/92 LAST NM 45/12 1/15
Add Wreck [K29] enclosed by purple composite-
line circle, radius 0.08 mile, centered 41°08′35″N 9°35′08″E

AIS [S17.1] to light 41°09′15″N 9°31′25″E
(20(7)13, 2(3)14 Genova)

53285 4Ed. 10/22/94 LAST NM 7/12 1/15
Delete Depth 9.8 meters Wk 41°12′09.4″N 9°26′12.0″E

Substitute Depth 26 meters for 29 meters 41°11′39.3″N 9°26′08.6″E

Change Buoy to YB, spar, double cone topmark points
downward [Q130.3] 41°12′36.9″N 9°25′18.9″E

Add AIS [S17.1] to light 41°09′18.0″N 9°31′23.2″E
(20(7)13, 2(5), 4(4), 20(11)14 Genova)

53287 (INT 3350) 6Ed. 9/30/95 LAST NM 7/12 1/15
Delete Range line and legend "104°30″" between
41°17′30″N 9°16′36″E
41°15′44″N 9°25′29″E

Depth 9.8 meters Wk 41°12′14″N 9°26′15″E

Change Buoy to YB, spar, double cone topmark points
downward [Q130.3] 41°12′34″N 9°25′20″E

Add AIS [S17.1] to light 41°18′28″N 9°20′26″E
AIS [S17.1] to light 41°09′20″N 9°31′26″E
(20(7)13, 4(4), 20(11)14 Genova; 25(81)14 Brest)

53290 2Ed. 9/1/12 LAST NM N43/12 N1/15
Add AIS [S17.1] to light 40°33′38.7″N 8°09′45.3″E
(20(7)13 Genova)

71027 10Ed. 11/30/13 LAST NM N47/14 N1/15
Add Platform (lighted) [L10] 5°37.2′N 114°59.7′E
Platform (lighted) [L10] 5°33.9′N 114°59.1′E
Platform (lighted) [L10] 5°31.6′N 114°58.4′E
Platform (lighted) [L10] 6°06.2′N 115°36.0′E
Platform (lighted) [L10] 5°15.9′N 115°07.3′E
Platform (lighted) [L10] 6°46.5′N 115°41.6′E
(7(123)13 Port Klang)

71255 7Ed. 8/15/09 LAST NM N49/14 N1/15
Add Chartlet A, depicting changes in hydrography,
topography and aids to navigation, from
Subsection I-3 1°15′38.0″N 103°41′17.0″E

Chartlet B, depicting changes in hydrography,
topography and aids to navigation, from
Subsection I-3 1°15′36.0″N 103°39′24.0″E

Chartlet C, depicting changes in hydrography,
topography and aids to navigation, from
Subsection I-3 1°14′05.0″N 103°40′07.0″E
(UKHO ARCS 4030-0, 4031-0)

71320 2Ed. 8/17/13 LAST NM N47/14 N1/15
(Panel A)
Add Platform (lighted) "SUDP-A" [L2] 5°37.2′N 114°59.7′E
Platform (lighted) "SUPG-B" [L2] 5°33.9′N 114°59.1′E
Platform (lighted) "SUJT-C" [L2] 5°31.6′N 114°58.4′E
Platform (lighted) "SM-4" [L2] 5°36.6′N 114°52.7′E
Platform (lighted) "KTMP-A" [L2] 6°06.2′N 115°36.0′E
Platform (lighted) "KTV-A" [L2] 6°06.3′N 115°36.4′E

(Panel B)
Add Platform (lighted) "TBG-B" [L2] 6°36.3′N 115°46.0′E
Platform (lighted) "KTMP-A" [L2] 6°06.2′N 115°36.0′E
Platform (lighted) "KTV-A" [L2] 6°06.3′N 115°36.4′E
Platform (lighted) "BELUD SOUTH" [L2]
6°46.5′N 115°41.6′E
(7(123)13 Port Klang)

71331 11Ed. 10/31/92 LAST NM 10/14 1/15
(Panel A)
Add Platform (lighted) "SUDP-A" [L2] 5°37′14″N 114°59′43″E
Platform (lighted) "SUPG-B" [L2] 5°33′53″N 114°59′07″E
Platform (lighted) "SUJT-C" [L2] 5°31′34″N 114°58′24″E
(7(123)13 Port Klang)

74020 4Ed. 2/10/96 LAST NM 29/14 1/15
Delete Purple composite line (anchoring prohibited
area limit) joining 20°22′32″S 116°41′22″E
20°21′07″S 116°41′22″E
20°19′50″S 116°45′04″E

Add Purple composite line (anchoring prohibited
area limit) [N20] joining 20°22′32″S 116°41′22″E
20°19′35″S 116°38′56″E
20°18′48″S 116°44′22″E
20°19′50″S 116°45′04″E
(21(1003)14 Wollongong)

74154 1Ed. 11/10/00 LAST NM N33/14 N1/15
Add Depth 60 meters Wk (unsurveyed) [K30]
33°50.81′S 151°21.10′E
(See N45/12-74154)
(21(994)14 Wollongong)

74181 8Ed. 7/26/97 LAST NM 9/13 1/15
Add "ANCHORING AND FISHING
PROHIBITED" area bound by purple
composite line joining 27°17′03″S 153°11′41″E
27°18′35″S 153°12′29″E
27°18′40″S 153°12′37″E
27°18′52″S 153°14′55″E
27°15′49″S 153°14′30″E
(22(1051)14 Wollongong)

74182 12Ed. 2/13/99 LAST NM 48/13 1/15
Add "ANCHORING AND FISHING
PROHIBITED" area bound by purple
composite line joining 27°17′03″S 153°11′41″E
27°18′35″S 153°12′29″E
27°18′40″S 153°12′37″E
27°18′52″S 153°14′55″E
27°15′49″S 153°14′30″E
(22(1051)14 Wollongong)

74212 2Ed. 4/27/07 LAST NM N44/13 N1/15
(Plan Fishermans Landing Wharves)
Delete Range line and legend "281.8°" between
23°47.294′S 151°10.562′E
23°47.458′S 151°11.402′E
(See 41/10-74212)

Change Characteristic of range light, front to F.G
23°47.312′S 151°10.635′E
Characteristic of range light, rear to F.G
23°47.294′S 151°10.562′E

Add Range line extending in 104.8°
direction from rear range light 23°47.294′S 151°10.562′E
dashed for 350 meters, thence
solid for 1100 meters
Legend "284.8°" along above range line
23°47.480′S 151°11.280′E
(22(1050)14 Wollongong; UKHO LL)

74216 1Ed. 5/27/05 LAST NM N14/13 N1/15
Delete Dashed-line area and legend "Spoil Ground" in
vicinity 19°13′48″S 146°52′38″E
(22(1052)14 Wollongong)

74243 1Ed. 5/26/06 LAST NM N47/13 N1/15
Delete Dashed-line area and legend "Spoil Ground" in
vicinity 19°13.8′S 146°52.6′E
(22(1052)14 Wollongong)

74244 1Ed. 4/27/07 LAST NM N44/13 N1/15
Delete Range line and legend "281.8°" between
23°47.299′S 151°10.560′E
23°47.460′S 151°11.395′E

Add Range line extending in 104.8°
direction from rear range light 23°47.299′S 151°10.560′E
dashed for 350 meters, thence
solid for 1600 meters
Legend "284.8°" along above range line
23°47.461′S 151°11.277′E
(22(1050)14 Wollongong)

74267 1Ed. 3/17/06 LAST NM N40/11 N1/15
Delete Radio reporting point symbol "K" and legend
"SRS (see Note)" 13°30′00″S 143°40′24″E
(21(999)14 Wollongong)

74270 3Ed. 8/5/95 LAST NM 40/11 1/15
Delete Radio reporting point symbol "K" and legend
"SRS (see Note)" 13°30.0′S 143°40.4′E
(21(999)14 Wollongong)

75165 2Ed. 4/27/07 LAST NM N1/11 N1/15
Add Danger circle "Unexploded Ordnance
(see Note)" [Kp] 38°11.50′S 144°52.00′E
Danger circle "Unexploded Ordnance
(see Note)" [Kp] 38°13.60′S 144°49.74′E
(22(1060)14 Wollongong)

75174 3Ed. 8/12/11 LAST NM N25/13 N1/15
Delete Beacon 38°12.48′S 144°43.80′E
Beacon 38°15.45′S 144°41.05′E

Change Beacon to "X" topmark, Fl Y 5s [Q130.6]
38°12.16′S 144°43.40′E

Add Purple composite-line circle, radius 0.5 mile,
with legend "Historic Wk (see Note)", centered
38°12.48′S 144°43.81′E
Danger circle "Unexploded Ordnance
(see Note)" [Kp] 38°11.50′S 144°52.00′E
Danger circle "Unexploded Ordnance
(see Note)" [Kp] 38°13.60′S 144°49.74′E
(22(1058, 1060)14 Wollongong)

75178 3Ed. 5/21/10 LAST NM N24/13 N1/15
Change Characteristic of light to 2 F.R 37°51.715′S 144°54.841′E
(22(1059)14 Wollongong)

75180 2Ed. 7/29/95 LAST NM 24/07 1/15
Change Characteristic of light to Fl(3) WR 10s
42°12′33″S 145°13′09″E
(22(1062)14 Wollongong)

75266 1Ed. 8/17/01 LAST NM N28/14 N1/15
Add Depth 60 meters Wk (unsurveyed) [K30]
33°50′49″S 151°21′06″E
(21(994)14 Wollongong)

75274 1Ed. 1/19/01 LAST NM N28/14 N1/15
Add Depth 60 meters Wk (unsurveyed) [K30]
33°50.81′S 151°21.10′E
(21(994)14 Wollongong)

★83484 12Ed. 4/10 LAST NM 47/14 1/15
(Inset Pago Pago Harbor)
Relocate Buoy "4" from 14°16′33.5″S 170°40′46.0″W
to 14°16′33.5″S 170°40′44.6″W
(49/14 CG14)

92006 5Ed. 3/13/99 LAST NM 47/14 1/15
Add Platform (lighted) [L10] 6°36.3′N 115°46.0′E
Platform (lighted) [L10] 6°06.2′N 115°36.0′E
Platform (lighted) [L10] 6°46.5′N 115°41.6′E
(7(123)13 Port Klang)

93006 3Ed. 3/15/08 LAST NM 43/14 1/15
Add Submarine cable [L30.1] joining 22°08.1′N 113°36.1′E
22°00.1′N 113°31.6′E
21°56.1′N 113°31.3′E
21°46.0′N 113°52.0′E
21°46.0′N 114°08.3′E
21°44.8′N 114°12.7′E
21°44.8′N 114°26.9′E
21°46.0′N 114°31.0′E
21°45.8′N 114°45.4′E
(21(1031)10 Tianjin)

93048 1Ed. 11/20/82 LAST NM 49/14 1/15
Add Platform (lighted) "SUDP-A" [L2] 5°37.2′N 114°59.7′E
Platform (lighted) "SUPG-B" [L2] 5°33.9′N 114°59.1′E
Platform (lighted) "SUJT-C" [L2] 5°31.6′N 114°58.4′E
Platform (lighted) "SM-4" [L2] 5°36.6′N 114°52.7′E
Platform (lighted) "SMV-AA" [L2] 5°37.1′N 114°53.4′E
Platform (lighted) "SMV-B" [L2] 5°38.1′N 114°54.2′E
Platform (lighted) "SMV-C" [L2] 5°36.5′N 114°53.2′E
Platform (lighted) "TBG-B" [L2] 6°36.3′N 115°46.0′E
Platform (lighted) "KTMP-A" [L2] 6°06.2′N 115°36.0′E
Platform (lighted) "KTV-A" [L2] 6°06.3′N 115°36.4′E
Platform (lighted) "BELUD SOUTH" [L2]
6°46.5′N 115°41.6′E
Platform (lighted) "EWQ-A" [L2] 6°20.7′N 115°39.6′E
Platform (lighted) "SFK-A" [L2] 6°46.6′N 116°13.7′E
(7(123)13 Port Klang)

93720 11Ed. 7/7/07 LAST NM 44/14 1/15
Add Submarine cable [L30.1] joining 22°08.1′N 113°36.1′E
22°00.0′N 113°31.6′E
21°56.1′N 113°31.3′E
21°46.0′N 113°52.0′E
21°46.0′N 114°08.3′E
21°45.3′N 114°18.5′E

Buoy BRB, pillar, double ball topmark, Fl(2) 5s
AIS [Q130.4] 22°03.7′N 113°41.9′E

Light Fl(2) 8s 56m 12M 22°06.8′N 113°34.4′E
(21(1031)10, 28(970)11, 26(817)12 Tianjin; UKHO ARCS 3026-0)

93721 6Ed. 4/26/08 LAST NM N44/14 N1/15
Delete Submarine cable joining 22°09′54″N 113°33′55″E
22°10′13″N 113°34′00″E
22°10′19″N 113°34′51″E
22°10′06″N 113°35′12″E
22°09′28″N 113°35′35″E
22°08′05″N 113°36′05″E
22°07′01″N 113°35′32″E

(continued on next page)

93721 (Continued)

Add Dangerous wreck [K28] marked by buoy BRB, pillar, double ball topmark, Fl(2) 6s [Q130.4] 22°08′00″N 113°36′50″E

Submarine cable [L30.1] joining 22°08′05″N 113°36′06″E
22°00′07″N 113°31′34″E
22°00′00″N 113°31′33″E
21°59′00″N 113°31′28″E

Buoy BRB, pillar, double ball topmark, Fl(2) 5s AIS [Q130.4] 22°03′42″N 113°41′56″E

AIS [S17.2] to buoy 22°10′57″N 113°40′30″E

(21(1024, 1031)10, 33(1196)11, 26(817)12 Tianjin; UKHO ARCS 3026-0)

93725 6Ed. 12/12/98 LAST NM 14/12 1/15

Delete Buoy "A1" 22°09′58.2″N 113°34′43.9″E
Buoy "A2" 22°10′16.2″N 113°35′03.0″E
Buoy "1" 22°09′47.1″N 113°35′59.8″E
Buoy "3" 22°10′31.2″N 113°34′37.2″E
Buoy "4" 22°10′39.0″N 113°34′19.2″E
Buoy "1" 22°10′22.3″N 113°35′31.3″E
Buoy 22°10′10.0″N 113°35′43.5″E

Substitute Buoy "M27" YBY, pillar, double cone topmark points together, Q(9) 15s [Q130.3] for beacon "16" 22°10′38.9″N 113°31′45.6″E

Change Buoy "2/A4" to "No 4" R, Fl R 1.5s 22°10′05.4″N 113°35′22.2″E
Designation of buoy "10" to "M14" 22°10′52.8″N 113°33′21.6″E
Light "5" to "M9" Fl(2) G 5s 9m 3M 22°10′50.7″N 113°33′49.3″E
Light "6" to "M10" Fl(2) R 6s 9m 3M 22°10′48.0″N 113°33′49.2″E
Light "7" to "M11" Fl(2) G 5s 9m 3M 22°10′51.3″N 113°33′47.3″E
Light "8" to "M12" Fl(2) R 6s 9m 3M 22°10′48.6″N 113°33′47.4″E
Light "11" to "M15" Fl G 4s 9m 3M 22°10′49.6″N 113°32′45.6″E
Light "12" to "M16" Fl G 3s 9m 3M 22°10′46.8″N 113°32′46.2″E
Light "13" to "M17" Fl G 3s 9m 3M 22°10′48.4″N 113°32′40.7″E
Light "14" to "M18" Fl R 4s 9m 3M 22°10′46.2″N 113°32′41.4″E

Add Dangerous wreck [K28] marked by buoy BRB, pillar, double ball topmark, Fl(2) 6s [Q130.4] 22°08′00.0″N 113°36′49.8″E

Submarine cable [L30.1] between 22°08′04.9″N 113°36′05.5″E
22°06′00.0″N 113°34′54.2″E

Danger circle "Obstn" [K40], marked by buoy BRB, pillar, double ball topmark, Fl(2) 6s [Q130.4] 22°11′36.0″N 113°31′57.0″E

Buoy RW, pillar, ball topmark, Oc 1.5s [Q130.5] 22°09′39.6″N 113°36′25.2″E

Buoy "No 1" G, pillar, cone topmark, QG 22°09′57.6″N 113°35′47.4″E
Buoy "No 2" R, pillar, can topmark, QR 22°09′44.4″N 113°35′59.4″E
Buoy "No 3" G, pillar, cone topmark, Fl G 1.5s 22°10′12.6″N 113°35′18.0″E
Buoy "No 5" Y, pillar, "X" topmark, Fl Y 1.5s [Q130.6] 22°10′26.4″N 113°34′50.4″E
Buoy "No 6" R, pillar, can topmark, QR 22°10′18.0″N 113°34′56.4″E
Buoy "No 7" G, pillar, cone topmark, QG 22°10′10.8″N 113°34′39.0″E
Buoy "No 8" R, pillar, can topmark, Fl R 1.5s 22°10′01.8″N 113°34′48.6″E

Buoy "Tf" Y, pillar, "X" topmark, Fl Y 2s [Q130.6] 22°10′19.8″N 113°34′45.0″E

Buoy "A" Y, conical, Fl Y [Q130.6] 22°10′14.4″N 113°34′45.0″E
Buoy "B" Y, conical, Fl Y [Q130.6] 22°10′21.0″N 113°34′40.8″E
Buoy "C" Y, conical, Fl Y [Q130.6] 22°09′53.4″N 113°34′46.2″E
Buoy "S5" Y, can 22°11′24.0″N 113°33′36.6″E
Buoy "S7" Y, can 22°11′27.0″N 113°33′32.4″E
Buoy "S9" Y, can 22°11′30.6″N 113°33′30.0″E
Buoy "S11" Y, can 22°11′34.2″N 113°33′27.6″E

Buoy "M1" G, pillar, cone topmark, Fl G 3s 22°10′01.8″N 113°36′40.8″E
Buoy "M2" R, pillar, can topmark, Fl R 3s 22°09′56.4″N 113°36′49.8″E
Buoy "M3" G, pillar, cone topmark, Fl G 3s 22°10′15.0″N 113°35′54.0″E
Buoy "M4" R, pillar, can topmark, Fl R 3s 22°10′09.6″N 113°36′03.0″E
Buoy "M5" G, pillar, cone topmark, Fl G 3s 22°10′28.2″N 113°35′07.2″E
Buoy "M6" R, pillar, can topmark, Fl R 3s 22°10′22.8″N 113°35′16.2″E
Buoy "M7" G, pillar, cone topmark, Fl G 3s 22°10′41.4″N 113°34′20.4″E
Buoy "M8" R, pillar, can topmark, Fl R 3s 22°10′36.0″N 113°34′29.4″E
Buoy "M19" G, pillar, cone topmark, Fl G 4s 22°10′45.6″N 113°32′30.6″E
Buoy "M20" R, pillar, can topmark, Fl R 4s 22°10′34.8″N 113°32′16.2″E
Buoy "M25" G, pillar, cone topmark, Fl G 3s 22°10′32.4″N 113°31′50.4″E
Buoy "M26" BY, pillar, double cone topmark points upward, Q [Q130.3] 22°10′24.6″N 113°31′55.2″E
Buoy "M28" R, pillar, can topmark, Fl R 3s 22°10′36.0″N 113°31′42.0″E
Buoy "M29" G, pillar, cone topmark, Fl G 3s 22°10′53.4″N 113°31′42.0″E

Light "M21" Fl G 3s 3M 22°10′34.2″N 113°32′04.2″E
Light "M22" Fl R 3s 3M 22°10′29.4″N 113°32′06.6″E
Light "M23" Fl G 4s 3M 22°10′33.6″N 113°32′03.0″E
Light "M24" Fl R 4s 3M 22°10′28.8″N 113°32′05.4″E

(21(1031)10, 31(1086), 32(1140), 33(1196), 48(1809)11, 46(1759)13 Tianjin)

93730 5Ed. 10/20/12 LAST NM N44/14 N1/15

Delete Submarine cable joining 22°09.9′N 113°33.9′E
22°10.2′N 113°34.0′E
22°10.3′N 113°35.2′E
22°08.1′N 113°36.1′E
22°01.0′N 113°32.0′E

Add AIS [S17.2] to buoy 22°04.0′N 113°42.1′E

(21(1024)10, 26(817)12 Tianjin)

Chart 53063 NM 1/15

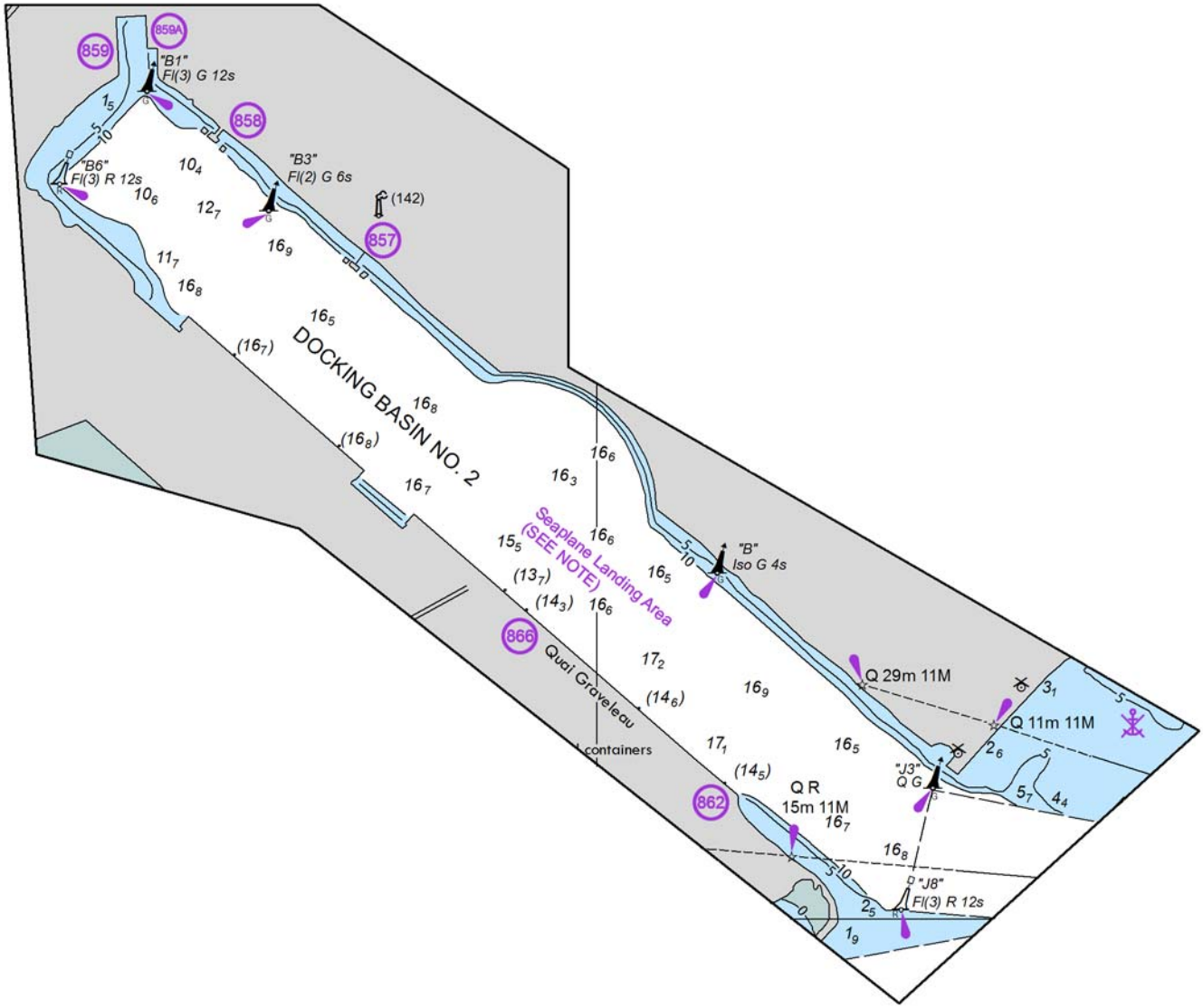


Chart 71255 (A) NM N1/15

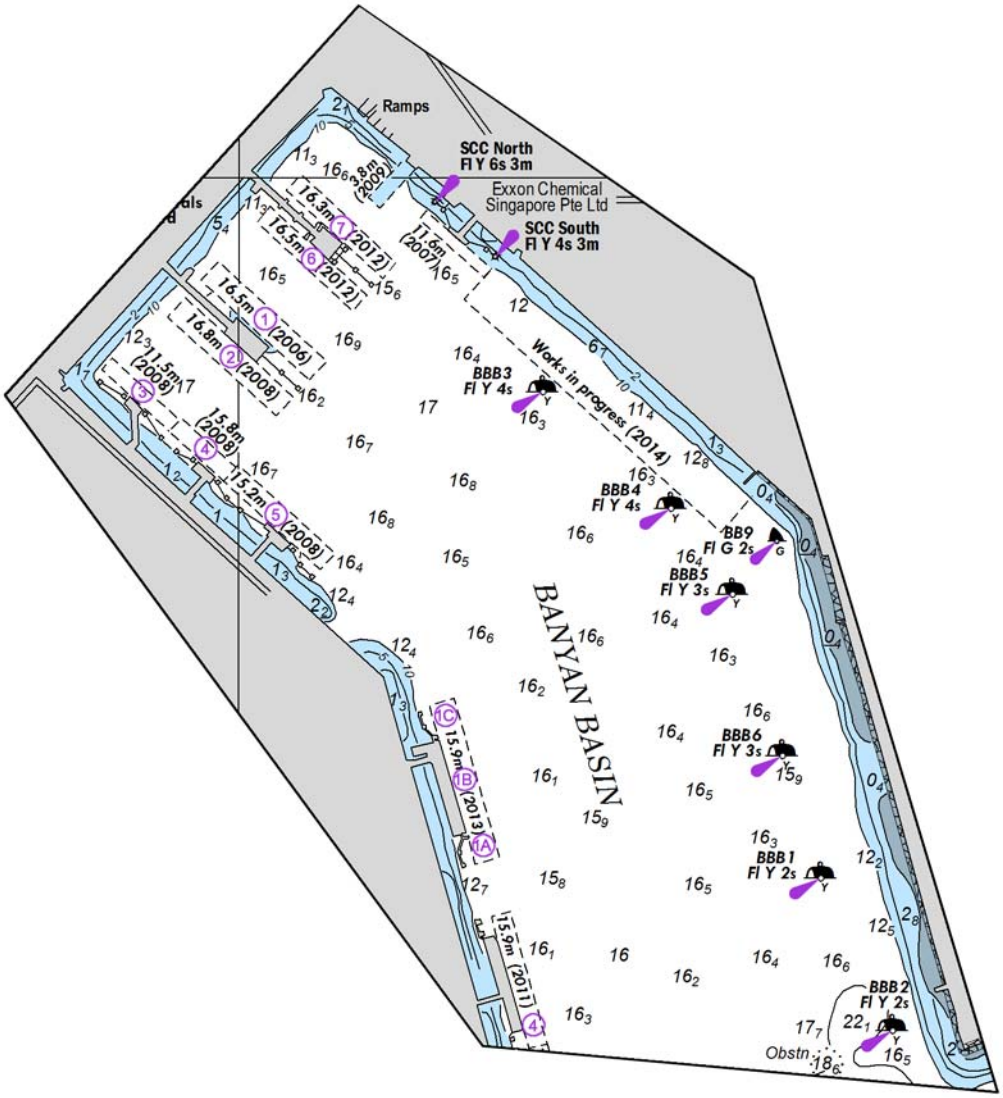


Chart 71255 (B) NM N1/15

Chart 71255 (C) NM N1/15

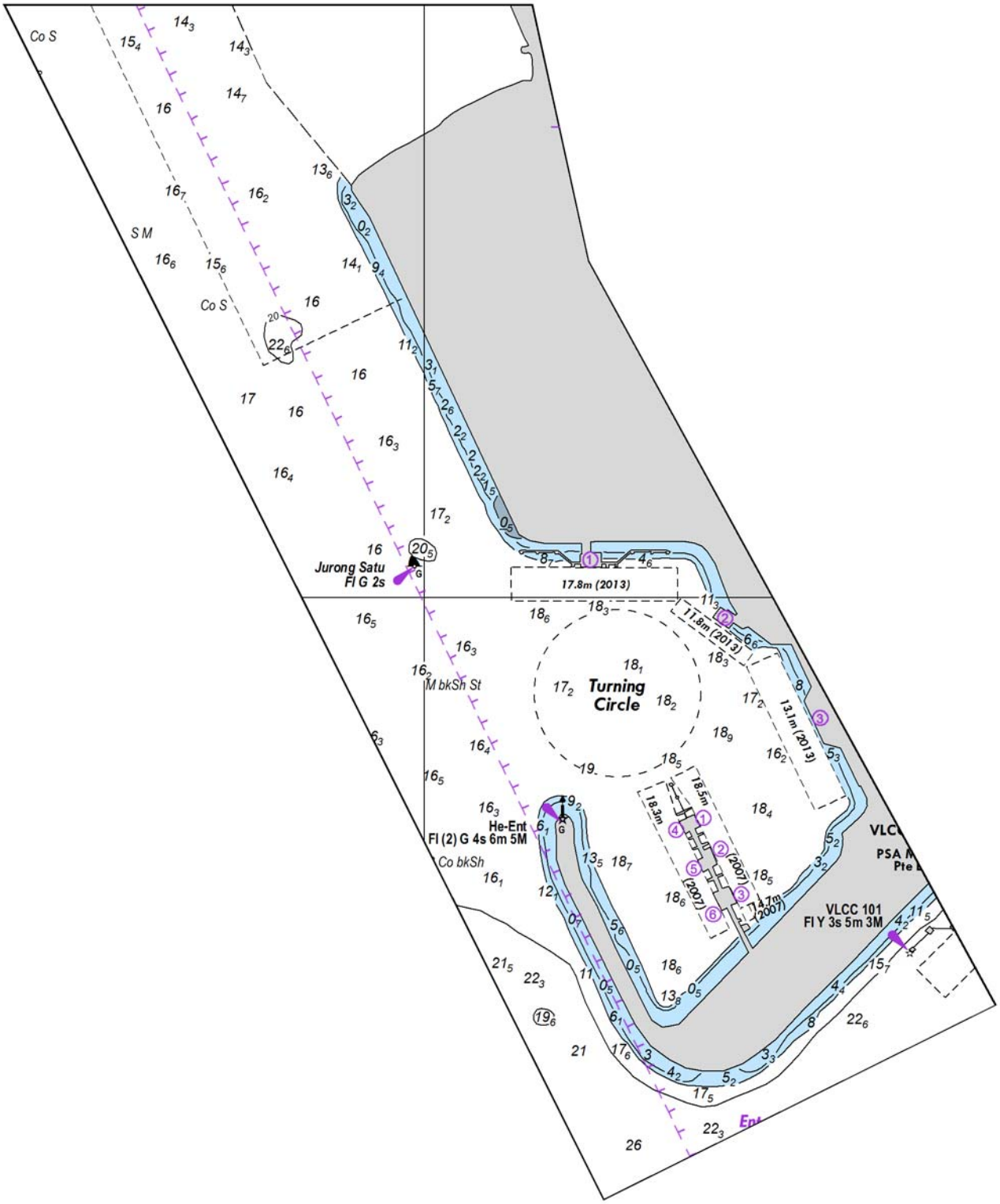


Chart 14839 NM 1/15

CLEVELAND HARBOR CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF SEP 2013
AND SURVEYS TO AUG 2013

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (FEET)	DEPTH LWD (FEET)
CLEVELAND HARBOR								
HARBOR ENTRANCE	26.8	29.0	28.6	23.4	8-13	600-700	1150	29
BASINS & CUYAHOGA RIVER ENTRANCE	24.5	28.0	28.0	24.2	8-13	230-760	1200	28
WEST BASIN								
MAIN SECTION	17.0	24.2	22.9	13.7	8-13	800-1560	4400	28
WESTERLY 400 FEET	15.7	14.0	12.8	11.7	8-13	330-800	400	28
EAST BASIN								
WEST SECTION (A)	17.2	23.3	26.7	17.9	8-13	1560	1300	28
MIDDLE SECTION (A)	13.4	20.6	21.2	19.9	8-13	1270-1560	3800	27
EAST SECTION (B)	17.4	22.3	22.2	14.0	8-13	500	14600	25
NICHOLSON APPROACH	22.7	22.7	22.5	22.5	8-13	400-1600	1300	25

A. TRAFFIC FLOWS IN EAST BASIN FROM WEST TO EAST.
B. TRAFFIC FLOWS IN EAST BASIN FROM EAST TO WEST.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 14839 NM 1/15

CUYAHOGA AND OLD RIVERS CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUN 2014
AND SURVEYS TO JUN 2014

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)				PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (FEET)	DEPTH LWD (FEET)
CUYAHOGA RIVER							
(J) ENTRANCE TO BRIDGE 1	15.1	21.8	16.1	6-14	230	1700	27
(B) BRIDGE 1 TO BRIGE 6	7.1	17.2	11.0	6-14	250-300	6300	23
(C) BRIDGE 6 TO BRIDGE 12	7.1	12.0	5.3	5-14	180-700	5500	23
(D) BRIDGE 12 TO BRIDGE 17	4.5	15.5	9.3	4-14	120-400	6400	14.2
(E) BRIDGE 17 TO END OF TURNING BASIN	15.5	19.2	11.9	4-14	110-250	4000	23
(F) END OF TURNING BASIN TO BRIDGE 23	15.4	17.0	7.1	4-14	110-200	5200	23
(G) UPSTREAM TURNING BASIN	4.8	4.8	4.8	4-14	0-600	1000	18
OLD RIVER							
(A) OLD RIVER	5.7	13.6	4.9	6-14	125-200	5300	27
(H) OLD RIVER UPPER END	9.0	7.1	5.3	6-14	120	710	27

(*) BRIDGE 17 - OLD LOCATION OF BRIDGE. BRIDGE HAS BEEN REMOVED.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 14846 (Page 1) NM 1/15

TOLEDO HARBOR AND MAUMEE RIVER CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JAN 2014
AND SURVEYS TO NOV 2013

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH LWD (FEET)
TOLEDO HARBOR								
(A) ENTRANCE CHANNEL	25.8	28.0	28.0	25.1	11-13	500	4(a)	28
(B) ENTRANCE CHANNEL	25.0	25.6	26.4	24.4	8-13	500	5	28
(C) ENTRANCE CHANNEL	23.0	24.0	22.4	15.2	7-13	500	5	28
(D) ENTRANCE CHANNEL	24.5	26.6	26.6	26.0	7-13	500-950	2(b)	28
(K) WIDENING WEST SIDE (c)	N/A	N/A	N/A	N/A	N/A	0-480	7200	28
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL		RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (FEET)	DEPTH LWD (FEET)
MAUMEE RIVER								
(E) THENCE TO LOWER TURNING BASIN	10.7	15.1		4.9	8-13	400-100	14000	27
(F) LOWER TURNING BASIN		8.2			7-13	350	1300(b)	10
(G) THENCE TO MIDDLE TURNING BASIN	11.5	13.0		13.7	7-13	200-400	18900	27
(I) MIDDLE TURNING BASIN TO END OF PROJECT	5.9	7.8		10.4	7-13	200	2600	25*
(J) UPPER TURNING BASIN		11.1			7-13	800	1100(b)	18

a. LENGTH VARIES DEPENDING ON THE LOCATION OF THE 28 FOOT CONTOUR IN LAKE ERIE.
b. IRREGULARLY SHAPED.
c. (K) WIDENING WEST SIDE IS AN AREA OF THE ENTRANCE CHANNEL THAT IS A WIDENING OF THE WEST SIDE OF (D) ENTRANCE CHANNEL.
(*) NOT MAINTAINED.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 14847 NM 1/15

TOLEDO HARBOR AND MAUMEE RIVER CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JAN 2014
AND SURVEYS TO NOV 2013

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH LWD (FEET)
TOLEDO HARBOR								
(A) ENTRANCE CHANNEL	25.8	28.0	28.0	25.1	11-13	500	4(a)	28
(B) ENTRANCE CHANNEL	25.0	25.6	26.4	24.4	8-13	500	5	28
(C) ENTRANCE CHANNEL	23.0	24.0	22.4	15.2	7-13	500	5	28
(D) ENTRANCE CHANNEL	24.5	26.6	26.6	26.0	7-13	500-950	2(b)	28
(K) WIDENING WEST SIDE (c)	N/A	N/A	N/A	N/A	N/A	0-480	7200	28
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL		RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (FEET)	DEPTH LWD (FEET)
MAUMEE RIVER								
(E) THENCE TO LOWER TURNING BASIN	10.7	15.1		4.9	8-13	400-100	14000	27
(F) LOWER TURNING BASIN		8.2			7-13	350	1300(b)	10
(G) THENCE TO MIDDLE TURNING BASIN	11.5	13.0		13.7	7-13	200-400	18900	27
(I) MIDDLE TURNING BASIN TO END OF PROJECT	5.9	7.8		10.4	7-13	200	2600	25*
(J) UPPER TURNING BASIN		11.1			7-13	800	1100(b)	18

a. LENGTH VARIES DEPENDING ON THE LOCATION OF THE 28 FOOT CONTOUR IN LAKE ERIE.
b. IRREGULARLY SHAPED.
c. (K) WIDENING WEST SIDE IS AN AREA OF THE ENTRANCE CHANNEL THAT IS A WIDENING OF THE WEST SIDE OF (D) ENTRANCE CHANNEL.
(*) NOT MAINTAINED.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 3/14 THROUGH NM 1/15

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
50	7	13,32,42/14
51	1	32/14
52	1	49/14
62	3	3,38/14
108	9	35,42/14
120	6	13,17/14
124	10	17,42/14
125	7	13/14
126	39	13/14
145	16	34/14
200	3	17/14
204	4	24/14
301	1	39/14
400	3	17,35,40,42/14
401	5	35,40/14
402	4	11,17,42/14
411	54	5,6,17,22,23,35,40,43,45, 48,49/14;1/15
500	8	8,13/14
501	13	9,28,40,42,45/14
502	2	30/14
504	4	27,32/14
505	2	46/14
506	2	5,49/14
507	2	49/14
509	4	21,23/14
510	3	49/14
520	127	30/14
521	11	33/14
522	87	49/14
524	12	49/14
525	3	5,49/14
526	10	33,49/14
530	33	8,9,13,16,27,28,32,40,41, 42,43,50/14
531	24	8,13,40/14
540	19	27,32,33,41,43,50/14
541	2	46/14
608	2	3,38/14
609	2	3/14
625	4	3/14
705	3	15/14
1113A		17,32,35,39,43/14
1114A		7,22,27,32/14
1115A		3,5,8,15,18,22,23,34,36, 40,46,48,50,51/14
1116A		3,5,6,7,8,10,11,14,15,16, 17,18,22,24,25,26,28,32, 34,36,40,44,46,47,48,51, 52/14
1117A		3,5,8,10,16,18,22,24,36, 44,46,51,52/14
11004	9	41*,44,48,51/14
11006	34	5,7,8,10,15,17,22,28,35, 39,40,43,46,48/14
11009	39	11,43,45,49/14;1/15
11013	48	11,12,17,23,35,39,43, 45/14
11299	1	N50/14
11300	43	3,5,8,10,16,18,22,24,36, 44,46,51,52/14
11301	26	10*,36,47/14
11302	34	19*,47/14
11303	22	19/14*
11305	2	N8,N14,N40,N47, N50/14
11307	38	3,22/14
11308	24	40/14
11309	41	3,8,14,22,40,50/14
11310	2	N8,N50/14
11311	25	48/14*
11312	5	8,14,50/14
11316	42	8,25,28,34,50/14
11317	33	48*,50/14
11318	2	N8,N14,N40,N47, N50/14
11320	1	N3,N22/14
11321	30	5,17,46/14
11322	33	22,28,47/14
11323	65	19*,28,46,48,50/14
11324	38	9,15,28,40,44,48,50/14
11325	40	28,47,52/14
11326	39	19*,28,44,48,50/14
11327	36	28,32,44,47,50/14
11328	27	14,22,28,44,47/14
11329	39	10*,14,17,28,36,47/14
11330	22	3,8,10,14,17,18,22,24,32, 34,40,44,46,47,48,51, 52/14
11331	22	16*,25,47/14
11332	33	3,5,8,9,22,24,34,36,40, 46,47,50/14
11339	4	5,7,9,15,22,23,28,40,46, 48,50,51/14
11340	77	3,5,6,7,8,10,11,14,15,16, 17,18,22,24,25,26,28,32, 34,36,40,44,46,47,48,51, 52/14
11341	44	3,5,8,9,22,24,34,36,40, 46,47,48,50/14
11342	55	8,14,15,22,25,28,34,47, 50/14
11343	39	10*,14,15,18,22,25,28, 46,47/14
11344	39	3,7,9,14,15,17,23,25,28, 40,46,48,50,51/14
11346	4	5,8,15,17,34,36,40,46, 51/14
11347	40	3,5,7,22,23,28,40,46,50, 51/14
11348	23	5,22,23,40/14
11349	46	24*,26,34,36,40,46,47, 51/14
11351	43	3,5,6,9,15,16,25,28,34, 46/14
11352	42	9,28,36,40,46,48/14
11353	7	23*,34,44,47,50,51/14
11355	30	51/14
11356	41	43*,47,51/14
11357	42	3,5,10,11,14,15,25,34,36, 40,46,47,51,52/14
11358	58	36*,48,51/14
11359	14	8,18,46/14
11360	44	3,5,8,15,18,22,23,34,36, 40,46,48,50,51/14
11361	77	3,5,15,17,26,28,40,44,46, 47,51/14
11362	6	N47*,N48,N50,N51/14
11363	44	6,15,17,22,26,34,36,44, 47,50,51,52/14
11364	44	5/14
11365	23	8,34,36,40,46/14
11366	15	3,5,7,8,10,14,15,16,18, 22,23,28,36,40,44,48,51, 52/14
11367	37	48/14*
11368	25	5/14
11370	29	5,14,15,22,25,26,36,40, 47/14
11371	40	10/14
11372	35	7,10,36,44,50/14
11373	51	14*,23,28,36,40,44,46, 47,50/14
11374	37	14,15,17,23,28,36,40,44, 46,47/14
11375	38	7,14,15,17,23,28,36,40, 44,46,47/14
11376	57	14*,25,32,36,40,44,46, 47,51/14
11377	10	7,8,15,25,32,36,46,47, 51/14
11378	38	7,14,25,36,40,46,47, 51/14
11380	3	48/14*
11382	42	3,14,36/14
11383	54	14,36,47/14
11384	38	3*,14,36/14
11389	34	5,8,22,25,44,46/14
11390	25	5,8,46/14
11391	25	5,8/14
11392	8	1/15*
11393	22	8,22,25,44/14
11400	36	7,22,27,32/14
11404	24	8,17/14
11405	30	4*,17/14
11406	13	4/14*
11408	29	26,32/14
11409	30	26,27/14
11411	19	7,17,27/14
11412	46	7,11,16,17,22,26,27,43, 49/14
11415	10	11,17,26,43/14
11416	12	6,11,16,22,25,26,43, 49/14
11420	30	17,32,35,39,43/14
11423	9	N17,N32,N35,N39, N43/14
11424	20	32/14
11425	39	32/14
11429	23	35/14
11430	27	35/14
11434	29	17,35,39,43/14
11435	15	N17,N35,N39,N43/14
11438	14	17/14
11439	27	17,35,39,43/14
11441	42	11,17,35/14
11442	36	17,35,39/14
11445	31	39/14
11446	33	11,17,35/14
11447	38	11,17/14
11450	11	35,39/14
11451	35	6,25,33,35,44/14
11452	22	25/14
11460	43	6,11,33,35,39,44,45/14
11461	5	35,39/14
11462	27	25,35/14
11463	19	35/14
11464	18	48/14*
11465	39	6,7,27,33,44/14
11466	39	7,10,11,18,22,23,44/14
11467	43	6,10,11,17,18,22,33, 44/14
11468	44	24/14*
11469	9	10,44/14
11470	40	18/14*
11471	1	N10,N17/14
11472	36	16*,25,45/14
11473	1	N10/14
11474	11	6,11,45/14
11476	23	48/14*
11477	6	N22,N23,N33,N45, N47/14
11478	23	22,23,45,47/14
11479	6	N6,N11,N33,N44, N45/14
11480	41	33,43,47,49/14;1/15
11481	8	22,23,45,47/14
11482	1	N10,N11,N17/14
11484	24	33/14
11488	28	43,47,49/14;1/15
11489	39	32,43,45/14;1/15
11490	20	11,26,43,47/14;1/15
11491	38	11,16,26,39,44,47/14
11493	10	N11,N23,N32,N47/14
11494	9	N7,N11,N23,N45, N47/14
11495	17	4/14*
11496	11	N33,N43,N47,N49/14; N1/15
11498	18	8/14*
11502	34	3*,10,17,35,45/14
11503	45	7,10,11,23,32,35,45, 47/14
11504	18	17,32/14
11505	4	17,23,26,27,35,43,47/14
11506	45	11,23,27,35,42,45/14
11507	35	4*,17,45/14
11509	32	17/14
11510	20	17/14
11512	63	17,23,26,27,35,43,45, 47/14
11513	27	10*,43,45/14
11514	31	49/14*
11516	32	12*,43/14
11517	18	33/14
11518	38	11,27,32,33,35,42,45, 49/14
11519	13	47/14*
11520	45	4*,11,37,42,43/14;1/15
11521	30	11,23,32,35,45,47/14
11522	21	33/14
11523	25	44/14**
11524	53	6,7,11,23,26,27,33,35,42, 45,49/14
11525	8	N37,N42,N43,N44/14; N1/15
11527	18	6/14
11528	1	44*,47/14
11531	23	11/14
11532	22	23,27,35,39/14
11534	38	23,44/14;1/15
11536	19	43,44/14
11537	39	13,45,47/14;1/15
11539	19	43,52/14
11541	40	12,23,34,43/14
11542	19	44/14*
11543	24	12,23,35,37,43/14;1/15
11544	41	12*,23/14;1/15
11545	65	12,13,23,34/14;1/15
11547	39	12*,23,34/14;1/15
11552	21	49/14*
11553	30	49/14*
11555	41	42/14
12200	51	36*,42,43,47/14;1/15
12201	27	N18,N23,N42,N43, N47/14;N1/15
12204	38	42/14
12205	33	19,36,42/14
12206	34	35/14
12207	24	47/14*
12208	16	13,19,36,47/14
12210	39	12,47/14;1/15
12211	45	1/15
12214	49	18,23,25,47/14
12216	29	18,47/14
12221	82	16*,35,36,41,43,47/14
12222	54	13,19,22,35,36,41,47/14
12224	26	43/14*
12225	60	19,21,52/14;1/15
12226	19	44/14*
12228	33	1/15
12230	66	22,45/14
12231	30	18*,22/14
12233	38	28*,37,45/14
12235	34	18*,52/14
12237	28	8*,25/14
12238	41	47/14*
12241	23	23*,44/14
12243	14	35,44/14
12245	68	17,19,41,47/14
12248	44	14*,51/14
12253	47	9,17,35/14
12254	49	13,19,22,35,36,41,47/14
12255	17	22,35/14
12256	18	14*,22,35,36,41,47/14
12261	30	22,45/14
12263	56	5,35,36,51/14
12264	32	14*,33/14
12266	31	32,51/14
12270	36	35,36,44/14
12272	32	12,34/14
12273	59	36*,46/14
12274	36	19,21,30,46/14
12277	36	49/14*
12278	78	17,19,22,34/14
12280	11	18*,21,30,34,35,36,41, 45,47,51/14;1/15
12281	55	48/14*
12282	36	17,36,44/14
12283	29	43/14*
12284	16	33/14
12285	41	8,45/14
12286	31	37/14
12288	21	8,45/14
12289	50	8/14
12300	49	18,25,30,34,35,39,46/14
12301	23	N18,N25,N30,N34,N35, N39,N46/14
12304	47	49/14*
12311	46	13,21,22,26,36,46/14
12312	56	13,17,22,26,31,44,46/14
12313	53	22,31,34,44/14
12314	33	23,25/14
12316	35	11,12,18,22,25,32,47/14
12318	45	11,18,22,25/14
12323	26	18,33/14
12324	35	5,11,20,25,29,30,31,33, 34,35/14
12325	4	5,20/14
12326	52	30,31,32,34,35,39,42,45, 46,49/14
12327	106	23*,24,25,32,34,36,45, 50/14
12331	32	20,50/14
12332	24	32,50/14
12333	37	8,24,35,50/14

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 3/14 THROUGH NM 1/15

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
12334	72	10*,24,28,29,35,36/14
12335	45	19,20,28,30,36/14
12337	24	39/14
12339	47	30/14
12341	28	29/14
12343	20	8,13,44,49/14
12345	11	8/14
12346	12	8/14
12347	31	24,35/14
12348	34	41/14
12350	60	32/14
12352	34	5,20,22,29,39,45,46, 49/14
12353	19	20,29/14
12354	44	5,20,22,25,28,29,30,41, 48/14
12358	21	5,48/14
12362	17	28/14
12363	41	18,20,34,44/14
12364	39	18,20,28,29,34,44/14
12365	28	49/14*
12366	30	48/14*
12368	28	18,20/14
12369	26	20,29,34/14
12370	21	29/14
12372	36	20,22,25,30,32,41,42/14
12373	15	22,32/14
12374	14	18,25/14
12375	22	20,30,41/14
12401	11	5,11,20,24,25,29,30,35, 41/14
12402	12	20,24/14
13000	1	N32/14
13003	51	18,22,25,28,32,43,45/14
13006	36	7,18,22,25,28,32,39,45, 46/14
13009	36	49/14*
13200	38	7,18,28,45/14
13201	12	N7,N18,N28,N45/14
13203	14	45/14
13204	14	36*,45/14
13205	40	49*,52/14
13209	27	48/14*
13212	39	30,32/14
13213	43	42,45/14
13214	30	17*,45/14
13215	20	30,32,45,52/14
13216	1	N30/14
13217	17	30/14
13218	42	7,13,18,22,25,29,30,32, 35,36,45,52/14
13219	14	47*,52/14
13221	60	22*,35/14
13223	43	20,22/14
13227	15	23/14
13229	32	7,13,18,25,32,36,45, 49/14
13230	51	49/14*
13232	5	32,36/14
13233	19	7,25/14
13237	42	13,25,45,49/14
13238	16	25/14
13241	18	23/14*
13244	42	21/14*
13246	40	3*,7,42/14
13248	12	3/14*
13260	41	7,18,22,30/14
13263	9	N7,N18,N22,N30/14
13267	36	18,32/14
13269	11	18/14
13272	52	5,8,30/14
13274	28	18,20,30,31,41,45,46,49, 52/14
13275	32	10/14*
13276	23	21/14
13278	28	18,30,31,41,46,49,52/14
13279	34	3*,31/14
13282	12	46/14
13283	22	18,23,30,41,49/14
13286	32	10*,22,24,30,41,49/14
13287	13	30/14
13288	43	22,31,32/14
13290	39	22,31,32,36/14
13292	41	44/14*
13298	11	31/14
13301	21	31/14
13302	23	11,30,34/14
13303	13	30/14
13305	29	30,34/14
13308	13	34/14
13309	29	11/14
13312	23	7/14
13316	24	47/14*
13324	15	22/14
13325	16	22/14
14003	6	28,32,43,45/14
14047	1	N4/14
14048	1	N6/14
14049		N7/14
14050	1	N4/14
14202	29	8/14**
14221	26	8/14**
14786	14	29/14
14804	25	20/14*
14805	25	20/14*
14813	22	12*,29/14
14814	26	8/14*
14815	24	28/14*
14820	21	27,29,32/14
14822	32	22,29/14
14823	31	29,32,34/14
14824	26	22/14
14830	32	27,29,32,38/14
14832	35	18,22,29,38/14
14833	27	18,22,25,29,38/14
14835	33	22/14
14836	28	4*,25,38/14
14837	29	25/14
14838	4	29,32,34/14
14839	37	24,27/14;1/15
14841	29	29,38/14
14842	15	22,27,29,32,38/14
14843	24	25/14
14844	32	22,32,38/14
14845	28	20/14*
14846	14	25,27,29,32,33,38/14; 1/15
14847	31	25,29,33,38/14;1/15
14848	58	10,27,38/14
14850	54	51/14
14852	46	38,51/14
14853	17	27,38,51/14
14860	36	6,38/14
14862	28	38/14
14863	32	23*,38/14
14864	28	9/14*
14865	17	17*,18,38/14
14867	27	45/14
14869	27	4/14*
14880	33	49/14*
14881	34	49/14*
14882	36	29/14*
14883	44	14*,38/14;1/15
14884	40	14*,38/14
14885	22	49/14*
14886	11	18/14
14887	1	28*,38/14
14901	15	4,6,25,29,38/14
14902	29	4,6,29,34,38/14
14903	24	25/14
14905	31	34,38/14
14907	27	4/14
14908	18	6/14
14909	20	34/14
14910	23	27,38/14
14911	21	4,6,29/14
14915	26	20*,32/14
14916	10	6/14
14917	25	25/14
14918	27	6,27/14
14919	28	38/14
14922	20	25,34/14
14924	29	45/14
14926	12	34/14
14930	26	22,45/14;1/15
14933	25	38/14
14934	29	38/14
14938	24	4/14
14962	21	14*,38/14
14963	21	48/14*
14964	22	48/14*
14966	28	17/14*
14969	23	47/14*
14970	27	51/14*
14971	22	51/14*
14972	27	12/14*
14973	28	18*,38/14
14974	25	17*,38/14
14975	36	45/14*
15880		N8/14
15953		N21/14
16006	35	8/14
16011	38	8,10/14
16012	22	10/14
16013	30	31/14
16016	22	8/14
16145	1	49/14*
16220	6	15/14
16300	10	4*,37/14
16304	3	37/14
16322	9	30/14*
16380	15	37/14
16382	11	37/14
16420	10	10/14
16421	10	10/14
16423	2	10/14
16431	7	10/14
16432	11	10/14
16433	9	48/14*
16435	7	31/14*
16436	11	43/14*
16440	14	17/14
16441	8	17/14
16442	8	49/14*
16446	9	47/14*
16477	8	49/14*
16480	11	10/14
16500	10	17,43/14
16511	8	49/14*
16513	6	49/14*
16514	5	43/14*
16515	8	40/14*
16516	7	17/14
16518	7	34/14*
16520	23	8,17,31,43/14
16522	7	17/14
16528	18	17,31,43/14
16529	16	17/14
16530	7	17/14
16531	7	8,17/14
16547	10	48/14*
16549	17	49/14*
16551	11	48/14*
16576	4	37/14;1/15
16580	14	17,25,31,37/14;1/15
16587	3	43/14*
16590	11	31/14;1/15
16591	10	48/14*
16592	11	48/14*;1/15
16593	12	47/14*
16594	13	8,25,37,41/14
16595	16	8,17,21,39,41/14
16596	13	17,21,41/14
16597	9	41/14
16601	11	47/14*
16604	12	49/14*
16605	10	47/14*
16660	31	9/14
16662	9	43/14
16663	9	9/14
16665	10	9/14
16700	32	30/14
16707	13	28/14
16708	28	28/14
16709	25	30/14
16723	16	1/15*
16762	10	47/14*
17003	4	25,40/14
17005	10	41/14**
17010	1	N41/14*
17303	11	34/14*
17315	25	47/14
17320	19	8/14
17321	10	48/14*
17322	11	34/14*
17324	15	37,40/14
17327	24	9,37,40/14
17330	9	39/14
17363	14	34/14*
17365	13	47/14*
17367	12	43/14*
17368	8	48/14*
17375	22	37/14
17377	2	31/14*
17378	15	32/14*
17379	2	31/14*
17387	14	47/14*
17403	15	34/14*
17420	29	43/14
17426	16	48/14*
17428	11	4*,47/14
17429	2	N47/14
17430	12	8*,47/14
17433	12	34*,43/14
17434	14	3/14*
17435	17	34/14*
17436	10	49/14*
17437	10	34/14*
17514	1	N25/14
18000	8	9,30,35,36/14
18002	8	N9,N30,N35,N36/14
18003	20	25,28,34,40,42/14
18005	6	N9,N16,N18/14
18007	33	16,25,28,34,40,42,45/14
18008	9	N41*,N42,N45/14
18009	4	N16,N32,N45/14
18010	22	16,32,45/14
18013	3	N25/14*
18020	39	9,13,16,18,30,35,36/14
18022	36	9,13,16,18,24,30,35,36, 45/14
18400	49	7,11,18,22,24,28,37/14
18421	51	7,11,18,22,24,28,37/14
18423	38	7,11,21,24,28,37/14
18424	28	24/14
18427	24	37/14
18429	11	38/14*
18430	9	24,37/14
18431	9	36*,37/14
18432	7	3/14*
18433	6	7,24/14
18434	7	24/14
18440	30	7,8,18,21,28,38/14
18441	47	7,8,11,21,28,38/14
18443	17	11/14
18444	17	11,52/14
18445	34	3,7,8,10,18,28,38,51/14
18446	18	7/14
18448	35	8,18,28/14
18449	19	7,8,10,45,51/14
18450	19	7,45/14
18452	17	51/14
18453	27	18/14
18456	21	3,8/14
18461	1	N24/14
18462	1	N7/14
18464	25	28/14
18471	11	28/14
18473	8	7,21,38/14
18474	10	44*,51/14
18500	30	28,34,38/14
18502	87	38/14
18520	27	25,28,34,42/14
18521	75	4*,28/14
18523	58	4*,21,37/14
18524	37	8,10/14
18525	37	8,10,21,37,46/14
18526	60	10,37,46/14
18531	23	7,10/14
18558	39	28,42/14
18561	13	25/14
18580	23	23*,25,42/14
18581	19	10,46/14
18583	40	10,24,46/14
18584	48	10/14
18587	71	10,41/14
18588	37	46/14
18589	16	3/14
18600	15	3/14
18620	24	32,45/14
18622	55	37/14
18623	12	32/14
18640	26	16,18,32,45/14
18645	28	16,18,25,35,45/14
18647	16	16,45/14
18648	5	N16,N18/14
18649	68	6,9,13,16,18,22,24,25,30, 33,37,45,49/14

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 3/14 THROUGH NM 1/15

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
18650	57	10*,18,22,24,25,30,33,37,45,49/14
18651	45	14*,37/14
18652	36	6,9,10,13,16,18,22,24,25,30,33,37,45,49/14
18653	12	9,13,35,37/14
18654	45	18,37/14
18655	59	18/14
18656	56	10,13,37,49/14
18657	19	13,37,49/14
18658	31	10,13,37/14
18659	16	13,37/14
18660	3	49/14
18661	30	49/14
18663	6	49/14
18666	1	13,37/14
18680	32	16,18,25,45/14
18685	34	16/14
18700	23	9,13,18/14
18703	26	13,18,35/14
18704	13	13/14
18720	34	9,27,30,49/14
18721	12	9/14
18724	3	24,30,45/14
18725	30	24,27,30,45/14
18740	44	4,13,24,25,30,35,36,37,49/14
18741	20	N4,N13,N24,N25,N30,N35,N36,N37,N49/14
18744	33	25,30/14
18746	39	30,37/14
18748	1	25,30/14
18749	43	14,27,37,45/14
18751	46	14,27,37/14
18754	19	18/14
18755	10	49/14
18757	11	37/14
18758	7	13/14
18760	8	N4,N9,N13,N24,N25,N30,N35,N36,N49/14
18761	4	N41/14*
18762	16	25/14
18763	11	25/14
18765	17	4,13,24,30,36,37/14
18766	7	4,13,24,30,36,37/14
18768	6	N4,N13,N24,N30,N36,N37/14
18769	4	N25/14
18772	48	13,24,30,35,36,37/14
18773	43	9,13,18,30,35,37,49/14
18774	12	30,33/14
18775	3	N25/14
19002	11	N22,N27,N32,N37,N41,N43,N47,N50/14
19004	39	3,12,14,22,27,32,37,41,43,47,50/14
19007	18	14,27,32,41,43,50/14
19008	5	27,32,41,43,50/14
19010	20	3,22,37,41,43,47/14
19013	19	3,14,27,32,43,50/14
19320	17	12,22,37,41,47/14
19324	23	47*,48/14
19326	7	47/14*
19327	11	12,37,41/14
19330	11	12,39/14
19331	8	47/14*
19339	2	N3,N12,N24,N26,N32,N37,N43/14
19340	27	3,12,24,26,32,37,43/14
19342	11	12/14
19347	19	49/14*
19348	8	12/14
19350	11	16/14
19351	11	3,37,43/14
19353	13	3/14
19357	25	12,24,26,32,46,52/14
19358	21	26/14
19359	12	46,52/14
19360	1	N12/14
19362	14	12/14
19366	37	26,33/14
19367	41	43/14*
19369	7	12,24,26/14
19379	2	N12,N14,N27,N32,N50/14
19380	15	12,14,27,32,50/14
19381	9	12,14,27,50/14
19383	18	50/14
19384	9	48/14*
19385	8	27/14
19387	10	N12/14
19481	12	40/14
19482	10	40/14
21023	41	35/14
21033	46	33,34/14
21140	1	13,30,36,37/14
21438	1	N29/14*
21483	2	33/14
21489	2	33/14
21500	1	31/14
21525	22	8*,41/14
21526	6	N34/14
21560	33	31/14
21563	4	22/14*
21601	4	52/14
21603	10	23,33/14
22004	38	10,13,15/14
22008	35	10,13/14
22012	31	44/14
22032	20	34/14
22036	28	17,34/14
22040	1	15,34/14
22050	4	15,33,47,48/14
22051	19	3,7,23,25,26,33/14
22052	7	3,7,14,23,25,26,32,45,46,47,49/14
22054	1	25,33/14
22055	1	3,7,23,25,26,32,33,45,47,49/14
22080	3	15,36/14
22081	1	46,48,49,50/14
22082	5	27,46,48,49,50/14
22083	6	48,50/14
22084	4	36/14
22090	2	8/14
22102	20	N26/14
22103	3	N26/14
22109	3	26/14
22112	3	19,38,41,42,46,48/14
22113	8	39/14
22114	5	38,42,44,45,46,47,48/14
22117	3	38,41,42,44,46,48/14
22120	3	8,10,13,34/14
22121	9	8,10,13/14
22124	2	8,10,13,23/14
22125	2	10,23,39/14
22126	1	10/14
22130	2	10/14
22134	1	N45/14*
22138	3	10,13,23,34,45/14
22140	2	10/14
22142	3	N10,N13/14
22143	4	8,10,13/14
22170	3	13/14
22172	9	N10,N13,N32,N48/14
22173	37	N13,N32,N36,N47,N48/14
22181	17	12,23/14
22182	7	8,44/14
22183	4	8,13/14
22205	2	34/14
22221	20	14,34,35/14
22225	2	3,29,34/14
22234	2	N30/14
22250	2	29,34/14
22251	12	N28/14
22252	19	N3,N34/14
22263	2	3,35,41/14
22264	3	3,41/14
22275	3	29/14
22285	1	15/14
22290	4	3,29,30,32,48/14
22293	15	29,30/14
22294	17	N3,N30/14
22295	2	28/14
22305	2	51/14
22311	19	13,46/14
22312	3	N51/14
22313	3	N13,N35,N36/14
22314	1	35,36/14
22335	4	42,48,51/14
22341	9	14,27,42,51/14
22342	9	42,49/14
22343	2	N14,N33/14
22346	1	33/14
22347	6	N15,N42,N49/14
22352	7	N27,N48/14
22358	1	N15/14
22360	3	N15,N32/14
22370	2	15,48/14
22371	5	35/14
22397	1	N48/14
22405	7	N13,N27,N48,N51/14
22410	33	N35/14*
22415	8	27/14
22418	2	34,35,38/14
22419	1	N51/14*
22420	3	N29/14*
22422	1	N30/14*
22425	3	N47/14*
22426	1	N4/14*
22428	1	N46/14*
22430	6	31/14
22431	1	N51/14*
22432	1	N46/14*
22433	5	N42/14
22434	2	14,42/14
22440	1	7/14
22461	1	N52/14
22471	31	17,34,39/14
22481	36	N35/14*
22492	3	34/14
23000	5	17/14
23010	4	17/14
23023	4	17,46/14
23030	6	7,17,36/14
23101	5	46/14
23102	7	N46/14
23115	4	N28/14*
23121	7	17,29,30/14
23122	9	N8,N9,N29,N43,N46/14
23124	4	N17,N29,N30,N43,N45/14
23126	6	N9,N17,N29,N30,N46/14
23127	4	N8,N9,N17,N29,N30,N43,N46/14
23129	3	N8,N40,N45,N46/14
23131	8	N6/14*
23141	8	N18,N26/14
23142	11	N41/14*
23145	4	N7,N17,N18,N26,N30,N40/14
24028	6	3,9,43/14
24050	12	N7,N11,N30,N36,N39,N52/14
24052	17	N24,N26,N36,N41/14
24053	17	N10,N36/14
24055	7	N7,N24,N30,N36,N39,N41/14
24057	6	N16,N31,N36,N52/14
24058	3	N11,N36,N44,N45/14
24060	3	N24/14*
24080	6	N45/14*
24100	6	N28/14*
24153	6	39/14
24154	13	N39/14
24240	6	N51/14
24250	6	N51/14
24251	24	N51/14
24252	6	N51,N52/14
24355	2	32/14
24370	1	17/14
24380	2	43/14
24388	2	45/14
24390	3	3,9/14
24400	1	3,30/14
24402	17	30,34,36/14
24404	9	23,30/14
24405	12	N30/14
24430	5	11,35/14
24431	14	11,20,28,35/14
24433	3	20,28/14
24434	4	22,28,35/14
24435	5	22,35/14
24450	3	11,22/14
24452	7	22/14
24454	5	22/14
24460	4	11,20,31,42,43,44/14
24468	1	5,13,31,41,42,44/14
24469	1	5,13,31,41,42,44/14
24470	4	41/14
24471	9	20/14
24480	1	4,5,7,12,13,20,28,30,31,35,43,47,50/14
24482	2	20,28/14
24483	2	20,41/14
24485	1	7/14
24486	1	7/14
24490	3	5,27,31,41,44,47,48/14
24491	3	5,33,47/14
24492	21	N7/14
24500	1	5,47/14
24501	3	5,20,43,47/14
24503	35	5,47/14
24504	7	3,12,13,18,28,34,43/14
24507	1	3,5,12,13,18,20,26,28,30,34,43,51/14
24508	4	17,18,20,26,28,30,42,43/14
24509	3	3,5,13,14,26,28,30,34,43,44,49,51/14
24510	3	3,5,12,14,17,18,20,26,28,30,34,42,43,44,49,51/14
24511	2	50/14
24512	3	4,35/14
24514	1	4/14
24517	2	7,30/14
25001	7	5,11,12,19,42/14
25017	6	N7,N10,N19,N42/14
25018	9	7,42/14
25400	2	3,4,30/14
25481	25	4/14
25487	5	N31/14*
25550	2	5,42/14
25563	50	5,35,48/14
25564	8	N26/14*
25565	8	N41/14*
25566	27	35,48/14
25567	16	6/14
25570	3	45/14
25600	47	10,12,35,42,44/14
25609	5	42,47/14
25611	22	11/14
25613	3	22,35/14
25640	45	7,10,42/14
25641	29	7,10,42,44/14
25644	15	14/14*
25645	20	7,10/14
25647	12	31*,44/14
25649	20	22,35,47/14
25650	37	18/14*
25661	12	23/14
25663	29	22/14*
25664	18	23/14*
25667	21	47/14*
25677	22	22/14
25687	13	3*,22/14
25710	2	34/14
25720	3	10,34/14
25723	40	34/14
26001	4	12/14
26042	4	N41/14*
26060	1	7,9,31/14
26065	4	31/14
26066	13	9,11,20,30,31,52/14
26068	12	11,20,30/14
26081	9	N9,N18,N43/14
26082	1	N9,N13,N43/14
26083	14	13,27,45/14
26140	2	34/14
26142	10	17,34,38/14
26143	10	34/14
26146	1	11,23,38/14
26184	5	41/14
26186	19	10/14
26218	3	N28/14
26219	6	N4/14*
26224	32	30/14
26229	12	N6,N23/14
26230	13	N6,N23/14
26244	3	6/14
26259	2	23/14
26260	5	34/14
26308	5	34/14
26309	27	34/14
26320	5	11,30,35/14
26323	5	N8*,N30,N33/14

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 3/14 THROUGH NM 1/15

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
26341	80	N48/14*
27005	4	12,45/14
27080	4	17,35,39,43/14
27083	39	6,15,17,27,29/14
27084	4	17/14
27085	66	N28/14
27142	5	24/14
27163	21	23,27/14
27186	8	12/14
28004	1	12,33/14
28006	1	9,17,20,29/14
28049	13	10/14
28050	3	9,13,17,20,22,27,33, 47/14
28051	3	49/14*
28082	19	29/14
28110	2	29/14
28120	1	29/14
28140	1	18/14
28150	3	22/14
28153	1	22/14
28154	2	22/14
28162	29	13,20/14
28170	1	13,20/14
28220	2	31/14
28300	1	31/14
28310	2	31/14
28320	6	31/14
29002	9	35/14
29101	6	25,26/14
29104	4	31/14
29122	5	25/14
29124	1	40/14
29126	2	25/14
35000	26	17,25/14
35008	22	N11/14
35019	2	N4/14
35020	1	N4,N24,N25,N41/14
35024	2	N24,N25,N41/14
35035	3	N23/14*
35048	3	N34/14*
35063	2	N11/14
35065	2	N11/14
35067	1	N11/14
35068	2	N11/14
35096	2	N23/14*
35109	2	N24/14*
35113	3	N23/14*
35114	3	N23/14*
35115	2	N23/14*
35116	3	N23/14*
35117	2	N23/14*
35118	3	N23/14*
35119	2	N52/14
35123	1	N22/14*
35127	2	N29,N52/14
35128	1	N4/14
35131	1	N24,N41/14
35138	1	N4/14
35139	1	N4,N24,N25,N41/14
35140	1	N24,N25,N41/14
35147	2	N25/14
35148		N25/14
35151	1	N25/14
35172	4	N11/14
35180	7	N17/14*
36000	1	N25,N52/14
36001		N25,N41/14
36002		N25/14
36005	3	16/14
36006	1	N25,N52/14
36007	1	N25/14
36011	4	N34*,N52/14
36020	2	N21/14*
36030	3	N23/14*
37000	23	17/14
37005	18	N7,N31/14
37010	25	N21*,N45/14
37025	26	15,23,29,30,40,41/14
37027	4	N45/14*
37032	2	14,17,24,29,30,31,49/14
37033	2	12,14,15,34,39,40,41,42, 44/14
37034	2	15,23,39,40,42/14
37040	4	N21/14*
37050	10	N23/14
37051	2	N21/14*
37052	4	N21/14*
37055	1	N17,N46/14
37057	3	N29/14*
37059	2	N40/14*
37066	10	N34/14*
37080	4	N38/14
37095	4	N16/14
37120	3	11,19,22,25,27,28,34/14
37129	7	N11,N19,N25,N27,N28, N33,N34,N46/14
37140	34	7,17/14
37162	14	N19,N24,N27,N29,N30, N34,N45,N46/14
37163	21	N17,N30/14
37164	6	N19,N24,N34/14
37165	4	N7,N17,N31,N33,N34, N36/14
37166	4	N16*,N19,N24,N27, N29,N34,N45/14
37221	14	15,17,19,25,27,33/14
37222	14	N15,N17,N18,N19,N27, N33,N45/14
37223	15	17,18,19,27,31/14
37224	12	N18,N27,N45/14
37241	21	N30/14
37242	12	N19,N25,N27,N45/14
37243	7	17/14
37244	13	N22,N27,N28/14
37246	16	N10,N17,N18/14
37247	1	N10,N17,N18/14
37248	20	N19,N22,N27,N34, N46/14
37262	21	N28/14*
37281	16	N16/14*
37320	17	N23/14
37325	10	N17/14*
37326	3	N17/14*
37328	3	N41/14*
37330	3	N38/14*
37360	16	N21/14*
37362	7	N41/14*
37380	3	N22/14
37420	2	N4/14*
37443	3	N15/14
37445	2	N21/14
37446	3	N21,N40/14
37461	9	13,16,17,19,22,38,39, 52/14
37464	3	N20/14
37481	7	12,14,15,18,19,35,41/14
37501	4	N13,N32,N34,N39,N40, N42/14
37505	2	29,32,34,38,39,40,42/14
37506	4	31,32,40,42/14
38103		N47/14
38105		N47/14
38603	3	N3/14
38604	2	N3,N47/14
38607	3	N41*,N47/14
38610	1	21/14
38642	1	N3,N21/14
42004	1	N25/14
42038	2	52/14
42046	3	51/14
42050	2	52/14
42052	2	50,51/14
42141	3	4/14
42301	3	4/14
42560	5	25/14
42740	5	25/14
43030	25	N48,N49/14
43060	5	N41/14*
43080	5	N52/14*
43125	8	N41/14*
43144	5	N20*,N48/14
43145	5	N20/14*
43146	3	N20/14*
43147	4	N20/14*
43167	6	N31/14*
43201	2	N47/14
43245	5	N16/14*
43249	2	45/14
43260	4	45/14
43285	6	N28/14*
43303	5	N33/14*
43342	8	N28/14*
43343	3	N34/14*
43344	4	N41/14*
43360	22	N48/14
43365	5	1/15
43368	6	N10/14*
43370	7	52/14
43371	13	52/14;1/15
43373	8	45/14
43374	2	N3/14*;N1/15
44000	16	5,7,11,43,49/14
44015	9	4,5,7,11,16,20,27,38,39, 42,43,46,49,51/14;1/15
44030	9	52/14*
44040	25	48/14
44045	7	N10/14*
44050	24	N41/14*
44059	1	N11/14
44063	9	N49/14
44065	8	N49/14
44066	11	N49/14
44067	23	49/14
44082	12	N4*,N51/14
44083	9	N19/14*
44084	2	N19*,N51/14
44100	9	N47/14*
44105	2	51/14
44120	9	N10*,N42,N46,N47, N51/14
44122	2	N41*,N42,N51/14
44123	2	N42/14*
44140	10	N16*,N46,N47/14
44161	3	N48/14*
44180	7	N21/14*
44182	5	N52/14;N1/15
44183	7	N41*,N52/14
44224	1	46/14
44243	2	46/14
44281	3	N49/14*
44283	3	N41/14*
44310	6	N10/14*
44319	3	4,5,7,20,31,38,39,43/14
44320	5	N41*,N43/14
44323	1	N34/14*
44324	1	N34/14*
44326	1	N34/14*
44340	13	N29*,N31,N39,N41, N43/14;N1/15
44352	4	N7,N20,N32,N39,N41, N42/14
44353	1	N20,N30,N32,N40, N41/14
44355	2	N28/14*
44360	11	N48/14*
44361	8	N48/14*
44365	2	N5/14
44367	3	N4/14*
44400	5	5,7,9,16,20,26,27,32,38, 39,40,41,43/14
44401	9	N14,N16,N21,N26/14
44410	5	5,9,16,41,42,43,46/14
44420	7	21,42,43,46/14
44430	3	5,11,13,21,46,47,49/14
44442	2	N29/14*
44443	1	N15,N21/14
44445	1	N17/14
44446	1	N11,N13,N22,N32,N47, N51/14;N1/15
44462	5	N49/14;N1/15
44463	10	N46,N47,N49/14;N1/15
44465	4	N41*,N43,N47,N49/14; N1/15
44481	2	46,47,49,51/14;1/15
51007	22	12/14
51013	4	29/14
51017	31	30,32,50/14
51022	11	30/14
51027	8	48/14
51032	10	16/14
51041	3	32/14
51062	28	32/14
51100	7	16,23,34,35,39,40,42/14
51103	10	35,38,40/14
51104	1	35,38,40/14
51120	6	12,16,17/14
51135	2	N20/14
51142	3	N24/14
51143	5	N24,N42/14
51144	4	N24/14
51145	2	34/14
51146	4	N34/14
51150	1	12,24,39/14
51158	2	13,15,23,52/14
51159	4	N15,N18,N32,N39,N47, N51/14
51160	21	19,29,30,39,41,42/14
51163	4	39,42,43,47/14
51164	18	18,19,34/14
51165	9	N12,N18,N19,N32,N34, N43/14
51166	4	N12,N34/14
51167	7	N12,N18,N32,N34, N43/14
51168	2	18,19,29,34,42/14
51200	4	20/14
51201	3	20/14
51220	8	41/14
51224	1	48,50/14
51225	3	48/14
51240	2	32,41,50/14
51260	4	15,20,22,30,47,51/14
51280	8	32,50/14
51341	23	47/14
51343	3	40/14
51344	2	31,40,47/14
51346	1	N41/14
51347	1	N13,N15,N22,N30,N47, N51/14
51380	5	16,35/14
51480	4	48/14
51560	11	16,24/14
51580	13	24/14
52031	1	13,17,30,33,34,39,43/14
52037	1	N23/14
52038	1	N23/14
52039	5	N19,N20,N21,N30,N34, N35,N38,N39,N40, N42/14
52040	18	15,17,20,22,23,33,34,39, 40,41,42/14
52042	6	21,34,41/14
52043	22	N21,N22,N29,N32,N33, N34,N36,N40,N42/14
52045	7	N34/14
52046	21	15,17,23,25,32/14
52048	4	N19,N29,N35,N37,N38, N41/14
52051	2	N22,N41/14
52052	2	N32,N33/14
52060	17	N30,N34,N43,N51/14
52061	2	30,34,35,43/14
52062	7	23,31,33/14
52066	3	34,51/14
52069	1	30/14
52079	1	N15,N16,N19,N23, N39/14
52080	15	N8*,N13,N15,N17,N19, N20,N36,N39,N51/14
52081	6	N20/14
52082	3	19,34,47/14
52083	2	18,23,31,34,36,41,42,50, 51/14
52084	3	N22/14
52085	4	N13,N17,N19,N20, N23/14
52086	3	N8*,N15,N18,N19/14
52088	3	19,30,42,47/14
52091	1	N19,N33,N34,N40, N41/14
52092	2	N23,N34,N35,N36/14
52093	1	N21/14
52117	1	40,41/14
52118	1	23,40,41/14
52119	1	41/14
52120	13	N19*,N39,N51/14
52121	9	33,34,41,51/14
52122	16	N14,N38,N42,N47/14
52125	1	14,35/14
52126	1	N14,N35,N38/14
52140	7	N13,N23,N24,N32,N34, N39/14
52141	5	23,34,35/14
52142	3	18,35,48/14
52143	8	13,35,39,40/14
52144	6	N17,N20,N24,N33,N34, N48/14

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 3/14 THROUGH NM 1/15

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
52145	1	N13,N19,N20,N22, N33/14
52180	14	21,34/14;1/15
52200	8	1/15
53011	2	21,34/14
53031	2	44*,46/14
53058	3	N17*,N52/14
53060	15	43,44,46,51/14
53061	11	N43,N44,N46,N52/14; N1/15
53062	14	N43,N44,N46/14
53063	9	43,44,46,51,52/14;1/15
53081	10	N44/14
53082	15	N44/14
53086	9	N17/14*
53087	10	N15/14*
53090	2	N41/14*
53100	17	18/14
53110	1	1/15
53120	14	11/14;1/15
53130	1	1/15
53133	4	11,17,20,49/14
53141	6	N11,N17,N26,N49,N50, N51/14
53147	4	N11/14
53149	3	N11/14
53160	14	11,17,26,49/14
53161	8	26,27,50,51/14;1/15
53162	7	26,28,50,51/14
53164	10	N26,N27,N50/14
53166	2	N48/14*
53180	10	9,11,26/14;1/15
53181	4	9/14
53183	14	N9,N11/14;N1/15
53184	5	9,10,11/14
53191	1	N1/15
53200	7	9/14;1/15
53201	7	N51/14;N1/15
53203	12	N23/14
53205	3	23,48/14
53206	7	N32/14
53207	1	N11,N48/14
53212	3	51/14;1/15
53220	7	34/14
53242	12	1/15
53244	2	1/15
53262	8	1/15
53263	1	1/15
53264	5	1/15
53266	4	1/15
53268	4	1/15
53269	5	1/15
53279	4	1/15
53281	5	N1/15
53282	9	N1/15
53283	5	N1/15
53284	4	1/15
53285	4	1/15
53287	6	1/15
53290	2	N1/15
54061	13	N8/14*
54125	4	43,45/14
54131	2	34/14
54151	1	26,30,49/14
54165	3	N45/14
54167	3	N6/14*
54168	1	45/14
54169	3	43,45/14
54279	4	17/14
54284	1	24/14
54300	12	22/14
54318	3	22/14
54320	4	22/14
54322	8	22/14
54324	9	19,51/14
54335	3	30/14
54340	8	24,30/14
54341	4	24/14
54343	10	24/14
54344	6	24,30/14
54359	2	17/14
54360	12	17,26,49/14
54361	10	17/14
54363	3	15,49/14
54369	4	26,49/14
54380	7	N6,N26,N45,N49/14
54382	9	14,15,26,42,49/14
54386	10	11,13,15,45,49/14
54387	7	23,37/14
54389	8	11,13/14
54400	8	14,40,48,49/14
54403	4	49/14
54407	4	14,40,48/14
54409	2	17,21,23,49/14
54412	1	41/14
54416	6	N40/14
54421	6	48,49/14
54422	4	48/14
54423	5	41/14
54424	1	48/14
54430	1	38,39,41,48/14
54440	4	20/14
54441	6	14/14
54462	5	11/14
54463	6	N49/14*
54464	5	11,20/14
54480	9	N14,N17/14
54481	10	N48/14*
54482	1	N48/14*
55001	4	3,18,20,22,23,26,36,45, 48/14
55040	4	6,13,15,39,40,48,49/14
55041	7	7,39,45/14
55042	2	N6,N7,N14,N48,N52/14
55043	2	5,7,13,42,49/14
55044	5	39,42,48,49/14
55045	3	N48,N49,N52/14
55046	5	N7,N13,N15,N17,N37, N40,N42,N48,N49, N52/14
55047	8	16,17,38/14
55048	12	5,9,17,22,39,49/14
55049	7	N6,N7,N17,N23,N48, N52/14
55060	8	N3,N26/14
55063	1	40/14
55064	3	5,18,22,39,45/14
55082	10	N27*,N36,N45/14
55084	7	23,26,32,45/14
55085	9	23,26,32,36,45/14
55100	8	3,18,20,26,45/14
55101	5	24,36,45/14
55102	4	22,24,36,45/14
55105	7	18,21,45/14
55110	2	3,22,40,49/14
55120	2	3/14
55127	2	45/14
55128	3	N20/14
55129	7	20/14
55130	2	18,20,22,23,26,32,36,37, 45/14
55131	1	22/14
55133	4	N17/14
55138	5	21,36/14
55139	6	36/14
55140	2	18,37/14
55141	1	20/14
55150	2	3,45/14
55160	2	11,52/14
55161	2	N3,N14,N52/14
55170	2	5,21,36,38,52/14
55180	2	17,18,21/14
55190	2	6,22/14
55200	2	17,18,20,21/14
55205	2	N49/14*
56031	1	39/14
56063	2	N14/14*
56064	7	N39*,N44/14
56065	4	N39/14*
56100	14	18,21/14
56101	7	22/14
56102	24	22/14
56103	8	N22/14
56104	3	21/14
56120	13	22/14
57006	5	17/14
57014	11	17/14
57035	10	17,39,46/14
57102	3	N29/14*
57103	3	N31/14*
57160	10	21/14
57170	1	21/14
57180	6	17/14
57200	6	17/14
57201	6	N17/14
57381	13	N36,N42,N46/14
57440	4	32/14
57460	5	41/14
57471	3	19,35,45/14
57472	3	N45/14
57480	9	17,39,46/14
57483	12	N16,N26/14
57486	6	19/14
61000	21	25*,26,39,46/14
61003	17	17,19,39,42/14
61040	7	26/14
61050	5	24,26,38/14
61051	9	N38/14
61060	7	N19/14
61080	4	39/14
61090	6	17,42/14
61092	14	N41/14
61100	4	19,42/14
61111	13	6/14
61112	11	N6/14
61142	8	N25/14*
61191	9	N16/14*
61192	1	N8/14*
61212	3	N20,N21,N24,N26/14
61240	7	15/14
61242	2	15,18/14
61300	2	35/14
61433	1	21/14
61434	2	21/14
61538	1	21,26/14
61541	9	N18/14*
61591	4	17/14
62001	5	9,28,52/14
62024	13	15,21/14
62028	15	4,8,32,35/14
62032	17	34*,35/14
62033	4	N33*,N35/14
62040	5	15/14
62046	3	15/14
62097	6	3/14
62098	8	N3/14
62191	15	31/14
62193	18	N28/14
62194	9	N47/14*
62195	7	28/14
62196	1	N41/14*
62225	4	N45/14
62230	3	5,52/14
62276	4	N41/14*
62314	3	18/14
62343	4	18/14
62350	3	18/14
62355	7	3,18/14
62360	5	4,18,35/14
62361	2	N4,N18,N35/14
62364	1	15,35/14
62366	5	N41/14*
62367	1	N41/14*
62388	3	N3/14
62392	8	15,35,46/14
62393	8	N14/14
62394	11	N14/14
62400	17	3,9,14,17,22,31,41/14
62401	9	17/14
62402	11	N10*,N49/14
62403	5	3,15,22,41/14
62405	9	N47/14*
62406	3	N22,N31/14
62407	5	17/14
62408	7	3,17/14
62409	6	31/14
62412	13	10,44,46,49/14
62413	13	10,44,49/14
62416	15	N39/14*
62420	6	N31*,N44,N46/14
62421	1	N41/14*
62422	1	N41*,N49/14
62423	1	N41/14*
62424	1	N41/14*
62437	12	7/14
62440	8	3,7,17,23/14
62444	3	N15,N22,N31,N41/14
62449	4	3/14
62453	6	N10,N44,N49/14
62459	3	N47/14*
62460	5	6,14,15,22/14
62462	3	N15,N22,N41/14
62463	3	N15,N21,N41/14
62465	1	N9/14*
62480	3	31*,35/14
62490	3	31*,52/14
62498	5	N6,N22,N31/14
62499	6	N31/14
62510	3	31/14**
62512	4	N31*,N46,N49/14
62520	6	33/14**
62521	5	N33/14*
62530	6	8,10,14,15,23,44,49, 52/14
62531	4	N8,N14,N15,N23,N44, N49,N52/14
62541	4	N31/14*
62550	4	N25*,N44,N46,N49/14
62560	5	N8*,N14,N52/14
62570	5	N3/14*
62590	3	7/14
62591	4	N7/14
62593	1	44/14
62594	1	44/14
62595	1	44/14
62596	1	46/14
63000	13	8,48/14
63050	3	8,32,48/14
63053	5	8,11,12,20,21,48/14
63054	3	8,10,20,21,48/14
63055	3	8,10,11,12/14
63060	8	8,32,48/14
63091	4	32/14
63120	3	N8/14*
63200	6	N10/14*
63337	17	N47/14*
63400	1	43/14
63440	4	26/14
71005	1	9/14
71027	10	N10*,N12,N14,N15, N17,N19,N27,N28,N30, N37,N47/14;N1/15
71033	31	46/14
71040	5	26,43/14
71042	2	N26/14
71066	2	14,17,28,37/14
71185	25	N45/14*
71186	3	N34/14
71230	11	29/14
71239	4	N51/14
71241	11	N47,N48,N51/14
71243	6	27,29,47,48,51/14
71244	4	45,48,51/14
71247	20	N38,N43,N45,N46,N47, N48,N49/14
71248	3	N45,N46,N47,N48/14
71249	2	47/14
71250	1	N45,N47,N49/14
71251	13	N15,N17,N38,N45,N46, N48,N49/14
71252	3	N15,N27,N38,N43,N44, N45,N46,N47,N48, N51/14
71253	12	N27,N38,N44,N45,N47, N48,N49/14
71254	2	N27,N38,N43,N44,N45, N46,N48,N51/14
71255	7	N15,N27,N44,N45,N47, N48,N49/14;N1/15
71256	2	N10,N17,N27,N38,N45, N46,N47,N48,N49, N51/14
71262	7	20,26,28,45/14
71265	4	10,15,17,27,29,38,43,46, 47,48,49,51/14
71275	4	26,28,45,46/14
71285	4	20,45/14
71305	2	3/14
71311	4	10/14
71312	5	10/14
71315	2	3/14
71320	2	N15,N19,N37,N47/14; N1/15
71325	9	N14,N17/14
71326	1	N14,N17/14
71330	14	N24/14*
71331	11	10/14;1/15

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 3/14 THROUGH NM 1/15

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
71340	12	N14,N21,N27,N28, N38/14
71343	4	N20,N21/14
71348	4	N24/14*
71350	8	10,14,21/14
71401	2	N21/14
71402	1	14,21,27/14
71430	3	47/14
71440	2	27,38,43,45,48,49/14
71445	2	N18*,N24/14
71450	2	N34/14*
72007	10	43/14
72014	10	10/14
72070	4	43/14
72141	5	10,11/14
72142	6	10/14
72143	5	10/14
72150	6	10/14
73191	4	N29/14*
74020	4	29/14;1/15
74024	7	5/14
74154	1	N3,N4,N6,N28,N33/14; N1/15
74155	1	N3,N6,N33/14
74181	8	1/15
74182	12	1/15
74208	1	N34/14
74212	2	N1/15
74216	1	N1/15
74243	1	N1/15
74244	1	N1/15
74248	1	N33/14
74267	1	N1/15
74270	3	1/15
74302	1	N4,N15,N28/14
74342	1	N5,N7,N15,N34/14
74397	1	N5,N6,N7,N8,N15,N28, N34/14
74398	2	N5,N7,N15,N26,N33/14
74410	3	4/14
74582	9	6,29/14
74585	1	N6/14
74588	1	N6/14
75035	18	15/14
75165	2	N1/15
75174	3	N1/15
75178	3	N1/15
75180	2	1/15
75266	1	N28/14;N1/15
75267	1	N6,N15/14
75269	1	N4,N7,N15/14
75274	1	N15,N28/14;N1/15
76015	2	N3/14*
76041	2	39/14
76052	9	N29,N30,N47/14
76070	9	30/14
76071	10	N10/14*
76080	8	30/14
76081	7	28,39/14
76100	3	31/14
76110	5	30/14
76141	9	N21/14
76150	6	21/14
76151	7	28/14
76160	4	31/14
76161	10	29,31,33,47/14
76180	1	31/14
81002	7	44*.49/14
81004	5	5,22,37,49/14
81025	3	N5,N49/14
81048	10	49/14
81059	1	N5,N37,N49/14
81060	2	5,37,49/14
81067	9	5,22,37/14
81071	8	22,37/14
81086	8	31/14*
81249	2	18/14
81664	7	49/14*
81711	7	26,35/14
81715	5	26,35/14
83010	6	35,46/14
83026	32	35/14
83039	11	35/14
83484	12	35,47/14;1/15
83567	3	27/14
83637	5	48/14*
91008	2	N22*,N32,N39,N43/14
91010	6	32,39,43/14
91020	6	N8/14*
91030	4	N41/14*
91116	2	N32/14*
91289	20	N41/14*
91335	1	N42/14*
92006	5	15,47/14;1/15
92010	3	10/14
92025	4	N11*,N20/14
92050	2	N8/14*
92061	4	N8/14*
92140	2	N49/14*
92180	2	40/14
92190	3	N49/14*
92220	3	N14/14*
92242	3	N3/14*
92290	3	N18/14*
92380	4	N8/14*
92560	5	N31/14*
93006	3	4,15,30,32,36,39,43/14; 1/15
93010	6	4,9,10,13,15,17,27,28,37, 43,45/14
93018	8	4,9,13,15,17,27,28,38,43, 45/14
93020	2	4,5,15,26/14
93030	7	4/14
93036	12	N4,N15,N36,N43/14
93043	1	8/14
93044	2	8/14
93047	2	11/14
93048	1	10,47,49/14;1/15
93110	2	15,37/14
93113	3	N15/14
93115	3	N15/14
93160	4	4,9,10,15,28,49/14
93180	8	N13,N45/14
93220	7	14,35/14
93224	3	14/14
93240	12	13,14,45/14
93241	10	N13/14
93245	7	N13/14
93248	1	13/14
93260	9	13/14
93261	6	N25/14*
93283	5	35/14
93300	6	26/14
93301	6	26/14
93340	5	N10/14*
93420	5	N4/14*
93720	11	36,44/14;1/15
93721	6	N8,N14,N26,N36,N44, N52/14;N1/15
93725	6	1/15
93730	5	N4,N15,N16,N44/14; N1/15
93733	14	N4,N16/14
93734	13	N4,N16/14
93736	25	N4,N16,N19,N36, N44/14
94004	7	9,12,20,24,30,31,39/14
94016	3	8,15,16,31/14
94028	8	8,43/14
94033	6	21,23,24/14
94040	14	30,39,43/14
94060	12	9,20,24,25/14
94061	6	25/14
94063	5	22,33/14
94080	8	12,24/14
94082	9	20,22,24,35,39/14
94083	13	N24,N33/14
94084	2	N24,N33/14
94120	7	12,15,22,50/14
94122	8	N22/14
94123	10	N48,N50/14
94127	3	N48/14
94160	9	15,21,50/14
94164	2	36/14
94180	10	8,15,16,21,23,25/14
94188	2	7,11,12,13,14,21,27/14
94203	10	7,8,9,10,11,12,13,14,15, 16,17,18,21,23,25,27/14
94206	3	9,10,12,13,16,18,23, 25/14
94207	5	N7,N8,N12,N14,N18, N19,N23,N25,N27/14
94208	6	N7,N27/14
94216	9	N8,N9,N10,N18,N19, N20,N21,N29/14
94217	7	N7,N19,N20,N29/14
94218	6	N20/14
94219	3	N21/14
94220	5	8,9,10,11,12,13,15,16,17, 19,21,23,25/14
94260	7	N13,N16,N17,N36/14
94280	7	N15,N17,N19,N21, N36/14
94281	7	N17,N21/14
94360	7	N24,N35/14
94363	5	N35/14
94364	1	N21,N27,N35,N36/14
94420	4	21/14
94440	4	N23/14
95066	13	N36/14
95068	3	N36,N37/14
95140	16	43/14
95144	10	43/14
95149	11	N3/14*
95151	19	N49/14
95152	7	N48/14*
95153	4	N18/14*
95257	1	N23/14*
95258	3	23/14**
96036	2	15/14
96039	8	N27/14
96041	12	N15,N23/14
96043	8	7,23,27/14
96044	10	7/14
96320	4	5/14
96340	4	5/14
96400	4	5/14
96441	1	22/14
96640	5	15/14
96951	2	N21/14*
97022	1	N43/14
97055	3	N3/14*
97084	2	N33/14*
97085	2	N34/14*
97095	4	N3/14*
97137	2	N3/14*
97211	2	N29/14*
97213	1	N29/14*
97228	16	N29/14**
97252	2	N21/14*
97253	2	N3/14*
97255	2	N3/14*
97322	2	N21/14*
97330	1	N21/14*
97343	12	21/14**
97363	1	N3/14*
97423	3	N3/14**
97480	9	15/14
97567	1	N21/14*
800669	9	N25/14
801066	1	N25/14*
801243	1	N30/14*
801372	1	N5/14*
801385	1	N14/14*
801492	1	N3/14*
801953	1	N22/14
802202	8	N22/14
802260	6	N25/14
802985	3	N17/14**
803426	1	N5/14*
803434	1	N39/14*
803444	1	N5/14*
803453	1	N36/14*
803455	1	N30/14
803601	1	N7/14
803610	1	N10/14
803611	1	N43/14*
803628	1	N12,N14/14
803629	1	N17/14*
803646	1	N26/14*
803678	1	N30/14*
803685	1	N17/14*
803738	1	N49/14
804567	4	N12/14**
805118	4	N22,N37/14
805647	2	N12,N32/14
806903	1	N5*,N15,N22/14
806904	1	N26/14*
806911	1	N30/14*
806918	1	N44/14
806932	1	N5/14*
806941	1	N26/14*
806943	1	N43,N49/14
806969	1	N9/14*
806973	1	N36,N37/14
806979	1	N4,N13,N24,N30,N35, N37/14
807228	1	N3/14*
808955	1	N49/14*
809103	1	N30/14*
809106	1	N41/14*
809111	1	N8/14*
809117	1	N5/14*
809125	1	N22*,N46/14
809144	1	N12,N24,N26,N33,N46, N52/14
809167	1	N12*,N23/14
809178	1	N22*,N31/14
809310	10	N43/14

SECTION II
NGA/DLIS CATALOG CORRECTIONS

Note: Underlining indicates that column in which a correction has been made or new information added.			Edition			
NGA Ref. No. (National Stk. No.)	Title	Scale = 1:	No.	Date	Price Category	NTM
	REGION 1					
11BHA11392 (7642014010210)	Bear Point to Sulphur Point	5,000	8	8/14	NOS	1/15
16BCO16723 (7642014011302)	Controller Bay 59 40 29N 145 05 36W 60 22 39N 143 49 37W	100,000	16	9/14	NOS	1/15

Price Categories effective 1 October 2014

A	23.25	D	14.50	E	12.00	F	12.00	G	7.50	H	12.00

CHS Canadian Hydrographic Service
DS Distribution Limited
GPO Government Printing Office
NOS National Ocean Service
UKHO United Kingdom Hydrographic Office
DHO Danish Hydrographic Office
AHS Australian Hydrographic Service
JCG Japan Coast Guard
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Civilian users can obtain information about ordering NGA paper charts at: http://www.nauticalcharts.noaa.gov/staff/charts.htm.

SAILING DIRECTIONS CORRECTIONS

PUB 180 11 Ed 2014 LAST NM 38/14
Publication Data Update (PDU) #1 for Pub. 180 is available for download on the NGA Maritime Website.
http://www.msi.nga.mil/NGAPortal/MSI.portal
(NGA) 1/15

PUB 193 15 Ed 2014 LAST NM 33/14
Publication Data Update (PDU) #1 for Pub. 193 is available for download on the NGA Maritime Website.
http://www.msi.nga.mil/NGAPortal/MSI.portal
(NGA) 1/15

COAST PILOT CORRECTIONS

COAST PILOT 1 44 Ed 2014 30 NOV 2014 LAST NM 49/14
Chapter 1—Paragraphs 189.01 to 189.05; read:
(189.01) **Automatic Identification System (AIS) Aids to Navigation**
(189.02) AIS is an automatic communication and identification system intended to improve the safety of navigation by assisting the efficient operation of a Vessel Traffic Services (VTS), ship reporting, ship-to-ship and ship-to shore operations. AIS is increasingly being used as an aid to navigation. An AIS-equipped aid to navigation may provide a positive identification of the aid. It may also have the capability to transmit an accurate position and provide additional information such as actual tide height and/or weather information.
(189.03) The AIS message may represent an aid to navigation that physically exists (Physical AIS Aid to Navigation) or the message, transmitted from a remote location, may represent an aid to navigation that does not physically exist (Virtual AIS Aid to Navigation). A virtual aid to navigation is a digital information object promulgated by an authorized service provider that can be presented on navigational systems.
(189.04) Physical AIS aids to navigation are charted with the symbol for the physical aid (such as a buoy or light) with a magenta circle surrounding the symbol and labeled AIS. Virtual aids to navigation are charted with a small central dot with a topmark symbol indicating the purpose of the aid, surrounded by a magenta circle and labeled V-AIS. Temporary AIS aids to navigation and stations remotely transmitting an AIS signal shall not be charted. See U.S. Chart No. 1, Section S, for additional information and examples.
(189.05) Add new graphic titled **Examples of Charted AIS Aids to Navigation** from back of this Subsection.
(L 423-2014) 1/15

COAST PILOT 3 47 Ed 2013 30 NOV 2014 LAST NM 50/14
Chapter 1—Paragraphs 182.01 to 182.05; read:
(182.01) **Automatic Identification System (AIS) Aids to Navigation**
(182.02) AIS is an automatic communication and identification system intended to improve the safety of navigation by assisting the efficient operation of a Vessel Traffic Services (VTS), ship reporting, ship-to-ship and ship-to-shore operations. AIS is increasingly being used as an aid to navigation. An AIS-equipped aid to navigation may provide a positive identification of the aid. It may also have the capability to transmit an accurate position and provide additional information such as actual tide height and/or weather information.
(182.03) The AIS message may represent an aid to navigation that physically exists (Physical AIS Aid to Navigation) or the message, transmitted from a remote location, may represent an aid to navigation that does not physically exist (Virtual AIS Aid to Navigation). A virtual aid to navigation is a digital information object promulgated by an authorized service provider that can be presented on navigational systems.
(182.04) Physical AIS aids to navigation are charted with the symbol for the physical aid (such as a buoy or light) with a magenta circle surrounding the symbol and labeled AIS. Virtual aids to navigation are charted with a small central dot with a topmark symbol indicating the purpose of the aid, surrounded by a magenta circle and labeled V-AIS. Temporary AIS aids to navigation and stations remotely transmitting an AIS signal shall not be charted. See U.S. Chart No. 1, Section S, for additional information and examples.
(182.05) Add new graphic titled **Examples of Charted AIS Aids to Navigation** from back of this Subsection.
(L 423-2014) 1/15

COAST PILOT 4 46 Ed 2014 30 NOV 2014 LAST NM 49/14
Chapter 1—Paragraphs 189.01 to 189.05; read:
(189.01) **Automatic Identification System (AIS) Aids to Navigation**
(189.02) AIS is an automatic communication and identification system intended to improve the safety of navigation by assisting the efficient operation of a Vessel Traffic Services (VTS), ship reporting, ship-to-ship and ship-to-shore operations. AIS is increasingly being used as an aid to navigation. An AIS-equipped aid to navigation may provide a positive identification of the aid. It may also have the capability to transmit an accurate position and provide additional information such as actual tide height and/or weather information.

COAST PILOT 4 (Continued)

(189.03) The AIS message may represent an aid to navigation that physically exists (Physical AIS Aid to Navigation) or the message, transmitted from a remote location, may represent an aid to navigation that does not physically exist (Virtual AIS Aid to Navigation). A virtual aid to navigation is a digital information object promulgated by an authorized service provider that can be presented on navigational systems.

(189.04) Physical AIS aids to navigation are charted with the symbol for the physical aid (such as a buoy or light) with a magenta circle surrounding the symbol and labeled AIS. Virtual aids to navigation are charted with a small central dot with a topmark symbol indicating the purpose of the aid, surrounded by a magenta circle and labeled V-AIS. Temporary AIS aids to navigation and stations remotely transmitting an AIS signal shall not be charted. See U.S. Chart No. 1, Section S, for additional information and examples.

(189.05) Add new graphic titled **Examples of Charted AIS Aids to Navigation** from back of this Subsection.

(L 423-2014) 1/15

COAST PILOT 5 42 Ed 2014 30 NOV 2014
LAST NM 43/14

Chapter 1—Paragraphs 189.01 to 189.05; read:

(189.01) **Automatic Identification System (AIS) Aids to Navigation**

(189.02) AIS is an automatic communication and identification system intended to improve the safety of navigation by assisting the efficient operation of a Vessel Traffic Services (VTS), ship reporting, ship-to-ship and ship-to-shore operations. AIS is increasingly being used as an aid to navigation. An AIS-equipped aid to navigation may provide a positive identification of the aid. It may also have the capability to transmit an accurate position and provide additional information such as actual tide height and/or weather information.

(189.03) The AIS message may represent an aid to navigation that physically exists (Physical AIS Aid to Navigation) or the message, transmitted from a remote location, may represent an aid to navigation that does not physically exist (Virtual AIS Aid to Navigation). A virtual aid to navigation is a digital information object promulgated by an authorized service provider that can be presented on navigational systems.

(189.04) Physical AIS aids to navigation are charted with the symbol for the physical aid (such as a buoy or light) with a magenta circle surrounding the symbol and labeled AIS. Virtual aids to navigation are charted with a small central dot with a topmark symbol indicating the purpose of the aid, surrounded by a magenta circle and labeled V-AIS. Temporary AIS aids to navigation and stations remotely transmitting an AIS signal shall not be charted. See U.S. Chart No. 1, Section S, for additional information and examples.

(189.05) Add new graphic titled **Examples of Charted AIS Aids to Navigation** from back of this Subsection.

(L 423-2014) 1/15

Chapter 2—Paragraphs 2624.01 to 2624.17; read:

(2624.01)**161.70 Vessel Traffic Service Port Arthur**

(2624.02)(a) The VTS area consists of the navigable waters of the United States to the limits of the territorial seas bound by the following points:

(2624.03) 30°10.00'N., 92°37.00'W.; then south to
(2624.04) 29°10.00'N., 92°37.00'W.; then west to
(2624.05) 29°10.00'N., 93°52.25'W.; then northwest to
(2624.06) 29°33.70'N., 94°21.25'W.; then north to
(2624.07) 30°10.00'N., 94°21.25'W.; then east along the
(2624.08) 30°10'N. latitude to the origination point.

(2624.09) Note: Although mandatory participation in VTS Port Arthur is limited to the area within the navigable waters of the United States, prospective users are encouraged to report at the safe water marks in order to facilitate vessel traffic management in the VTS Area and to receive advisories or navigational assistance.

(2624.10) (b) Precautionary areas. (see table)

(2624.11) Insert **Table 161.70(b)** from back of this Subsection.

(2624.12) (c) Reporting points (Inbound). (see table)
(2624.13) (d) Reporting points (Outbound). (see table)
(2624.14) (e) Reporting points (Eastbound). (see table)
(2624.15) (f) Reporting points (Westbound). (see table)

(2624.16) Insert **Table 161.70(c), Table 161.70(d), Table 161.70(e), Table 161.70(f), Table 161.70(g)** from back of this Subsection.

(2624.17) (g) Reporting points (Offshore Safety Fairway). (see table)

(FR 8/21/2013) 1/15

COAST PILOT 6 44 Ed 2014 30 NOV 2014
LAST NM 50/14

Chapter 1—Paragraphs 193.01 to 193.05; read:

(193.01) **Automatic Identification System (AIS) Aids to Navigation**

(193.02) AIS is an automatic communication and identification system intended to improve the safety of navigation by assisting the efficient operation of a Vessel Traffic Services (VTS), ship reporting, ship-to-ship and ship-to-shore operations. AIS is increasingly being used as an aid to navigation. An AIS-equipped aid to navigation may provide a positive identification of the aid. It may also have the capability to transmit an accurate position and provide additional information such as actual tide height and/or weather information.

(193.03) The AIS message may represent an aid to navigation that physically exists (Physical AIS Aid to Navigation) or the message, transmitted from a remote location, may represent an aid to navigation that does not physically exist (Virtual AIS Aid to Navigation). A virtual aid to navigation

COAST PILOT 6 (Continued)

is a digital information object promulgated by an authorized service provider that can be presented on navigational systems.

(193.04) Physical AIS aids to navigation are charted with the symbol for the physical aid (such as a buoy or light) with a magenta circle surrounding the symbol and labeled AIS. Virtual aids to navigation are charted with a small central dot with a topmark symbol indicating the purpose of the aid, surrounded by a magenta circle and labeled V-AIS. Temporary AIS aids to navigation and stations remotely transmitting an AIS signal shall not be charted. See U.S. Chart No. 1, Section S, for additional information and examples.

(193.05) Add new graphic titled **Examples of Charted AIS Aids to Navigation** from back of this Subsection.

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COAST PILOT 8 36 Ed 2014 30 NOV 2014
LAST NM 34/14

Chapter 1—Paragraphs 189.01 to 189.05; read:

(189.01) **Automatic Identification System (AIS) Aids to Navigation**

(189.02) AIS is an automatic communication and identification system intended to improve the safety of navigation by assisting the efficient operation of a Vessel Traffic Services (VTS), ship reporting, ship-to-ship and ship-to-shore operations. AIS is increasingly being used as an aid to navigation. An AIS-equipped aid to navigation may provide a positive identification of the aid. It may also have the capability to transmit an accurate position and provide additional information such as actual tide height and/or weather information.

(189.03) The AIS message may represent an aid to navigation that physically exists (Physical AIS Aid to Navigation) or the message, transmitted from a remote location, may represent an aid to navigation that does not physically exist (Virtual AIS Aid to Navigation). A virtual aid to navigation is a digital information object promulgated by an authorized service provider that can be presented on navigational systems.

(189.04) Physical AIS aids to navigation are charted with the symbol for the physical aid (such as a buoy or light) with a magenta circle surrounding the symbol and labeled AIS. Virtual aids to navigation are charted with a small central dot with a topmark symbol indicating the purpose of the aid, surrounded by a magenta circle and labeled V-AIS. Temporary AIS aids to navigation and stations remotely transmitting an AIS signal shall not be charted. See U.S. Chart No. 1, Section S, for additional information and examples.

(189.05) Add new graphic titled **Examples of Charted AIS Aids to Navigation** from back of this Subsection.

(L 423-2014) 1/15

COAST PILOT 9 32 Ed 2014 30 NOV 2014
LAST NM 34/14

Chapter 1—Paragraphs 189.01 to 189.05; read:

(189.01) **Automatic Identification System (AIS) Aids to Navigation**

(189.02) AIS is an automatic communication and identification system intended to improve the safety of navigation by assisting the efficient operation of a Vessel Traffic Services (VTS), ship reporting, ship-to-ship and ship-to-shore operations. AIS is increasingly being used as an aid to navigation. An AIS-equipped aid to navigation may provide a positive identification of the aid. It may also have the capability to transmit an accurate position and provide additional information such as actual tide height and/or weather information.

(189.03) The AIS message may represent an aid to navigation that physically exists (Physical AIS Aid to Navigation) or the message, transmitted from a remote location, may represent an aid to navigation that does not physically exist (Virtual AIS Aid to Navigation). A virtual aid to navigation is a digital information object promulgated by an authorized service provider that can be presented on navigational systems.

(189.04) Physical AIS aids to navigation are charted with the symbol for the physical aid (such as a buoy or light) with a magenta circle surrounding the symbol and labeled AIS. Virtual aids to navigation are charted with a small central dot with a topmark symbol indicating the purpose of the aid, surrounded by a magenta circle and labeled V-AIS. Temporary AIS aids to navigation and stations remotely transmitting an AIS signal shall not be charted. See U.S. Chart No. 1, Section S, for additional information and examples.

(189.05) Add new graphic titled **Examples of Charted AIS Aids to Navigation** from back of this Subsection.

(L 423-2014) 1/15

Chapter 1

Examples of Charted AIS Aids to Navigation

COAST PILOT 1

Chapter 1

Examples of Charted AIS Aids to Navigation

COAST PILOT 3

Chapter 1

Examples of Charted AIS Aids to Navigation

COAST PILOT 4

Chapter 1

Examples of Charted AIS Aids to Navigation

COAST PILOT 5

TABLE 161.70(b)–VTS PORT ARTHUR PRECAUTIONARY AREAS			
Precautionary area name	**Radius**	**Center point latitude**	**Center point longitude**
Petco Bend [1]	2000 yards	30°00.80'N.	93°57.60'W.
Black Bayou [1]	2000 yards	30°00.00'N.	93°46.20'W.
Orange Cut [1]	2000 yards	30°03.25'N.	93°43.20'W.
Neches River Intersection [1]	2000 yards	29°58.10'N.	93°51.25'W.
Texaco Island Intersection [1]	2000 yards	29°49.40'N.	93°57.55'W.
Sabine-Neches Waterway	N/A	All waters of the Sabine-Neches Waterway between the Texaco Island Precautionary Area and the Humble Island Precautionary Area.	
[1] Precautionary Area encompasses a circular area of the radius denoted around the center point with the exception of the Sabine-Neches Waterway.			

TABLE 161.70(c)–INBOUND				
Designator	Geographic name	Geographic description	Latitude/Longitude	Notes
1	Sabine Bank Channel "SB" Buoy	Sabine Bank Sea Buoy	29°25.00'N, 93°40.00'W	Sailing Plan Report
2	Sabine Pass Buoys "29/30"	Sabine Pass Buoys "29/30"	29°35.90'N, 93°48.20'W	
3	Port Arthur Canal Light "43"	Keith Lake	29°46.50'N, 93°56.47'W	
4	North Forty GIWW Mile 279	North Forty	29°56.40'N, 93°52.10'W	
5	FINA Highline Neches River Light "19"	FINA Highline	29°59.10'N, 93°54.30'W	
6	Ready Reserve Fleet Highline	Channel at Cove Mid-Point	30°00.80'N, 93°59.90'W	
7	Sabine River MM 268	268 Highline	30°02.00'N, 93°44.30'W	

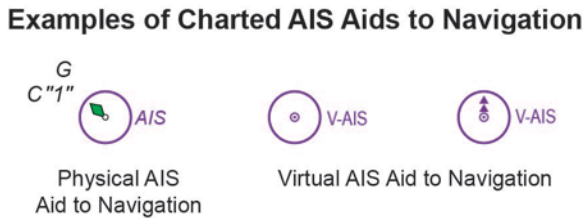
TABLE 161.70(d)–OUTBOUND				
Designator	Geographic name	Geographic description	Latitude/Longitude	Notes
1	Sabine River Light "2"	Black Bayou	30°00.00'N, 93°46.25'W	
2	Ready Reserve Fleet Highline	Channel at Cove Mid-Point	30°00.80'N, 93°59.90'W	
3	FINA Highline Neches River Light "19"	FINA Highline	29°59.09'N, 93°54.30'W	
4	GIWW Mile 285	The School House	29°52.70'N, 93°55.55'W	Sector Shift
5	Port Arthur Canal Light "43"	Keith Lake	29°46.50'N, 93°56.47'W	
6	Sabine Pass Buoys "29/30"	Sabine Pass Buoys "29/30"	29°35.90'N, 93°48.20'W	
7	Sabine Bank Channel "SB" Buoy	Sabine Bank Sea Buoy	29°25.00'N, 93°40.00'W	Final Report

TABLE 161.70(e)–EASTBOUND (ICW)				
Designator	Geographic name	Geographic description	Latitude/Longitude	Notes
1	GIWW Mile 295	ICW MM 295	29°47.25'N, 94°01.10'W	Sailing Plan Report
2	North Forty GIWW Mile 279	North Forty	29°56.40'N, 93°52.10'W	
3	Sabine River MM 268	268 Highline	30°02.20'N, 93°44.30'W	
4	GIWW Mile 260	260 Highline	30°03.50'N, 93°37.50'W	Final Report

TABLE 161.70(f)–WESTBOUND (ICW)				
Designator	Geographic name	Geographic description	Latitude/Longitude	Notes
1	GIWW Mile 260	260 Highline	30°03.50'N, 93°37.50'W	Sailing Plan Report
2	Sabine River Light "2"	Black Bayou	30°00.03'N, 93°46.18'W	
3	GIWW Mile 285	The School House	29°52.71'N, 93°55.55'W	Sector Shift
4	GIWW Mile 295	ICW MM 295	29°46.20'N, 94°02.60'W	Final Report

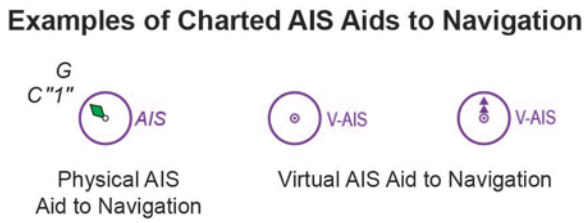
TABLE 161.70(g)–OFFSHORE SAFETY FAIRWAY				
Designator	Geographic name	Geographic description	Latitude/Longitude	Notes
1	Sabine Pass Safety Fairway–East	East Dogleg	29°35.00'N, 93°28.00'W	
2	Sabine Pass Safety Fairway–West	West Dogleg	29°28.00'N, 93°58.00'W	

Chapter 1



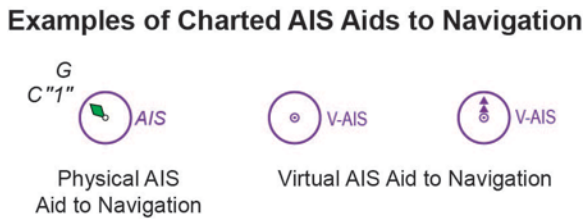
COAST PILOT 6

Chapter 1



COAST PILOT 8

Chapter 1



COAST PILOT 9

CORRECTIONS TO C. G. LIGHT LIST, VOLUME I ATLANTIC COAST, 2014

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
410	*Boston Lighted Whistle Buoy B*	42-22-42.16N 70-46-58.16W	Mo (A) W		6	Red and white stripes with red spherical topmark.	RACON: B (– • • •). AIS: MMSI 993672065. * 1/15
828.3	*WHOI Research Lighted Buoy Pioneer ISSM*	40-21-42.84N 70-52-40.92W *	Fl Y 4s			Yellow.	Private aid. 1/15
*828.7	*WHOI Lighted Research Buoy Pioneer OSSM*	39-56-09.48N 70-52-43.32W	Fl Y 4s			Yellow.	Private aid. 1/15
*828.8	*WHOI Lighted Research Buoy Pioneer ISSP*	40-21-53.16N 70-53-17.88W	Fl Y 4s			Yellow.	Private aid. 1/15
1255	Moose Rock Daybeacon M On ledge.						*Remove from list.* * 1/15
3420	Bay Ledge Daybeacon						*Remove from list.* * 1/15
9480	*Essex Bay Entrance Lighted Bell Buoy 1*	42-40-48.18N 70-42-17.34W	Fl G 4s		4	Green.	Removed when endangered by ice. * 1/15
10676	*Boston Lighted Whistle Buoy B*	42-22-42.16N 70-46-58.16W	Mo (A) W		6	Red and white stripes with red spherical topmark.	RACON: B(– • • •). AIS: MMSI993672065. * 1/15
10680	*- Entrance Lighted Whistle Buoy NC*	42-22-32.08N 70-54-17.83W	Mo (A) W		6	Red and white stripes with red spherical topmark.	RACON: N (– •). AIS: MMMSI 993672066. * 1/15
10815	- Anchorage Gong Buoy A	42-20-35.50N 70-57-33.70W				Yellow.	AIS: MMSI 993672071 (21). * 1/15
10852	- Anchorage Buoy C	42-20-38.88N 70-58-18.86W			4	Yellow can.	AIS: MMSI 993672073 (21). * 1/15
10855	*- Anchorage Lighted Buoy D*	42-20-32.84N 70-58-51.02W	Fl Y 4s		3	Yellow.	AIS: MMSI 993672074 (21). * 1/15
10860	- Anchorage Buoy E	42-20-12.77N 70-58-46.73W				Yellow nun.	AIS: MMSI 993672075 (21). * 1/15
10910	*- Lighted Buoy 10*	42-20-43.10N 71-00-43.50W	Fl R 6s		3	Red.	Replaced by nun when endangered by ice. AIS: MMSI 993672067. * 1/15
15030	*- Harbor Approach Lighted Buoy 2*	41-32-41.16N 70-34-10.25W	Fl R 2.5s		3 *	Red.	Maintained from May 1 to Nov. 1. 1/15
15235	- Channel Buoy 15						*Remove from list.* * 1/15
26680	*- Entrance Lighted Buoy 1*	40-54-51.85N 73-24-21.43W	Fl G 4s		3	Green.	Replaced by can when endangered by ice. * 1/15

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME I ATLANTIC COAST, 2014

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
34785	*- Lighted Whistle Buoy A*	40-27-27.99N 73-50-12.23W	Mo (A) W		7	Red and white stripes with red spherical topmark.	RACON: N(– •). AIS: MMSI 993672056 (21). * 1/15
34799	*- Lighted Buoy 4*	40-29-08.22N 73-53-59.09W	Fl R 4s		4	Red.	AIS: MMSI 993672057 (21). * 1/15
34815	*- Lighted Buoy 7*	40-30-03.55N 73-57-20.73W	Fl G 4s		4	Green.	AIS: MMSI 993672058. * 1/15
34860	*- Lighted Gong Buoy 13*	40-31-25.93N 74-00-53.00W	Q G		3	Green.	AIS: MMSI 993672059. * 1/15
34865	*- Lighted Bell Buoy 14*	40-31-40.62N 74-00-33.72W	Q R		3	Red.	AIS: MMSI 993672060. * 1/15
34880	*- Lighted Gong Buoy 17*	40-32-14.06N 74-01-36.50W	Q G		3	Green.	AIS: MMSI 993672061. * 1/15
34885	*- Lighted Bell Buoy 18*	40-32-22.20N 74-01-11.94W	Q R		3	Red.	AIS: MMSI 993672062. * 1/15
34903	*- Lighted Gong Buoy 21*	40-33-57.30N 74-02-05.34W	Fl G 4s		3	Green.	AIS: MMSI 993672063. * 1/15
34905	*- Lighted Buoy 22*	40-34-01.26N 74-01-39.61W	Fl R 4s		3	Red.	AIS: MMSI 993672064. * 1/15
35190	**Sandy Hook Point Light**	40-28-14.70N 74-01-07.20W	Iso W 6s	38	13	NB on skeleton tower.	* 1/15
35345	- Anchorage Buoy A	40-35-52.00N 74-01-42.50W				Yellow nun.	AIS: MMSI 993672068 (21). * 1/15
35385	- Anchorage Buoy C	40-34-58.18N 74-01-21.50W				Yellow nun.	AIS: MMSI 993672069 (21). * 1/15
35390	- Anchorage Buoy B	40-35-25.50N 74-01-32.50W				Yellow nun.	AIS: MMSI 993672070 (21). * 1/15
37755	*- Lighted Buoy 11*	41-07-32.59N 73-52-51.97W	Fl G 4s		4	Green.	Replaced by can from Nov. 1 to Apr. 1. AIS: MMSI 993672032. * 1/15
37765	*- Lighted Buoy 15*	41-08-46.94N 73-53-18.34W	Fl G 2.5s		4	Green.	Replaced by can from Nov. 1 to Apr. 1. AIS: MMSI 993672033. * 1/15
37820	*- Lighted Buoy 23*	41-12-07.41N 73-56-47.14W	Fl G 2.5s		4	Green.	Replaced by can from Nov. 1 to Apr. 1. AIS: MMSI 993672034. * 1/15
37850	*- Lighted Buoy 25*	41-13-16.26N 73-57-16.51W	Fl G 4s		4	Green.	Replaced by can from Nov. 1 to Apr. 1. AIS: MMSI 993672035. * 1/15

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME I ATLANTIC COAST, 2014

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
37930	- *Lighted Buoy 27*	41-16-34.24N 73-57-35.00W	Fl G 2.5s		4	Green.	Replaced by can from Nov. 1 to Apr. 1. AIS: MMSI 993672036. * 1/15
37970	- *Lighted Buoy 31*	41-18-47.25N 73-58-48.88W	Q G		3	Green.	Replaced by can from Nov. 1 to Apr. 1. AIS: MMSI 993672037. * 1/15
37975	- *Lighted Buoy 33* Southeast side of rocky shoal.	41-20-46.34N 73-57-50.50W	Fl G 2.5s		4	Green.	Year round radar reflective LIB. AIS: MMSI 993672038. * 1/15
38020	- *Lighted Buoy 46* On west side of rocks.	41-24-29.34N 73-57-43.50W	Fl R 2.5s		3	Red.	Replaced by nun from Nov. 1 to Apr. 1. AIS: MMSI 993672039. * 1/15
38090	- *Shoal Lighted Buoy A* On south side of shoal.	41-38-39.34N 73-56-54.50W	Fl (2+1) R 6s		3	Red and green bands.	Replaced by nun from Nov. 1 to Apr. 1. AIS: MMSI 993672040. * 1/15
38095	- *Shoal Lighted Buoy B* On south side of shoal.	41-40-43.34N 73-56-36.50W	Fl (2+1) R 6s		3	Red and green bands.	Replaced by nun from Nov. 1 to Apr. 1. AIS: MMSI 993672041. * 1/15
38165	- *Lighted Buoy 67*	41-52-29.75N 73-56-38.08W	Fl G 4s		3	Green.	Replaced by can from Nov. 15 to Apr. 1. AIS: MMSI 993672042. * 1/15
38180	- *Lighted Buoy 71*	41-54-21.35N 73-57-50.50W	Fl G 2.5s		3	Green.	Replaced by can from Nov. 15 to Apr. 1. AIS: MMSI 993672043. * 1/15
38182	- *Lighted Buoy 72*	41-54-23.72N 73-57-30.14W	Fl R2.5s		3	Red.	Replaced by nun from Dec. 1 to Apr. 1. AIS: MMSI 993672044. * 1/15
38305	- *Lighted Buoy 78* On west side of The Flat.	41-56-43.91N 73-57-40.98W	Fl R 4s		4	Red.	Year round radar reflective LIB. AIS: MMSI 993672045. * 1/15
38355	- *Lighted Buoy 87*	42-02-15.14N 73-55-56.86W	Fl G 2.5s		3	Green.	Replaced by can from Dec. 1 to Apr. 1. AIS: MMSI 993672046. * 1/15
38385	- *Lighted Buoy 95*	42-05-10.85N 73-55-53.93W	Fl G 2.5s		3	Green.	Replaced by can from Dec. 1 to Apr. 1. AIS: MMSI 993672047. * 1/15
38415	- *Lighted Buoy 104* Marks lower end of shoal.	42-08-21.66N 73-54-27.46W	Fl R 4s		3	Red.	Replaced by nun from Dec. 1 to Apr. 1. AIS: MMSI 993672048. * 1/15
38455	- *Lighted Buoy 111*	42-09-50.97N 73-53-16.24W	Fl G 4s		3	Green.	Replaced by can from Nov. 15 to Apr. 1. AIS: MMSI 993672049. * 1/15
38465	- *Lighted Buoy 113*	42-10-21.47N 73-52-42.76W	Fl G 2.5s		3	Green.	Replaced by can from Nov. 15 to Apr. 1. AIS: MMSI 993672050. * 1/15

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME I ATLANTIC COAST, 2014

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
38520	*- Lighted Buoy 122*	42-13-04.66N 73-51-07.50W	Fl R 4s		3	Red.	Replaced by nun from Dec. 1 to Apr. 1. AIS: MMSI 993672051. * 1/15
38545	*- Lighted Buoy 128*	42-14-24.70N 73-50-12.78W	Fl R 2.5s		3	Red.	Replaced by nun from Nov. 15 to Apr. 1. AIS: MMSI 993672052. * 1/15
38615	*- Lighted Buoy 143*	42-17-14.78N 73-47-01.61W	Fl G 4s		3	Green.	Replaced by can from Nov. 15 to Apr. 1. AIS: MMSI 993672053. * 1/15
38695	*- Lighted Buoy 159*	42-20-59.93N 73-47-24.86W	Fl G 2.5s		3	Green.	Replaced by can from Dec. 1 to Apr. 1. AIS: MMSI 993672054. * 1/15
38903	*- Lighted Buoy 201*	42-31-23.15N 73-45-48.32W	Fl G 2.5s		3	Green.	Replaced by can from Nov. 15 to Apr. 1. AIS: MMSI 993672055. * 1/15

CORRECTIONS TO C. G. LIGHT LIST, VOLUME II ATLANTIC COAST, 2014

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
23015	- Channel Warning Daybeacon A	37-58-23.61N 75-58-45.71W				NW on pile worded DANGER. *	1/15
23020	- Channel Warning Daybeacon B	37-58-15.69N 75-59-00.64W				NW on pile worded DANGER. *	1/15
24225	- Daybeacon 7	38-34-14.90N 75-38-28.12W *				SG on pile.	1/15
29445	*- Lighted Buoy 22*	34-42-15.58N 76-40-53.25W	Fl R 4s		5 *	Red.	1/15
30669.1 30914.1	UPPER MIDNIGHT CHANNEL SOUTH RANGE REAR PASSING LIGHTS (2)	33-59-54.33N 77-56-23.25W	Fl W 4s	15	4 *	Located on same structure as Midnight Channel South Range Rear Light.	Located on corners of platform. 1/15
30914.1 3069.1	UPPER MIDNIGHT CHANNEL SOUTH RANGE REAR PASSING LIGHTS (2)	33-59-54.33N 77-56-23.25W	Fl W 4s	15	4 *	Located on same structure as Upper Midnight Channel South Range Rear Light.	Located on corners of platform. 1/15

CORRECTIONS TO C. G. LIGHT LIST, VOLUME III ATLANTIC AND GULF COAST, 2014

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
4685	*- Lighted Buoy 3*	32-03-47.95N 80-49-49.35W	Q G		4 *	Green.	1/15

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME III ATLANTIC AND GULF COAST, 2014

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
*5295	Southern Nuclear Operating Company Obstruction Daybeacon A	33-08-52.00N 81-45-09.00W				NW on pile worded DANGER.	Private aid.	1/15
*5295.1	Southern Nuclear Operating Company Obstruction Daybeacon B	33-08-53.00N 81-45-09.01W				NW on pile worded DANGER.	Private aid.	1/15
6226	*Brunswick Point Cut Lighted Buoy 28*	31-06-58.87N 81-28-59.65W	Fl R 2.5s		5 *	Red.		1/15
7015	- LIGHT 53	30-48-13.32N 81-31-11.16W	Fl G 4s	16	5 *	SG on pile.		1/15
19940	*- Channel Lighted Buoy 8*	26-41-47.32N 82-17-56.07W	Q R		4 *	Red.		1/15

CORRECTIONS TO C. G. LIGHT LIST, VOLUME IV GULF OF MEXICO, 2014

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
130	*Science Applications International Corp. Instrument Lighted Buoy E1*						*Remove from list.* *	1/15
155	*Science Applications International Corp. Instrument Lighted Buoy C1*						*Remove from list.* *	1/15
200	*Science Applications International Corp. Instrument Lighted Buoy B1*						*Remove from list.* *	1/15
275	*Walter-105-6 Lighted Buoy* Marks subsea installation.						*Remove from list.* *	1/15
970	*Newfield-113-19 Lighted Buoy* Marks subsea installation.						*Remove from list.* *	1/15
6130	*- Lighted Buoy 7* *	30-09-54.24N 88-03-11.69W	Fl G 2.5s		4	Green.		1/15
6660	- LIGHT 76	30-37-45.39N 88-01-52.48W	Fl R 2.5s	17	3 *	TR on pile.	Ra ref.	1/15
6695	- LIGHT 82 200 feet outside channel limit.	30-38-58.82N 88-01-49.77W	Fl R 2.5s	17	3 *	TR on pile.	Ra ref.	1/15
23115 35505	- LIGHT 5	30-00-51.16N 93-45-36.52W *	Fl G 4s	17	4	SG-TY on skeleton tower on piles.		1/15
	***Add Heading: Callaway Bayou**							
*30963	- Daybeacon 1	30-08-28.20N 85-34-08.26W				SG on pile.	Private aid.	1/15

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME IV GULF OF MEXICO, 2014

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
*30963.01	- Daybeacon 3	30-08-32.63N 85-34-01.91W				SG on pile.	Private aid.	1/15
*30963.02	- Daybeacon 5	30-08-35.57N 85-34-00.59W				SG on pile.	Private aid.	1/15
*30963.03	- Daybeacon 6	30-08-27.76N 85-34-08.00W				TR on pile.	Private aid.	1/15
*30963.04	- Daybeacon 8	30-08-29.82N 85-34-03.39W				TR on pile.	Private aid.	1/15
*30963.05	- Daybeacon 10	30-08-34.88N 85-34-00.15W				TR on pile.	Private aid.	1/15
*30963.06	- Daybeacon 12	30-08-34.65N 85-33-57.98W				TR on pile.	Private aid.	1/15
*30963.07	- Daybeacon 14	30-08-33.08N 85-33-55.71W				TR on pile.	Private aid.	1/15
35505 23115	- LIGHT 5	30-00-51.16N 93-45-36.52W *	Fl G 4s	17	4	SG-TY on skeleton tower on piles.		1/15
38355.01	- Daybeacon 1	28-18-46.40N 96-40-28.53W *				SG on pile.	Ra ref.	1/15
38400.01	- Daybeacon 9	28-17-34.69N 96-42-10.41W *				SG on pile.	Ra ref.	1/15
38570.01	- Daybeacon 35	28-12-31.43N 96-49-10.33W *				SG on pile.	Ra ref.	1/15
39645	- LIGHT 91	27-54-01.24N 97-02-59.42W *	Fl G 6s	17	4	SG-SY on pile.	Ra ref.	1/15

CORRECTIONS TO C. G. LIGHT LIST, VOLUME VII GREAT LAKES, 2014

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
2755	- Buoy 3 Marks shoal.						*Remove from list.* *	1/15
2815	- Buoy 7						*Remove from list.* *	1/15
4085	- *East Basin Channel Lighted Buoy 3* *	41-31-55.43N 81-39-55.67W	Fl G 4s		4	Green.	Maintained from Apr. 14 to Dec. 1.	1/15
4120	- *East Basin Channel Lighted Buoy 4* *	41-31-36.31N 81-40-39.92W	Fl R 6s		4	Red.	Replaced by nun from Dec. 1 to Apr. 14.	1/15
4135	- *East Basin Channel Lighted Buoy 5* *	41-30-49.19N 81-41-52.35W	Fl G 4s		4	Green.	Replaced by can from Dec. 1 to Apr. 14.	1/15

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME VII GREAT LAKES, 2014

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
4140	*- East Basin Channel Lighted Buoy 6*	41-30-53.09N 81-41-56.22W	Fl R 6s		4	Red.	Replaced by nun from Dec. 1 to Apr. 14.	
	*							1/15
4155	*- East Basin Channel Lighted Buoy 8*	41-30-36.18N 81-42-26.02W	Fl R 4s		3	Red.	Year round lighted buoy.	
	*							1/15
13215	*Coyle Point Lighted Buoy Q28* (C)	46-16-16.96N 84-06-53.62W	Q R			Red.	Spar; winter marker.	
		*						1/15

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CORRECTIONS TO PUB 110, LIST OF LIGHTS, 2014 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
18945.2	-No.87.						*Remove from list.*	
							*	1/15
18945.4	-No. 88.						*Remove from list.*	
							*	1/15
18999.97	- -No. 82.						*Remove from list.*	
							*	1/15
19004 *G 0639*	Verga.	32° 58.7′ S 52° 33.6′ W	**Fl.W.** period 5s fl. 0.5s, ec. 4.5s	49 **15**	11	Red four-sided metal framework structure, white masonry base; 36.	**Radar reflector.**	
	*	*	*		*	*		1/15

CORRECTIONS TO PUB 111, LIST OF LIGHTS, 2014 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
6896 *K 3664*	-Entrance Islet.	42° 12.5′ S 145° 13.1′ E	**Fl.(3)W.R.** period 10s	34 **10**	W. 10 R. 8	White hexagonal wooden tower.	R. 159°-207°, W.-357°30′, R.-000°30′, W.-159°.	
		*	*					1/15
*7924.5 *K 2343.5*	- -Alfred Graving Dock Pier.	37° 51.7′ S 144° 54.8′ E	**2 F.R.** (horiz.)	75 **23**				
								1/15
*10444.2 *K 2989.986*	-Fishermans Landing Wharf Range, front.	23° 47.3′ S 151° 10.6′ E	**F.G.**				F.Y. by day.	
								1/15
*10444.3 *K 2989.9861*	- -Rear, 284°48′ from front.	23° 47.3′ S 151° 10.5′ E	**F.G.**				F.Y. by day.	
								1/15

CORRECTIONS TO PUB 112, LIST OF LIGHTS, 2014 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
3476 *M 7082.5*	-Groin, head.	38° 56.9′ N 139° 48.9′ E	**Fl.R.** period 4s	46 **14**	3	Red metal framework tower; 33.		
			*		*	*		1/15
3484 *M 7083*	-N. breakwater, head.	38° 55.6′ N 139° 48.4′ E	**Fl.(2)G.** period 7s	62 **19**	5	White round concrete tower; 46.	Visible 293°-219°.	
					*			1/15
3492 *M 7080*	Fukura Ko, S. breakwater.	39° 04.2′ N 139° 52.3′ E	**Fl.G.** period 4s	39 **12**	7	White tower; 28.		
		*	*		*	*		1/15

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CORRECTIONS TO PUB 112, LIST OF LIGHTS, 2014 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
3496 *M 7077*	Ugo Misaki.	39° 07.1′ N 139° 52.2′ E	**Fl.(2)W.** period 7s	223 **68**	12	White tower; 33.		
	*	*			*	*		1/15
3500 *M 7077.4*	Kosagawa Ko, No. 1 breakwater.	39° 07.3′ N 139° 52.5′ E	**Fl.R.** period 4s	39 **12**	3	Red tower; 30.		
		*	*		*	*		1/15
3508 *M 7076.3*	Tobi Shima Ko, middle breakwater.	39° 11.1′ N 139° 32.9′ E	**Fl.R.** period 3s	43 **13**	3	Red round concrete tower; 28.		
		*			*			1/15
3516 *M 7075*	Kisakata Ko, S. breakwater, head.	39° 12.1′ N 139° 53.8′ E	**Fl.G.** period 3s	32 **10**	3	White tower; 26.		
		*	*		*	*		1/15
3528 *M 7070*	-E. breakwater, head.	39° 17.8′ N 139° 57.5′ E	**Fl.G.** period 4s	39 **12**	3	White tower; 15.		
		*	*		*	*		1/15
3532 *M 7071*	-W. jetty, head.						*Remove from list.*	
							*	1/15
3536 *M 7069.4*	Honzyo.						*Remove from list.*	
							*	1/15
3540 *M 7069.6*	-Breakwater, head.	39° 23.5′ N 140° 00.6′ E	**Fl.G.** period 3s	46 **14**	7	White concrete column; 33.		
		*	*		*	*		1/15
3556 *M 7067*	Akita Ko, E. inner breakwater.	39° 46.1′ N 140° 01.7′ E	**Iso.G.** period 6s	42 **13**	5	White round concrete tower; 29.		
		*			*	*		1/15
3564 *M 7062*	Funakawa, S. breakwater, head.	39° 52.5′ N 139° 51.9′ E	**Fl.G.** period 4s	49 **15**	3	White round concrete tower; 46.		
		*	*		*	*		1/15
3568 *M 7063.5*	-Asiyawa, S. breakwater.	39° 52.7′ N 139° 51.4′ E	**Fl.R.** period 3s	36 **11**	3	Red round concrete tower; 31.		
		*			*	*		1/15
3580 *M 7064*	Wakimoto Ko, breakwater.	39° 54.1′ N 139° 53.6′ E	**Fl.(2)G.** period 6s	30 **9**	3	White tower; 18.		
		*	*	*	*	*		1/15
3592 *M 7059.5*	Shioga Misaki.	39° 51.5′ N 139° 45.4′ E	**Fl.W.** period 3s	59 **18**	13	White tower; 31.		
		*	*			*		1/15

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3600 *M 7058.8*	-S. side, on island.	39° 56.8′ N 139° 42.1′ E	**Fl.W.** period 5s	69 **21**	5	White column; 36.		
		*			*	*		1/15
3608 *M 7057.4*	Yunosiri Ko.	39° 58.6′ N 139° 45.1′ E	**Fl.R.** period 4s	39 **12**	3	Red tower; 36.		
		*	*		*			1/15
3612 *M 7057*	Kitaura Ko, breakwater.	39° 57.8′ N 139° 47.3′ E	**Fl.(2)R.** period 6s	36 **11**	5	Red tower; 28.	F.W. spotlight illuminates E. head of breakwater 120m NE.	
		*	*		*	*	*	1/15
3620 *M 7057.2*	-Kitaura Ko, detached breakwater, E. head.	39° 57.6′ N 139° 47.6′ E	**Fl.R.** period 3s	39 **12**	3	Red tower; 36.		
		*			*			1/15
3624 *M 7056*	Noshiro Minato, Yoneshiro Gawa entrance.	40° 12.8′ N 139° 59.7′ E	**Fl.R.** period 3s	46 **14**	3	Red round concrete tower; 36.		
		*			*			1/15
3632 *M 7055.8*	Iwadate Ko, No. 2 breakwater.	40° 23.9′ N 139° 58.4′ E	**F.Fl.G.** period 5s	49 **15**	F. 1 Fl. 3	White tower; 27.		
		*			*	*		1/15
3648 *M 7055.14*	Iwasaki Ko, breakwater.	40° 35.0′ N 139° 52.7′ E	**Fl.G.** period 5s	49 **15**	7	White round concrete tower; 30.		
			*		*	*		1/15
3656 *M 7054.2*	Fukaura, breakwater, head.						*Remove from list.*	
							*	1/15
3660 *M 7054*	-Outer breakwater, head.	40° 38.8′ N 139° 55.5′ E	**F.Fl.G.** period 6s	39 **12**	F. 2 Fl. 5	White round concrete tower; 36.		
					*	*		1/15
3664 *M 7053.8*	Toriisaki.	40° 44.8′ N 140° 00.0′ E	**Fl.(2)W.** period 8s	89 **27**	7	White round concrete tower, red bands; 33.		
*		*	*		*	*	*	1/15
3672 *M 7052*	Azigasawa Ko.	40° 47.2′ N 140° 12.7′ E	**Fl.R.** period 3s	42 **13**	7	Red round concrete tower; 36.		
		*	*		*			1/15
3688 *M 6673*	Kokomari Misaki.	41° 07.5′ N 140° 15.0′ E	**Fl.(2)W.** period 6s	255 **78**	7	White round concrete tower; 43.		
			*		*		*	1/15
3700 *M 6670*	-E. breakwater, head.						*Remove from list.*	
							*	1/15

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3708 *M 6658*	-Minmaya Ko, breakwater, head.	41° 11.9′ N 140° 26.2′ E	**Fl.R.** period 4s	43 **13**	3	Red tower; 32.		
			*		*	*		1/15
3714 *M 6657.5*	-Breakwater, head.	41° 13.6′ N 140° 33.7′ E	**Fl.R.** period 3s	36 **11**	3	Red tower; 27.		
					*	*		1/15
3716 *M 6654*	Tairadate, on Myojin Saki, W. side of entrance to Mutsu Kaiwan.	41° 10.5′ N 140° 38.6′ E	**Fl.W.** period 5s	75 **23**	7	White round concrete tower; 75.	Visible 166°-358°.	
					*	*		1/15
3720 *M 6656*	-E. breakwater.	41° 09.5′ N 140° 38.5′ E	**Fl.G.** period 3s	31 **9**	3	White round concrete tower; 27.		
			*		*	*		1/15
3724 *M 6651*	Kaunita Ko, breakwater, head.	41° 02.9′ N 140° 38.8′ E	**Fl.(2)G.** period 6s	43 **13**	5	White round concrete tower; 36.		
			*		*			1/15
3730 *M 6650*	-Aomori Ko.						*Remove from list.*	
							*	1/15
3731 *M 6648*	-Okidate, W. breakwater.	40° 50.9′ N 140° 43.2′ E	**Fl.R.** period 4s	36 **11**	5	Red tower; 31.		
*					*			1/15
3736 *M 6645.5*	-Tutumi Kawa, E. breakwater.	40° 51.3′ N 140° 49.1′ E	**Fl.R.** period 4s	26 **8**	3	Red tower; 16.		
*		*	*		*	*		1/15
3740 *M 6643.5*	Moura Ko.	40° 56.6′ N 140° 52.2′ E	**Fl.G.** period 4s	39 **12**	3	White round concrete tower; 36.		
			*		*	*		1/15
3764 *M 6642.5*	Iotasawa, E. breakwater.	40° 59.8′ N 140° 55.0′ E	**Fl.R.** period 4s	39 **12**	3	Red tower; 30.		
			*		*	*		1/15
3790 *M 6640.4*	Yokohama Ko, breakwater.	41° 05.2′ N 141° 14.6′ E	**Oc.R.** period 5s lt. 4s, ec. 1s	39 **12**	4	Red tower; 27.		
					*	*		1/15
3802 *M 6640.2*	Ominato Ko, breakwater, head.	41° 16.5′ N 141° 10.6′ E	**Fl.R.** period 3s	33 **10**	5	Red tower; 27.		
			*		*	*		1/15
3806 *M 6639.5*	Kawauchi Ko, breakwater.	41° 11.8′ N 140° 59.1′ E	**Fl.G.** period 4s	26 **8**	3	White tower; 18.		
*				*	*	*		1/15

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3809 *M 6638.4*	Wakinosawa Ko, breakwater.	41° 08.5′ N 140° 49.6′ E	**Fl.R.** period 3s	39 **12**	3	Red round concrete tower; 32.		
					*	*		1/15
3810 *M 6638*	Mutsu Benten Shima.	41° 07.2′ N 140° 48.9′ E	**Fl.(2)W.** period 7s	118 **36**	7	White round concrete tower, black band; 39.		
		*	*		*	*		1/15
3812 *M 6637*	Oyo Jima.	41° 23.9′ N 140° 48.8′ E	**Fl.W.** period 3s	61 **19**	5	White round concrete tower; 33.		
		*			*	*		1/15
3828.2 *M 6636*	-W. breakwater.	41° 31.9′ N 140° 54.2′ E	**Fl.R.** period 4s	43 **13**	3	Red tower; 31.		
		*	*		*			1/15
3828.4 *M 6636.2*	-N. breakwater.	41° 31.9′ N 140° 54.3′ E	**Fl.G.** period 3s	39 **12**	5	White tower; 31.		
		*	*		*			1/15
3834 *M 6633.8*	Oma Saki, SE.	41° 29.4′ N 140° 59.9′ E	**Fl.G.** period 4s	43 **13**	5	White tower; 29.		
		*			*	*		1/15
3836 *M 6633.5*	Ohata Ko, S. of E. breakwater.	41° 24.5′ N 141° 10.6′ E	**F.Fl.R.** period 4s	49 **15**	F. 2 Fl. 5	Red round concrete tower; 33.		
		*			*	*		1/15
3840 *M 6632*	-E. breakwater.	41° 24.8′ N 141° 10.1′ E	**Fl.G.** period 3s	36 **11**	3	White tower; 30.		
		*	*		*	*		1/15
3856 *M 6628.8*	Kukidono Saki.	41° 23.7′ N 141° 27.4′ E	**Fl.R.** period 3s	43 **13**	3	Red tower; 30.		
		*	*		*	*		1/15
3872 *M 6628.4*	-Shima Breakwater.	41° 08.0′ N 141° 23.7′ E	**Fl.(2)G.** period 6s	36 **11**	3	White tower; 33.		
		*			*	*		1/15
3876 *M 6628.2*	Siranuka Ko, N. breakwater.						*Remove from list.*	
							*	1/15
3878 *M 6627.3*	Mutu Ogawara Ko.	40° 55.6′ N 141° 24.0′ E	**F.Fl.(2)G.** period 7s	52 **16**	F. 2 Fl. 5	White tower; 39.		
*		*			*	*		1/15
3888 *M 6626*	Oka-Misawa AVIATION LIGHT.	40° 41.2′ N 141° 21.6′ E	**Al.Fl.(2+1)W.G.** period 10s	230 **70**	W. 8 G. 6	Metal framework tower.		
					*	*		1/15

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3892 *M 6625*	-Hachinohe, AVIATION LIGHT.	40° 32.8′ N 141° 28.3′ E	**Al.Fl.W.G.** period 10s	259 **79**	W. 9 G. 6	Metal framework tower; 141.		
		*		*	*	*		1/15
3904 *M 6624.8*	-N. breakwater, head.	40° 33.5′ N 141° 31.7′ E	**Fl.(2)R.** period 9s	59 **18**	5	Red concrete tower; 52.		
					*	*		1/15
3916 *M 6624.7*	- -W. breakwater, head.	40° 32.3′ N 141° 31.2′ E	**Fl.R.** period 3s	43 **13**	3	Red tower; 30.	Bridge 620 meters SE. marked by F.Y., Iso.G., Iso.W. and Iso.R.	
		*			*	*		1/15
3920 *M 6622*	-N. detached breakwater, W. head.	40° 32.2′ N 141° 33.1′ E	**Fl.G.** period 3s	43 **13**	7	White round concrete tower; 31.		
			*		*	*		1/15
3922 *M 6623.6*	-Aomori, breakwater, S. head.	40° 32.2′ N 141° 32.0′ E	**Fl.R.** period 5s	43 **13**	5	Red tower; 31.		
		*			*			1/15
3936 *M 6624*	-Inner breakwater, N. head.	40° 32.1′ N 141° 33.1′ E	**Fl.(2)R.** period 6s	39 **12**	3	Red tower; 33.		
		*	*		*	*		1/15
3940 *M 6624.4*	-Kabu Shima Jetty.	40° 32.2′ N 141° 33.3′ E	**Fl.G.** period 6s	33 **10**	3	White tower; 28.		
		*	*		*	*		1/15
3941 *M 6619*	Ozya Ko.	40° 28.4′ N 141° 39.1′ E	**Fl.R.** period 3s	33 **10**	3	Red tower; 18.		
		*			*	*		1/15
3944 *M 6618*	Hajikami.	40° 27.1′ N 141° 40.8′ E	**Fl.W.** period 4s	72 **22**	7	White tower; 36.		
		*			*			1/15
3948 *M 6615*	Taneti Ko, E. breakwater.	40° 24.4′ N 141° 43.4′ E	**Fl.(2)R.** period 6s	43 **13**	3	Red tower; 31.		
		*			*	*		1/15
3952 *M 6614*	Taneti Ko.	40° 24.0′ N 141° 43.1′ E	**Dir.F.W.R.G.**	53 **16**	W. 13 R. 10 G. 11	White round concrete tower; 46.	R. 255°30′-257°30′, W.-261°30′, G.-263°30′. Identification light Q.Y.	
					*		*	1/15
3956 *M 6612*	Yagi Ko, entrance Range, front.	40° 20.8′ N 141° 45.7′ E	**F.G.**	95 **29**	5	White round concrete tower, white triangular daymark point up; 24.		
					*	*		1/15

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3960 *M 6612.1*	-Rear, 490 meters 236°42′ from front.	40° 20.8′ N 141° 45.5′ E	**F.G.**	154 **47**	5	White round concrete tower, white triangular daymark point up; 36.		
					*	*		1/15
3968 *M 6613.3*	-Yagi Ko.	40° 20.8′ N 141° 46.4′ E	**Fl.R.** period 3s	46 **14**	5	Red tower; 33.		
			*		*	*		1/15
3972 *M 6608*	Ushi Shima.	40° 13.2′ N 141° 50.1′ E	**Iso.W.** period 6s	233 **71**	12	White tower; 36.	Auxiliary F.W. illuminates reef about 0.7 mile SE.	
	*	*			*	*		1/15
3976 *M 6610*	-N. breakwater.	40° 11.4′ N 141° 48.2′ E	**Fl.(2)R.** period 6s	43 **13**	3	Red tower; 36.		
		*	*		*	*		1/15
3978 *M 6610.3*	-Outer breakwater.	40° 11.4′ N 141° 48.8′ E	**Fl.R.** period 3s	46 **14**	5	Red tower; 26.		
		*	*		*	*		1/15
3980 *M 6609*	-S. breakwater.	40° 11.1′ N 141° 48.3′ E	**F.Fl.G.** period 6s	49 **15**	F. 2 Fl. 5	White tower; 33.		
		*			*	*		1/15
3984 *M 6607.5*	Noda Wan.	40° 06.9′ N 141° 50.1′ E	**F.Fl.R.** period 3s	43 **13**	F. 1 Fl. 3	Red tower; 31.		
		*			*			1/15
3988 *M 6607*	Otanabe Ko, breakwater, head.	40° 00.6′ N 141° 54.7′ E	**Fl.G.** period 3s	46 **14**	3	White tower; 31.		
			*		*	*		1/15
3992 *M 6606*	**Ma (Kuro) Saki.**	40° 00.6′ N 141° 56.0′ E	**Fl.W.** period 5s	469 **143**	**19**	White tower; 39.	Visible 082°-332°.	
		*			*	*		1/15
3996 *M 6605.8*	Rikutyu, Benten Zaki.	39° 56.9′ N 141° 57.6′ E	**Fl.(2)W.** period 7s	321 **98**	7	White round concrete tower, red bands; 33.		
	*	*			*	*		1/15
4000 *M 6605.4*	Shimano Koshi, breakwater.	39° 55.0′ N 141° 56.6′ E	**Fl.G.** period 3s	46 **14**	5	White tower; 31.		
		*	*		*	*		1/15
4004 *M 6605.2*	**Omoto.**						*Remove from list.*	
							*	1/15
4012 *M 6604.5*	-Taro Ko.	39° 43.7′ N 141° 58.8′ E	**Fl.R.** period 3s	46 **14**	5	Red tower; 29.		
			*		*	*		1/15

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4040 *M 6596*	Kasano Hana.	39° 28.6′ N 142° 00.7′ E	**Fl.W.** period 4s	36 **11**	5	White tower; 25.		
		*			*	*		1/15
4044 *M 6597.35*	Yamada, breakwater, head.	39° 27.9′ N 141° 57.5′ E	**F.Fl.G.** period 4s	39 **12**	F. 1 Fl. 3	White round concrete tower; 30.		
		*			*	*		1/15
4048 *M 6597*	Tarai Shima.	39° 27.4′ N 141° 59.7′ E	**Fl.(2)W.** period 5s	30 **9**	3	ISOLATED DANGER BRB, beacon, topmark; 24.		
		*			*			1/15
4052 *M 6597.3*	Orikasa, N. breakwater.	39° 27.2′ N 141° 57.8′ E	**F.Fl.(2)R.** period 8s	33 **10**	F. 1 Fl. 3	Red tower; 30.		
		*			*	*		1/15
4056 *M 6597.2*	Oura Ko, breakwater, head.	39° 26.9′ N 142° 00.1′ E	**Fl.G.** period 3s	20 **6**	3	White tower; 15.		
			*	*	*	*		1/15
4060 *M 6595.1*	O Shima.	39° 24.0′ N 141° 59.8′ E	**Fl.W.** period 3s	92 **28**	5	White round concrete tower; 33.		
		*			*	*		1/15
4080 *M 6595.24*	-W. breakwater.						*Remove from list.*	
							*	1/15
4084 *M 6595*	Otuti Ko.	39° 20.9′ N 141° 55.8′ E	**Fl.R.** period 3s	36 **11**	5	Red tower; 36.		
		*	*		*	*		1/15
4092 *M 6594.5*	Shirahama, breakwater, head.	39° 19.8′ N 141° 56.6′ E	**Fl.G.** period 3s	40 **12**	3	White tower; 30.		
		*			*	*		1/15
4096 *M 6594*	Ohako Saki.	39° 21.0′ N 141° 59.7′ E	**Fl.(4)W.** period 15s	233 **71**	7	White tower; 30.		
*		*			*	*		1/15
4100 *M 6593*	Naka Ne, on rock.	39° 18.2′ N 141° 54.1′ E	**Fl.(2)W.** period 5s	36 **11**	3	ISOLATED DANGER BRB, beacon, topmark; 33.		
		*			*			1/15
4104 *M 6593.2*	Ryoishi Ko, breakwater.	39° 18.4′ N 141° 53.5′ E	**F.Fl.G.** period 5s	31 **9**	F. 2 Fl. 5	White tower; 16.		
		*			*	*		1/15
4152 *M 6587*	Kobe Saki.	39° 06.4′ N 141° 55.1′ E	**Fl.W.** period 5s	407 **124**	7	White tower; 33.		
*		*			*	*	*	1/15

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4162 *M 6586.2*	Onizawa Ko.	39° 05.2′ N 141° 48.9′ E	**Iso.G.** period 4s	23 **7**	3	White tower; 15.		
					*	*		1/15
4168 *M 6585*	-S. breakwater.						*Remove from list.*	
							*	1/15
4172 *M 6582*	Koori Saki.	39° 01.1′ N 141° 45.5′ E	**Fl.W.** period 4s	157 **48**	7	White tower; 39.		
	*	*			*	*		1/15
4188 *M 6583.5*	-Sango Shima, S. extremity.	39° 02.1′ N 141° 43.6′ E	**Fl.W.** period 3s	63 **19**	3	White round concrete tower; 33.		
		*			*			1/15
4196 *M 6582.9*	Marumori.	39° 01.9′ N 141° 42.8′ E	**Dir.F.W.R.G.**	174 **53**	W. 14 R. 13 G. 13	White tower; 46.	R. 309°-310°, W.-312°, G.-313°. Reserve light range 4M.	
*	*		*	*	*	*	*	1/15
4200 *M 6583.1*	-Rear, about 200 meters 309° from front.						*Remove from list.*	
							*	1/15
4208 *M 6581*	Goishi Saki.	38° 59.0′ N 141° 44.7′ E	**Fl.(3)W.** period 13s	128 **39**	5	White tower; 33.		
	*				*	*		1/15
4214 *M 6572*	Nesaki, N. breakwater, head.	38° 56.5′ N 141° 42.6′ E	**Fl.(2)R.** period 6s	30 **9**	3	Red tower; 18.		
					*	*		1/15
19693 *F 3435.4*	Porto Interior Channel, M11.	22° 10.8′ N 113° 33.8′ E	**Fl.(2)G.** period 5s fl. 0.5s, ec. 1s fl. 0.5s, ec. 3s	30 **9**	3	White square column, green bands.		
	*		*		*	*		1/15
19696 *F 3435*	-M9.	22° 10.8′ N 113° 33.8′ E	**Fl.(2)G.** period 5s fl. 0.5s, ec. 1s fl. 0.5s, ec. 3s	30 **9**	3	White square column, green bands.		
	*	*			*	*		1/15
19699 *F 3435.6*	-M12.	22° 10.8′ N 113° 33.8′ E	**Fl.(2)R.** period 6s	30 **9**	3	White square column, red bands.		
	*		*		*	*		1/15
19702 *F 3435.2*	-M10.	22° 10.9′ N 113° 33.8′ E	**Fl.(2)R.** period 6s fl. 0.5s, ec. 1s fl. 0.5s, ec. 4s	30 **9**	3	White square column, red bands.		
	*		*		*	*		1/15

Note: *Asterisks (*****) indicate that column(s) in which a correction has been made or new information added. Denotes a new entry when preceding the station number.*

CORRECTIONS TO PUB 113, LIST OF LIGHTS, 2014 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
8196 *E 0940*	**-Isola Razzoli.**	41° 18.4′ N 9° 20.4′ E	**Fl.W.R.** period 2.5s fl. 0.1s, ec. 2.4s	253 **77**	W. **19** R. **15**	Stone tower; 39.	W. 022°-092°, R.-137°, W.-237°, R.-320°. Reserve light range W.-17M, R.-13M. **AIS** (MMSI No 992471125).
	-RACON		**M(– –)** period 30s		6		
							* 1/15
8216 *E 1138*	**- -Porto Torres.**	40° 50.1′ N 8° 23.9′ E	**L.Fl.(2)W.** period 10s fl. 2s, ec. 2s fl. 2s, ec. 4s	147 **45**	**16**	Tower on two-story white house; 66.	Reserve light range 12M. **AIS** (MMSI No 992471136).
							* 1/15
8276 *E 1124*	**-Capo Caccia.**	40° 33.6′ N 8° 09.8′ E	**Fl.W.** period 5s fl. 0.2s, ec. 4.8s	610 **186**	**24**	White tower on three-story dwelling; 79.	Reserve light range 18M. **AIS** (MMSI No 992471128).
							* 1/15
8432 *E 1090*	**Capo Sandalo.**	39° 08.8′ N 8° 13.5′ E	**Fl.(4)W.** period 20s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 12.3s	438 **134**	**24**	White round tower on two story stone dwelling; 98.	Aeromarine light. Visible 322°-191° and in Canale di Pietro 311°-322°. Reserve light range 18M. **AIS** (MMSI No 992471135).
							* 1/15
8440 *E 1080*	**-Saint Antioco Ponti.**	39° 03.5′ N 8° 28.4′ E	**Fl.W.** period 5s fl. 1s, ec. 4s	75 **23**	**15**	White tower on two-story dwelling; 72.	Reserve light range 11M. **AIS** (MMSI No 992471134).
							* 1/15
8448 *E 1072*	**Capo Spartivento.**	38° 52.6′ N 8° 50.7′ E	**Fl.(3)W.** period 15s fl. 0.2s, ec. 3.5s fl. 0.2s, ec. 3.5s fl. 0.2s, ec. 7.4s	265 **81**	**22**	Red tower on two-story dwelling; 62.	Visible 240°-085°, and 093°-094°. Reserve light range 18M. **AIS** (MMSI No 992471133).
							* 1/15
8532 *E 1054*	**-Capo Sant' Elia.**	39° 11.0′ N 9° 08.9′ E	**Fl.(2)W.** period 10s fl. 0.2s, ec. 3.1s fl. 0.2s, ec. 6.5s	230 **70**	**21**	White round tower, black bands, attached to two-story dwelling; 69.	Reserve light range 18M. **AIS** (MMSI No 992471132).
							* 1/15
8541 *E 1052.7*	-NE.						*Remove from list.*
							* 1/15
8564 *E 1032*	**Capo Bellavista.**	39° 55.8′ N 9° 42.8′ E	**Fl.(2)W.** period 10s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 7.3s	541 **165**	**26**	White building, black bands; 62.	Reserve light range 18M. **AIS** (MMSI No 992471131).
			F.R.	476 **145**	6	Concrete pylon.	Visible 164°-177°30′.
						*	* 1/15

Note: *Asterisks (*) indicate that column(s) in which a correction has been made or new information added.*
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CORRECTIONS TO PUB 113, LIST OF LIGHTS, 2014 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
8588 *E 1030*	**Capo Comino.**	40° 32.0′ N 9° 50.0′ E	**Fl.W.** period 5s fl. 1s, ec. 4s	85 **26**	**15**	White quadrangular masonry tower; 66.	Visible 148°-010°. Reserve light range 11M. **AIS** (MMSI No 992471130).	
							*	1/15
8600 *E 1028*	**-Isola Tavolara.**	40° 55.2′ N 9° 44.2′ E	**L.Fl.(2)W.** period 10s fl. 2s, ec. 2s fl. 2s, ec. 4s	236 **72**	**15**	White octagonal masonry structure; 23.	Visible 050°-341°. Reserve light range 12M. **AIS** (MMSI No 992471129).	
							*	1/15
8616 *E 1014*	**- -Isola della Bacon.**	40° 55.2′ N 9° 34.1′ E	**L.Fl.W.** period 5s fl. 2s, ec. 3s	80 **24**	**15**	White tower on two-story dwelling; 72.	Visible 180°-264°. Reserve light range 11M. **AIS** (MMSI No 992471127).	
	*		*		*		*	1/15
8724 *E 1002*	**Capo Ferro.**	41° 09.3′ N 9° 31.4′ E	**Fl.(3)W.** period 15s fl. 0.3s, ec. 2.7s fl. 0.3s, ec. 2.7s fl. 0.3s, ec. 8.7s	170 **52**	**24**	White round tower on two-story dwelling; 59.	Reserve light range 18M. Aeromarine light. **AIS** (MMSI No 992471126).	
			Oc.R. period 5s lt. 4s, ec. 1s	137 **42**	8	Window in same tower; 26.	Visible 189°-203° over Secca delle Bisce and dei Monaci.	
						*	*	1/15
9676 *E 1750*	**Capo Bonifati.**	39° 32.5′ N 15° 53.3′ E	**Fl.(2)W.** period 10s fl. 1s, ec. 2s fl. 1s, ec. 6s	207 **63**	**15**	White tower on hut; 23.	Reserve light range 11M. **AIS** (MMSI No 992471049).	
							*	1/15
9680 *E 1752*	**Paola.**	39° 21.5′ N 16° 02.0′ E	**Fl.(3)W.** period 15s fl. 1s, ec. 2s fl. 1s, ec. 2s fl. 1s, ec. 8s	175 **53**	**15**	Tower; 56.	Visible 315°-160°. Reserve light range 11M. **AIS** (MMSI No 992471050).	
							*	1/15
9684 *E 1756*	**-Capo Suvero.**	38° 57.1′ N 16° 09.5′ E	**Fl.(2)W.** period 10s fl. 1s, ec. 2s fl. 1s, ec. 6s	190 **58**	**16**	White tower on building; 82.	Visible 280°-155°. Reserve light range 12M. **AIS** (MMSI No 992471051).	
							*	1/15
9704 *E 1762*	**-Capo Vaticano.**	38° 37.1′ N 15° 49.7′ E	**Fl.(4)W.** period 20s fl. 0.2s, ec. 3.1s fl. 0.2s, ec. 3.1s fl. 0.2s, ec. 3.1s fl. 0.2s, ec. 9.9s	354 **108**	**24**	White round tower on one-story building; 26.	Obscured in the Golfo di Santa Eufemia when bearing E. of 205°. Reserve light range 18M. **AIS** (MMSI No 992471052).	
							*	1/15
9708 *E 1766*	**-Scilla.**	38° 15.3′ N 15° 42.9′ E	**Fl.W.** period 5s fl. 0.3s, ec. 4.7s	236 **72**	**22**	Round tower; 20.	Reserve light range 18M. **AIS** (MMSI No 992471053).	
							*	1/15

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CORRECTIONS TO PUB 113, LIST OF LIGHTS, 2014 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
10392 *E 1838*	**Capo Santa Croce.**	37° 14.5′ N 15° 15.5′ E	**L.Fl.(2)W.** period 12s fl. 2s, ec. 2s fl. 2s, ec. 6s	128 **39**	**16**	White round tower; 89.	Visible 146°-021°. Reserve light range 10M. **AIS** (MMSI No 992471059).	
							*	1/15
10400 *E 1828*	**-Sciara Biscari.**	37° 29.2′ N 15° 05.2′ E	**Fl.W.** period 5s fl. 0.4s, ec. 4.6s	102 **31**	**22**	White round tower; 92.	Reserve light range 18M. **AIS** (MMSI No 992471058).	
							*	1/15
10432 *E 1826*	**Capo Molini.**	37° 34.6′ N 15° 10.6′ E	**Fl.(3)W.** period 15s fl. 0.2s, ec. 2.8s fl. 0.2s, ec. 2.8s fl. 0.2s, ec. 8.8s	138 **42**	**22**	White hut on building; 66.	Reserve light range 18M. **AIS** (MMSI No 992471057).	
							*	1/15

CORRECTIONS TO PUB 115, LIST OF LIGHTS, 2014 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
320 *B 2313*	-Helleskjaeret.						*Remove from list.*	
							*	1/15
392 *B 2362*	-Vestfjorden, Bjornnes.						*Remove from list.*	
							*	1/15

CORRECTIONS TO PUB 116, LIST OF LIGHTS, 2014 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
6672 *C 2968*	**-Hel.**	54° 36.0′ N 18° 48.8′ E	**Iso.W.** period 10s	128 **39**	**17**	Red octagonal masonry tower; 126.	Visible 151°-102°. **AIS.** Storm signal.	
				*				1/15
12660 *C 3616.1*	- -Rear, 671 meters 259°18' from front.	58° 08.9′ N 22° 31.5′ E	**Iso.W.** period 4s	126 **38**	9	White round concrete tower, black bands; 119.	Intensified on range line. Visible 135°-045°.	
							*	1/15
12765 *C 3778*	Madise Range, front.	59° 17.6′ N 24° 07.0′ E	**Iso.W.** period 2s	85 **26**	7	Metal framework tower, white rectangular daymark, black stripe; 69.	Visible 135°-145°.	
			Iso.W. period 2s	85 **26**	5		W. 095°-135°, W. 145°-185°.	
	*		*	*	*		*	1/15
12765.1 *C 3778.1*	-Rear, 593 meters 140° from front.	59° 17.4′ N 24° 07.4′ E	**Iso.W.** period 4s	108 **33**	8	Church steeple; 115.	Visible 135°-145°.	
	*						*	1/15

Note: *Asterisks (*) indicate that column(s) in which a correction has been made or new information added.*
Denotes a new entry when preceding the station number.

PUBLICATIONS AFFECTED BY NOTICE TO MARINERS
THROUGH NM 1/15

Note: * indicates New Edition/New Publication; ** indicates Publication Canceled; N indicates Not For Sale

Publication	Ed.	Notice to Mariners No.
NGA/DLIS CATALOGS CATCDNMCI		
Region 1	2014	43*,44,45,47,48,49, 51/14;1/15
Region 2	2014	43*,45,46,47,48,49, 51/14
Region 3	2014	43*,45/14
Region 4	2014	43*,47,48,49,52/14
Region 5	2014	43*,44,48,49/14
Region 6	2014	43*,47/14
Region 7	2014	43*,45/14
Region 8	2014	43*,44,48,49/14
Region 9	2014	43*,48,49/14
Miscellaneous Charts and Publications	2014	43*,44,45,46,47,48, 49,50,51,52/14
NGA LIST OF LIGHTS		
PUB 110	2014	20*,22,23,24,27,30, 31,33,35,36,41,42, 43,44,46,47,48/14; 1/15
PUB 111	2014	31*,33,34,35,36,39, 41,42,44,48,49, 51/14;1/15
PUB 112	2014	46*,48,49,50,51, 52/14;1/15
PUB 113	2014	42*,42,43,44,45,46, 47,48,49,50,51, 52/14;1/15
PUB 114	2014	23*,24,25,30,41,45, 52/14
PUB 115	2014	36*,45,48,52/14; 1/15
PUB 116	2014	28*,32,38,41,42,43, 46,47,49,51/14;1/15
SAILING DIRECTIONS		
PUB 120	2014	25/14*
PUB 123	2014	36/14*
PUB 124	2014	34/14*
PUB 125	2014	39*,49/14
PUB 126	2014	32/14*
PUB 127	2014	33/14*
PUB 131	2014	41/14*
PUB 132	2014	48/14*
PUB 140	2014	13/14*
PUB 141	2014	13/14*
PUB 142	2013	7/13*
PUB 143	2014	45/14*
PUB 145	2014	42/14*
PUB 146	2014	43/14*
PUB 147	2013	20/13*
PUB 148	2014	52/14*
PUB 153	2014	50/14*
PUB 154	2014	38/14*
PUB 155	2014	33/14*
PUB 157	2014	37*,49/14
PUB 158	2014	43/14*
PUB 159	2014	25/14*
PUB 160	2014	36*,46/14
PUB 161	2014	48/14*
PUB 162	2014	34/14*
PUB 163	2011	35/11*
PUB 164	2011	43/11*
PUB 171	2013	26/13*
PUB 172	2014	33*,49/14
PUB 173	2014	48/14*
PUB 174	2014	49/14*
PUB 175	2014	38/14*
PUB 180	2014	38/14*;1/15
PUB 181	2014	36/14*
PUB 182	2013	42/13*
PUB 183	2014	44/14*
PUB 191	2014	45/14*
PUB 192	2014	32*,49/14
PUB 193	2014	33/14*;1/15
PUB 194	2014	42/14*
PUB 195	2014	46/14*
PUB 200	2011	13/11*
USCG LIGHT LIST VOLUMES I - VII		
VOLUME I	2014	22*,23,24,25,26,27, 29,30,31,32,33,34, 35,36,37,38,39,40, 41,42,43,44,45,46, 47,48,49,50,52/14; 1/15
VOLUME II	2014	22*,23,24,25,26,27, 29,30,31,32,33,34, 35,36,37,38,39,40, 41,42,43,44,45,46, 47,48,49,50,51, 52/14;1/15
VOLUME III	2014	24*,25,26,28,29,30, 31,32,33,34,35,36, 37,38,39,40,41,42, 43,44,45,46,47,48, 49,50,51,52/14;1/15
VOLUME IV	2014	24*,25,26,28,29,30, 31,32,33,35,36,37, 38,39,40,41,42,43, 44,45,46,47,48,49, 50,51,52/14;1/15
VOLUME V	2014	23/14*
VOLUME VI	2014	23*,24,25,26,28,29, 30,31,32,33,34,35, 36,37,38,39,40,41, 42,43,44,45,46,47, 48,49,50,51,52/14
VOLUME VII	2014	23*,24,25,26,28,29, 30,31,32,33,34,35, 36,37,38,40,41,42, 43,44,45,47,49,50, 52/14;1/15
DIGITAL PUBS - QUARTERLY		
DIGITAL PUBS - QUARTERLY	2014	N44/14*
FLEET GUIDES		
PUB 940	2013	N1/14*
PUB 941	2013	N1/14*
NOS MISCELLANEOUS PUBLICATIONS		
CATALOG A	2012	22/12*
CATALOG G	2012	18/12*
CATALOG K	2012	34/12*
CATALOG L	2012	27/12*
CATALOG P	2012	32/12*
ALMANACS		
AIR ALMANAC	2015	29/14*
NAUTICAL ALMANAC	2015	25/14*
COAST PILOT		
COAST PILOT 1	44	12*,14,20,24,28,32, 34,37,45,47,49/14; 1/15
COAST PILOT 2	44	43*,50/14
COAST PILOT 3	47	52/13*;14,19,24,25, 26,29,30,32,34,37, 48,50/14;1/15
COAST PILOT 4	46	39*,47,49/14;1/15
COAST PILOT 5	42	22*,23,25,26,28,32, 34,37,41,42,43/14; 1/15
COAST PILOT 6	44	6*,10,12,13,14,19, 21,28,29,32,34,35, 37,41,42,44,45,46, 50/14;1/15
COAST PILOT 7	47	52/14*
COAST PILOT 8	36	25*,30,32,34/14; 1/15
COAST PILOT 9	32	34/14*;1/15
RADIO NAVIGATIONAL AIDS		
PUB 117	2014	51/14*
AMERICAN PRACTICAL NAVIGATOR		
PUB 9	2002	36/02*;14,38/03; 40/05
INTERNATIONAL CODE OF SIGNALS		
PUB 102	2003	20/03*
WORLD PORT INDEX		
PUB 150	2015	51/14*
DISTANCES BETWEEN PORTS		
PUB 151	2001	4/02*
RADAR NAVIGATION AND MANEUVERING BOARD MANUAL		
PUB 1310	2001	51/01*
SIGHT REDUCTION TABLES (MARINE)		
PUB 229 VOL. 1	1970	11/71*
PUB 229 VOL. 2	1970	11/71*
PUB 229 VOL. 3	1970	7/71*
PUB 229 VOL. 4	1970	3/71*
PUB 229 VOL. 5	1970	3/71*
PUB 229 VOL. 6	1970	23/70*
SIGHT REDUCTION TABLES (AIR)		
PUB 249 VOL. 1	2007	38/07*
PUB 249 VOL. 2	1952	46/52*
PUB 249 VOL. 3	1952	46/52*
CHART NO. 1		
CHART NO. 1	2013	25/13*;49/14
CHART NO. 4		
CHART NO. 4	1988	N23/91*
ATLAS OF PILOT CHARTS		
PUB 106	2002	42/03*
PUB 107	1998	30/99*
PUB 109	2001	49/02*
USCG NAVIGATION RULES		
Navigation Rules	2014	38*,48,51/14
NOS TIDE TABLES		
EAST PACIFIC	2015	N52/14*
EUROPE/WEST AFRICA	2015	N52/14*
WEST ATLANTIC	2015	N52/14*
W PACIFIC/INDIAN OCEAN	2015	N52/14*
TIDAL CURRENT TABLES		
ATLANTIC	2015	N52/14*
PACIFIC	2015	N52/14*

BROADCAST WARNINGS

Details concerning the particulars of the broadcasting of radio navigational warnings may be found in Radio Navigational Aids, Pub. 117.

NAVAREA IV

Messages in force 221600Z December 2014:

2012 series	2014 series	407(14)	778(24)	869(11)	1014(11)
286(GEN)	72(11)	408(14)	829(11)	870(24)	1062(11)
610(GEN)	104(28)	409(14)	835(11)	892(26)	1073(GEN)
2013 series	116(28)	482(24)	836(28)	967(GEN)	1074(24,25)
286(24)	157(28)	509(24)	852(24,25)	974(GEN)	1076(GEN)
298(28)	200(24,25)	678(11)	857(11)	983(28)	
640(28)	335(14)	769(15)	864(24)	991(24)	

The summary of all NAVAREA IV messages in force as of 17 December 2014 is given in Section III of NM 52/14.

NAVAREA IV WARNINGS issued from 171500Z to 221600Z December 2014.

1066/14 thru 1072/14. CANCELED.

1073/14(GEN).
1. NAVAREA IV WARNINGS IN FORCE 200900Z DEC 14.
2012 SERIES: 286(GEN), 610(GEN).
2013 SERIES: 286(24), 298(28), 640(28).
2014 SERIES: 72(11), 104(28), 116(28), 157(28), 200(24,25), 335(14), 407(14), 408(14), 409(14), 482(24), 509(24), 678(11), 769(15), 778(24), 829(11), 835(11), 836(28), 852(24,25), 857(11), 864(24), 869(11), 870(24), 892(26), 967(GEN), 974(GEN), 980(24,25), 983(28), 991(24), 1014(11), 1062(11), 1072(GEN).
2. THE SUMMARY OF ALL NAVAREA IV WARNINGS IN FORCE AS OF 19 DEC 2013 IS GIVEN IN SEC III OF NM 52/13. WARNINGS ISSUED DURING THE SUBSEQUENT QUARTERS ARE SUMMARIZED IN NM 13/14, 26/14 AND 39/14.
3. CANCEL NAVAREA IV 1008/14, 1054/14.

(201105Z DEC 2014)

1074/14(24,25).
WESTERN NORTH ATLANTIC.
1. SEISMIC SURVEY IN PROGRESS UNTIL 28 FEB 15 BY M/V RAMFORM ATLAS TOWING 14 8100 METER LONG CABLES IN AREA BOUND BY 11-05N 058-22W, 10-33N 058-08W, 10-06N 059-14W, 10-40N 059-23W. SIX MILE BERTH REQUESTED.
2. CANCEL NAVAREA IV 980/14.
3. CANCEL THIS MSG 01 MAR 15.

(201435Z DEC 2014)

1075/14. CANCELED.

1076/14(GEN).
NORTH AMERICAN ICE SERVICE (NAIS) ICEBERG BULLETIN.
1. 220001Z DEC ICEBERG LIMIT ALONG TRACKLINE JOINING 53-30N 056-05W, 52-35N 053-00W, 52-35N 051-30W, 54-00N 052-00W, 57-00N 053-00W, 60-00N 056-30W.
2. SEA ICE LIMIT ALONG TRACKLINES JOINING:
A. 46-05N 063-45W AND 46-15N 063-40W.
B. 46-30N 063-20W, 48-10N 064-20W, 48-00N 065-20W.
C. 49-00N 067-00W, 49-30N 067-00W, 50-10N 065-40W, 49-30N 063-40W.
D. 49-10N 061-40W, 50-00N 060-00W, 51-25N 057-40W.
E. 50-35N 057-20W, 50-45N 057-30W, 51-00N 057-10W, 51-20N 056-50W, 51-40N 056-00W, 52-00N 055-50W.
F. 50-40N 056-05W, 51-00N 055-40W, 52-10N 055-00W, 54-00N 055-00W, 57-00N 060-00W, 58-00N 059-00W, 61-10N 060-20W, 64-25N 057-50W.
3. REPORT POSITION AND TIME OF ANY ICEBERGS OR STATIONARY RADAR TARGETS THAT MAY LIKELY BE ICEBERGS TO THE NEAREST CANADIAN COAST GUARD MARINE COMMUNICATIONS AND TRAFFIC SERVICE STATION OR USING INMARSAT CODE 42.
4. CANCEL THIS MSG 230001Z DEC 14.

(212200Z DEC 2014)

HYDROLANTS

Messages in force 221600Z December 2014:

2011 series	1680(44)	1864(36)	2625(37)	2852(37)	3056(51)
881(56)	1981(37)	1867(35)	2627(54,56)	2854(57)	3057(54,56)
1291(37)	2044(35)	1928(35)	2629(37)	2861(37)	3060(51)
1331(37,43)	2397(35,37)	1947(37)	2630(57)	2873(57)	3065(11,26,27)
1652(35)	2758(57)	1994(51)	2631(37)	2902(55)	3068(35)
1966(37)	2771(36)	1995(51)	2632(52)	2905(37)	3069(28)
2012 series	2849(35)	2055(51)	2651(57)	2908(11,26)	3074(51)
641(35,43)	2937(35)	2062(35)	2664(24)	2910(51)	3075(25)
751(37)	2014 series	2128(54)	2670(51)	2919(52)	3076(37)
2118(35)	4(54)	2205(51)	2688(24)	2920(35,37)	3078(55)
2501(37)	5(54)	2215(35)	2704(37)	2940(51)	3079(11,26)
2839(37)	6(54)	2381(57)	2725(54)	2949(57)	3087(54)
2908(37)	7(54)	2383(55)	2737(55)	2975(37)	3092(57)
2013 series	18(54)	2397(36)	2747(51)	2991(25,26)	3098(23,24)
618(37)	499(52)	2413(36)	2748(GEN)	2996(35,36)	3099(25)
620(GEN)	713(24)	2427(57)	2758(GEN)	3003(54)	3100(GEN)
856(35)	886(35)	2456(57)	2777(24)	3006(55)	3101(53)
857(35)	1108(36)	2509(54,56)	2812(51)	3011(24)	3103(53,54)
1151(37)	1115(35)	2515(52)	2818(54,56)	3014(11,26)	3108(36,37)
1230(37)	1226(35,37)	2519(57)	2819(37)	3027(57)	3109(35,43)
1390(55)	1382(24)	2529(37)	2829(37)	3030(24)	3110(56)
1406(36)	1493(37)	2566(57)	2839(37)	3047(37)	3112(36)
1583(37)	1609(37,43)	2573(51)	2842(37)	3048(12)	3113(27)
1613(36)	1783(37)	2584(24)	2845(51)	3054(57)	3114(24)
1637(37)	1846(57)	2594(37)	2847(37,43)	3055(51)	

The summary of all HYDROLANTS in force as of 17 December 2014 is given in Section III of NM 52/14.

HYDROLANT WARNINGS issued from 171500Z to 221600Z December 2014.

3071/14 thru 3073/14. CANCELED.

3074/14(51).
EASTERN NORTH ATLANTIC.
MAURITANIA TO SENEGAL.
DNC 01.
TWO 24 METER CANOES NAMED MAREME FALL, FOUR PERSONS ON BOARD
EACH, UNREPORTED NOUADHIBOU (20-56N 017-02W)
TO SAINT LOUIS (16-02N 016-30W). VESSELS IN VICINITY
REQUESTED TO KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE.
REPORTS TO MRCC DAKAR, PHONE: 22 133 826 5001,
FAX: 22 133 826 5000, E-MAIL: MARINENAT@ORANGE.SN.

(180105Z DEC 2014)

3075/14(25).
EASTERN CARIBBEAN SEA.
U.S. VIRGIN ISLANDS TO ANTIGUA.
DNC 14.
30 FOOT M/V PARTY SHOT OVERDUE ST. CROIX (17-44N 064-44W)
TO ANTIGUA (17-05N 061-48W). VESSELS IN VICINITY
REQUESTED TO KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE.
REPORTS TO U.S. COAST GUARD SAN JUAN,
PHONE: 787 289 2042, E-MAIL: SSJCC@USCG.MIL.

(180156Z DEC 2014)

3076/14(37).
BAY OF BISCAY.
DNC 08.
TWO PERSONS OVERBOARD FROM F/V LA NIOULARGUE
IN 45-53.1N 002-29.5W AT 180245Z DEC.
VESSELS IN VICINITY REQUESTED TO KEEP
A SHARP LOOKOUT, ASSIST IF POSSIBLE.
REPORTS TO MRCC ETEL, TELEX: 42950519,
PHONE: 332 9755 3535, FAX: 332 9755 4934,
E-MAIL: ETEL@MRCCFR.EU.

(180420Z DEC 2014)

3077/14. CANCELED.

3078/14(55).
BLACK SEA.
RUSSIA.
GUNNERY.
DNC 10.
1. GUNNERY EXERCISES 1100Z TO 1400Z DAILY
20 AND 22 THRU 25 DEC IN AREA BOUND BY
44-24.3N 037-16.0E, 44-30.0N 037-13.0E,
44-34.0N 037-31.0E, 44-30.0N 037-33.5E.
2. CANCEL THIS MSG 251500Z DEC 14.

(181314Z DEC 2014)

3079/14(11,26).
WESTERN NORTH ATLANTIC.
GEORGIA.
DNC 15.
DISTRESS SIGNAL RECEIVED ON 406 MHZ FROM
20 FOOT F/V DAWG HOUSE, THREE PERSONS ON BOARD,
VICINITY 31-06.4N 079-55.0W. VESSELS IN VICINITY
REQUESTED TO KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE.
REPORTS TO RCC MIAMI, PHONE: 305 415 6800,
E-MAIL: RCCMIAMI@USCG.MIL.

(181328Z DEC 2014)

3080/14 thru 3086/14. CANCELED.

3087/14(54).
EASTERN MEDITERRANEAN SEA.
DNC 09.
VESSEL REQUESTING ASSISTANCE IN 36-25N 019-13E
AT 182100Z DEC. VESSELS IN VICINITY REQUESTED TO
KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE.
REPORTS TO MRCC ROME, INMARSAT-C: 424744220,
PHONE: 39 065 908 4527, 39 065 908 4409,
FAX: 390 6592 2737, 3906 5908 4793,
E-MAIL: ITMRCC@MIT.GOV.IT.

(182315Z DEC 2014)

3088/14 thru 3091/14. CANCELED.

3092/14(57).
EASTERN SOUTH ATLANTIC.
NAMIBIA.
DNC 01.
1. UNDERWATER OPERATIONS IN PROGRESS UNTIL
FURTHER NOTICE BY:
A. M/V GARIEP IN 28-35.3S 015-55.8E.
B. M/V CORAL SEA IN 28-41.9S 016-07.0E.
TWO MILE BERTH REQUESTED.
2. CANCEL HYDROLANT 2411/14.

(191038Z DEC 2014)

3093/14 thru 3097/14. CANCELED.

3098/14(23,24).
WESTERN SOUTH ATLANTIC.
URUGUAY.
DNC 01, DNC 07.
1. SEISMIC SURVEY BY M/V BGP CHALLENGER TOWING 12000 METER
LONG CABLES:
A. 20 DEC ALONG TRACKLINE BETWEEN
37-50.38S 047-32.57W AND 37-04.73S 048-11.30W.
B. 20 AND 21 DEC ALONG TRACKLINE BETWEEN
37-04.20S 048-24.17W AND 38-03.50S 047-42.50W.
C. 22 DEC ALONG TRACKLINE BETWEEN
38-39.77S 047-58.88W AND 38-09.17S 048-59.25W.
TEN MILE BERTH REQUESTED.
2. CANCEL THIS MSG 23 DEC 14.

(200048Z DEC 2014)

3099/14(25).
WESTERN NORTH ATLANTIC.
EASTERN CARIBBEAN SEA.
MARTINIQUE.
DNC 14.
AIRCRAFT, TWO PERSONS ON BOARD, POSSIBLY CRASHED
VICINITY MARTINIQUE (14-40N 061-00W). VESSELS IN
VICINITY REQUESTED TO KEEP A SHARP LOOKOUT,
ASSIST IF POSSIBLE. REPORTS TO MRCC FORT DE FRANCE,
INMARSAT-C: 422799024, TELEX: 42912008,
PHONE: 59 659 670 9292, FAX: 59 659 663 2450,
E-MAIL: ANTILLES@MRCCFR.EU

(200505Z DEC 2014)

3100/14(GEN).
1. HYDROLANT WARNINGS IN FORCE 200900Z DEC 14. ONLY THOSE WARNINGS ISSUED DURING THE LAST SIX WEEKS ARE LISTED HEREIN.
2014 SERIES: 2688(24), 2704(37), 2725(54), 2737(55), 2747(51), 2748(GEN), 2758(GEN), 2777(24), 2812(51), 2818(54,56), 2819(37), 2829(37), 2839(37), 2842(37), 2845(51), 2847(37,43), 2852(37), 2854(57), 2861(37), 2873(57), 2902(55), 2905(37), 2908(11,26), 2910(51), 2919(52), 2920(35,37), 2940(51), 2949(57), 2964(43), 2975(37), 2991(25,26), 2996(35,36), 3003(54), 3006(55), 3011(24), 3014(11,26), 3027(57), 3030(24), 3047(37), 3048(12), 3054(57), 3055(51), 3056(51), 3057(54,56), 3060(51), 3065(11,26,27), 3068(35), 3069(28), 3074(51), 3075(25), 3076(37), 3078(55), 3079(11,26), 3081(51), 3082(36), 3083(36), 3084(36), 3086(35), 3087(54), 3089(56), 3090(53,54), 3092(57), 3098(23,24), 3099(25).
2. THE SUMMARY OF ALL HYDROLANT WARNINGS IN FORCE AS OF 19 DEC 2013 IS GIVEN IN SEC III OF NM 52/13.
WARNINGS ISSUED DURING THE SUBSEQUENT QUARTERS ARE SUMMARIZED IN NM 13/14, 26/14 AND 39/14.
3. CANCEL HYDROLANT 2000/14, 2671/14, 2933/14, 2965/14, 2967/14, 2968/14, 2969/14, 2974/14, 2993/14, 3001/14, 3077/14, 3088/14.

(201110Z DEC 2014)

3101/14(53).
WESTERN MEDITERRANEAN SEA.
FRANCE.
DNC 08.
11 METER S/V OCEAN, ONE PERSON ON BOARD, OVERDUE FROM HYERES (43-07.2N 006-07.9E). VESSELS IN VICINITY REQUESTED TO KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE. REPORTS TO MRCC LA GARDE, TELEX: 430024, PHONE: 334 9461 1616, FAX: 334 9427 1149, E-MAIL: LAGARDE@MRCCFR.EU.

(201125Z DEC 2014)

3102/14. CANCELED.

3103/14(53,54).
EASTERN MEDITERRANEAN SEA.
SOUTHERN IONIAN SEA.
DNC 09.
70 METER VESSEL, ORANGE HULL, 860 PERSONS ON BOARD, REQUESTING ASSISTANCE IN 36-37N 017-09E. VESSELS IN VICINITY REQUESTED TO KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE. REPORTS TO MRCC ROME, INMARSAT-C: 424744220, PHONE: 3906 5908 4527, 3906 5908 4409, FAX: 390 6592 2737, 3906 5908 4793, E-MAIL: ITMRCC@MIT.GOV.IT.

(201422Z DEC 2014)

3104/14 thru 3107/14. CANCELED.

3108/14(36,37).
EASTERN NORTH ATLANTIC.
CELTIC SEA.
DNC 08, DNC 19.
MAN OVERBOARD FROM F/V BARA AR VRO IN 47-32N 007-14W AT 210452Z DEC. VESSELS IN VICINITY REQUESTED TO KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE. REPORTS TO MRCC ETEL, TELEX: 42950519, PHONE: 332 9755 3535, FAX: 332 9755 4934, E-MAIL: ETEL@MRCCFR.EU.

(210540Z DEC 2014)

3109/14(35,43).
SCOTLAND-NORTH COAST.
SHETLAND ISLANDS.
RADIO SERVICES.
DNC 20.
MRCC SHETLAND MF DSC AND R/T SERVICES AT COLLAFIRTH HILL 60-32N 001-23W UNRELIABLE.

(210605Z DEC 2014)

3110/14(56).
EASTERN MEDITERRANEAN SEA.
LIBYA.
DNC 09.
1. VESSEL, 150 PERSONS ON BOARD, REQUESTING ASSISTANCE
IN 33-15N 013-32E. VESSELS IN VICINITY REQUESTED
TO KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE.
REPORTS TO MRCC ROME, INMARSAT-C: 424744220,
PHONE: 3906 5908 4527, 3906 5908 4409,
FAX: 390 6592 2737, 3906 5908 4793,
E-MAIL: ITMRCC@MIT.GOV.IT.
2. CANCEL HYDROLANT 3089/14.

(210910Z DEC 2014)

3111/14. CANCELED.

3112/14(36).
IRISH SEA.
ENGLAND-WEST COAST.
DNC 20.
CHART 36025.
1. ALL NAVIGATIONAL AIDS AT PLATFORMS INOPERATIVE:
A. 110/7A 53-48.5N 003-39.8W
B. 113/26 54-01.6N 003-51.7W.
2. CANCEL HYDROLANT 3083/14, 3111/14.

(211603Z DEC 2014)

3113/14(27).
GULF OF MEXICO.
CUBA.
DNC 15.
22 FOOT F/V JOVEN CARLOS, YELLOW HULL, FOUR PERSONS ON BOARD,
OVERDUE RIO DEL MEDIO (22-51N 083-07W). LAST
KNOWN POSITION VICINITY 22-39N 084-11W ON
18 DEC 14. VESSELS IN VICINITY REQUESTED TO KEEP
A SHARP LOOKOUT, ASSIST IF POSSIBLE. REPORTS
TO RCC MIAMI, PHONE: 305 415 6800, E-MAIL: RCCMIAMI@USCG.MIL.

(212101Z DEC 2014)

3114/14(24).
BRAZIL-NORTH COAST.
CHART 24260.
DNC 01.
1. PONTA DAS ALMAS LIGHT 02-53.4S 041-16.3W UNLIT.
2. CANCEL THIS MSG 18 JUN 15.

(220120Z DEC 2014)

NAVAREA XII

Messages in force 221600Z December 2014:

2012 series	2013 series	181(21)	431(GEN)	490(GEN)
110(97)	119(21)	2014 series	473(21,22)	
334(21)	153(21)	230(21)	489(19,83)	

The summary of all NAVAREA XII messages in force as of 17 December 2014 is given in Section III of NM 52/14.

NAVAREA XII WARNINGS issued from 171500Z to 221600Z December 2014.

488/14. CANCELED.

489/14(19,83).
NORTH PACIFIC.
HAWAII.
CHART 19010.
PAHOA DGPS STATION 19-31.1N 154-57.8W UNUSABLE
211900Z DEC UNTIL FURTHER NOTICE.

(192058Z DEC 2014)

490/14(GEN).
1. NAVAREA XII WARNINGS IN FORCE AS OF 200900Z DEC 14.
2012 SERIES: 110(97), 334(21).
2013 SERIES: 119(21), 153(21), 181(21).
2014 SERIES: 230(21), 431(GEN), 473(21,22), 489(19,83).
2. THE SUMMARY OF ALL NAVAREA XII WARNINGS IN FORCE
AS OF 19 DEC 2013 IS GIVEN IN SEC III OF NM 52/13.
WARNINGS ISSUED DURING THE SUBSEQUENT QUARTERS
ARE SUMMARIZED IN NM 13/14, 26/14 AND 39/14.
3. CANCEL NAVAREA XII 458/14, 484/14.

(201115Z DEC 2014)

HYDROPACS

Messages in force 221600Z December 2014:

2011 series	3276(74)	2154(63)	3418(62)	3695(74,75)	3796(81)
1561(56)	3405(97)	2222(22)	3439(93)	3696(22)	3797(63)
2286(71)	3660(93)	2223(22)	3484(94)	3703(96)	3798(95)
2812(71)	3708(74)	2238(97)	3525(63)	3727(63)	3802(71)
3552(96)	2014 series	2273(93)	3526(91,94)	3751(63)	3803(62)
2012 series	246(71)	2342(63)	3527(94)	3753(71)	3805(22)
408(94)	447(63)	2360(63)	3528(93)	3754(75)	3806(74,75)
1079(97)	496(74)	2422(63)	3529(97)	3759(63)	3807(GEN)
1222(97)	656(63)	2610(71,93)	3551(63)	3766(62)	3808(63)
1377(94,95)	894(63)	2789(62)	3553(63)	3767(62)	3810(22)
1555(96)	1077(63)	2832(62)	3599(94,97)	3768(62)	3813(22)
1824(76)	1118(74)	2905(22)	3608(63)	3769(63)	3814(93)
1847(63)	1209(62)	2906(22)	3617(22)	3770(95)	3821(81)
2013 series	1325(96)	2907(22)	3628(61,75)	3771(95)	3822(81)
899(75)	1368(93)	2942(63)	3631(74,75)	3772(95)	3823(63)
1076(63)	1392(71)	2993(94)	3646(74)	3775(22)	3824(73)
1178(63)	1445(22)	3019(63)	3674(63)	3777(63)	3825(96)
2019(62)	1452(62)	3091(63)	3675(74)	3779(93)	
2493(93)	1561(72,74)	3142(74)	3680(62)	3780(63)	
2830(63)	1570(74)	3221(63)	3681(74,75)	3785(95)	
2988(76,83)	1672(22)	3326(93)	3685(62)	3786(97)	
3004(63)	2130(72)	3395(GEN)	3686(62)	3788(81,91)	

The summary of all HYDROPACS in force as of 17 December 2014 is given in Section III of NM 52/14.

HYDROPAC WARNINGS issued from 171500Z to 221600Z December 2014.

3771/14(95).
YELLOW SEA.
GUNNERY.
DNC 23.
1. GUNNERY EXERCISES 0001Z TO 0800Z DAILY
22 THRU 24 AND 26 DEC IN AREA BOUND BY
35-15-00N 124-41-28E, 35-15-01N 125-36-10E,
34-50-00N 125-36-12E, 34-50-00N 124-41-31E.
2. CANCEL THIS MSG 260900Z DEC 14.

(171202Z DEC 2014)

3772/14(95).
YELLOW SEA.
GUNNERY.
DNC 23.
1. GUNNERY EXERCISES 0001Z TO 0800Z DAILY
22 THRU 24 AND 26 DEC IN AREA BOUND BY
36-35-00N 125-36-00E, 36-35-00N 124-50-00E,
37-04-21N 124-50-00E, 37-05-08N 125-36-00E.
2. CANCEL THIS MSG 260900Z DEC 14.

(171207Z DEC 2014)

3773/14 and 3774/14. CANCELED.

3775/14(22).
EASTERN SOUTH PACIFIC.
CHILE.
DNC 07.
CHART 22420.
ISLOTES EVANGELISTAS LIGHT 52-23.3S 075-05.8W AT REDUCED INTENSITY.

(172145Z DEC 2014)

3776/14. CANCELED.

3777/14(63).
ARABIAN SEA.
INDIA-WEST COAST.
DNC 03.
F/V YES DEVTA SINKING IN 19-12.73N 072-30.89E
AT 172130Z DEC. ONE PERSON MISSING. VESSELS
IN VICINITY REQUESTED TO KEEP A SHARP LOOKOUT,
ASSIST IF POSSIBLE. REPORTS TO MRCC MUMBAI,
PHONE: 9122 2438 8065, 9122 2438 3592,
FAX: 9122 2431 6558, E-MAIL: INDSAR@VSNL.NET.

(180510Z DEC 2014)

3778/14. CANCELED.

3779/14(93).
SOUTH CHINA SEA.
VIETNAM-SOUTH COAST.
DNC 03, DNC 11.
F/V BL1047TS, TEN PERSONS ON BOARD, FLOODING VICINITY
08-55N 105-25E AT 170400Z DEC. VESSELS IN VICINITY
REQUESTED TO KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE.
REPORTS TO MRCC VIETNAM, PHONE: 844 3768 3050,
FAX: 844 3768 3048, E-MAIL: VMRCC@FPT.VN.

(180950Z DEC 2014)

3780/14(63).
NORTHERN ARABIAN SEA.
PAKISTAN.
GUNNERY.
DNC 10.
1. GUNNERY EXERCISES 230300Z TO 230600Z AND
240300Z TO 241100Z DEC IN AREA BETWEEN
24-55.60N 25-05.60N AND 062-11.75E 062-30.00E.
2. CANCEL THIS MSG 241200Z DEC 14.

(181010Z DEC 2014)

3781/14 thru 3784/14. CANCELED.

3785/14(95).
YELLOW SEA.
GUNNERY.
DNC 23.
1. GUNNERY EXERCISES 2300Z TO 0900Z COMMENCING DAILY
22 AND 25 DEC IN AREA BETWEEN
35-35N 36-00N AND 125-00E 125-30E.
2. CANCEL THIS MSG 261000Z DEC 14.

(181249Z DEC 2014)

3786/14(97).
WESTERN NORTH PACIFIC.
JAPAN.
NAMPO SHOTO.
DNC 12.
1. PYROTECHNICS EXERCISES 0001Z TO 0730Z DAILY
23 THRU 25 DEC WITHIN FIVE MILES OF 24-47N 141-18E.
2. CANCEL THIS MSG 250830Z DEC 14.

(181258Z DEC 2014)

3787/14. CANCELED.

3788/14(81,91).
WESTERN NORTH PACIFIC.
PHILIPPINE SEA.
ROCKETS.
DNC 23.
1. HAZARDOUS OPERATIONS 0550Z TO 0710Z DAILY
23 THRU 29 DEC IN AREA BOUND BY
18-49.6N 128-29.9E, 19-12.7N 129-21.5E,
15-55.9N 130-56.5E, 15-33.1N 130-05.7E.
2. CANCEL THIS MSG 290810Z DEC 14.

(181434Z DEC 2014)

3789/14 thru 3795/14. CANCELED.

3796/14(81).
WESTERN NORTH PACIFIC.
DNC 12.
MAN OVERBOARD FROM M/V BEAGLE 1 IN 04-35.88N 136-42.58E.
VESSELS IN VICINITY REQUESTED TO KEEP A SHARP
LOOKOUT, ASSIST IF POSSIBLE. REPORTS
TO U.S. COAST GUARD SECTOR GUAM,
PHONE: 671 355 4824, E-MAIL: RCCGUAM@USCG.MIL.

(191119Z DEC 2014)

3797/14(63).
ANDAMAN SEA.
DNC 03.
1. SEISMIC SURVEY IN PROGRESS UNTIL 30 DEC BY
M/V BOA THALASSA IN AREAS BOUND BY:
A. 10-59.22N 095-51.36E, 10-54.24N 095-49.86E,
10-59.23N 095-33.95E, 10-53.07N 095-31.22E,

10-47.71N 095-47.42E, 09-53.72N 095-29.75E,
09-43.63N 095-33.71E, 09-53.32N 095-37.56E,
09-47.12N 095-57.57E, 09-56.79N 096-00.09E,
10-02.81N 095-40.36E, 10-45.67N 095-53.92E,
10-38.80N 096-14.96E, 10-45.22N 096-17.42E,
10-52.29N 095-55.59E, 10-59.40N 095-59.30E.
B. 10-15.52N 095-58.95E, 10-07.37N 095-56.61E,
10-00.66N 096-16.36E, 10-08.90N 096-18.70E.
THREE MILE BERTH REQUESTED.
2. CANCEL THIS MSG 31 DEC 14.

(191138Z DEC 2014)

3798/14(95).
YELLOW SEA.
GUNNERY.
DNC 23.
1. GUNNERY EXERCISES 0400Z TO 0600Z DAILY
24 AND 26 DEC IN AREA BETWEEN
37-25N 37-30N AND 124-43E 124-50E.
2. CANCEL THIS MSG 260700Z DEC 14.

(191152Z DEC 2014)

3799/14 thru 3801/14. CANCELED.

3802/14(71).
INDIAN OCEAN.
DNC 03.
1. DERELICT F/V SANESH II ADRIFT IN 00-02.9S 091-07.8E.
2. CANCEL THIS MSG 221744Z DEC 14.

(191744Z DEC 2014)

3803/14(62).
RED SEA.
DNC 10.
1. DERELICT VESSEL ADRIFT VICINITY
14-15N 041-58E AT 191300Z DEC.
2. CANCEL THIS MSG 221753Z DEC 14.

(191753Z DEC 2014)

3804/14. CANCELED.

3805/14(22).
EASTERN NORTH PACIFIC.
DNC 13.
DISTRESS SIGNAL RECEIVED ON 406 MHZ IN 01-57.7N 112-51.9W.
VESSELS IN VICINITY REQUESTED TO KEEP A SHARP LOOKOUT,
ASSIST IF POSSIBLE. REPORTS TO U.S. COAST GUARD ALAMEDA,
TELEX: 230172343, PHONE: 510 437 3701,
E-MAIL: RCCALAMEDA@USCG.MIL.

(192338Z DEC 2014)

3806/14(74,75).
AUSTRALIA-SOUTHEAST COAST.
DNC 05.
1. DERELICT SIX METER VESSEL ADRIFT IN
34-51.0S 151-42.3E AT 200215Z DEC.
2. CANCEL HYDROPAC 3765/14(93).
3. CANCEL THIS MSG 230750Z DEC 14.

(200750Z DEC 2014)

3807/14(GEN).
1. HYDROPAC WARNINGS IN FORCE 200900Z DEC 14. ONLY THOSE
WARNINGS ISSUED DURING THE LAST SIX WEEKS ARE LISTED HEREIN.
2014 SERIES: 3326(93), 3395(GEN), 3418(62), 3439(93), 3484(94),
3525(63), 3526(91,94), 3527(94), 3528(93), 3529(97), 3541(63),
3551(63), 3553(63), 3599(94,97), 3607(93), 3608(63), 3617(22),
3628(61,75), 3631(74,75), 3646(74), 3674(63), 3675(74), 3680(62),
3681(74,75), 3685(62), 3686(62), 3695(74,75), 3696(22), 3703(96),
3709(63), 3727(63), 3750(82), 3751(63), 3753(71), 3754(75),
3759(63), 3766(62), 3767(62), 3768(62), 3769(63), 3770(95),
3771(95), 3772(95), 3773(63), 3775(22), 3777(63), 3778(63),
3779(93), 3780(63), 3785(95), 3786(97), 3788(81,91), 3790(73,74),
3793(73,74), 3796(81), 3797(63), 3798(95), 3802(71), 3803(62),
3805(22), 3806(74,75).
2. THE SUMMARY OF ALL HYDROPAC WARNINGS IN FORCE AS OF
19 DEC 2013 IS GIVEN IN SEC III OF NM 52/13.
WARNINGS ISSUED DURING THE SUBSEQUENT QUARTERS
ARE SUMMARIZED IN NM 13/14, 26/14 AND 39/14.
3. CANCEL HYDROPAC 3640/14, 3643/14, 3655/14,
3656/14, 3657/14, 3661/14, 3666/14,
3682/14, 3690/14, 3698/14, 3716/14,
3729/14, 3764/14, 3799/14.

(201120Z DEC 2014)

3808/14(63).
ARABIAN SEA.
INDIA-WEST COAST.
DNC 03.
F/V JAI LAXMI, RED HULL WITH WHITE STRIPE, SEVEN PERSONS
ON BOARD, OVERDUE FROM MUMBAI. LAST KNOWN POSITION
18-40N 072-40E ON 13 DEC 14. VESSELS IN VICINITY
REQUESTED TO KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE.
REPORTS TO MRCC MUMBAI, PHONE: 9122 2438 8065,
FAX: 9122 2431 6558, E-MAIL: INDSAR@VSNL.NET.

(201318Z DEC 2014)

3809/14. CANCELED.

3810/14(22).
EASTERN SOUTH PACIFIC.
PERU.
DNC 07.
1. SEISMIC SURVEY IN PROGRESS UNTIL 14 JUN 15 BY
M/V DISCOVERER TOWING 10000 METER LONG CABLE
VICINITY OF TRACKLINE BETWEEN
03-34S 080-27W AND 14-04S 076-14W.
2. CANCEL THIS MSG 15 JUN 15.

(201716Z DEC 2014)

3811/14 and 3812/14. CANCELED.

3813/14(22).
EASTERN SOUTH PACIFIC.
DNC 07.
1. DART BUOY 32413 ADRIFT VICINITY
07-18-47S 093-39-05W AT 210215Z DEC.
UPDATED POSITIONS CAN BE FOUND AT:
WWW.NDBC.NOAA.GOV/station_page.php?station=32413.
2. CANCEL THIS MSG 240935Z DEC 14.

(210935Z DEC 2014)

3814/14(93).
SOUTH CHINA SEA.
VIETNAM.
DNC 11.
F/V JI HANG, SIX PERSONS ON BOARD, DISABLED AND ADRIFT
DUE TO ENGINE FAILURE IN 11-50N 110-23E AT 211035Z DEC.
VESSELS IN VICINITY REQUESTED TO KEEP A SHARP LOOKOUT,
ASSIST IF POSSIBLE. REPORTS TO MRCC VIETNAM,
PHONE: 844 3768 3050, FAX: 844 3768 3048,
E-MAIL: VMRCC@FPT.VN.

(211155Z DEC 2014)

3815/14 thru 3820/14. CANCELED.

3821/14(81).
WESTERN NORTH PACIFIC.
MARIANA ISLANDS.
HAZARDOUS OPERATIONS.
DNC 12.
1. HAZARDOUS OPERATIONS 230630Z TO 231130Z DEC
WITHIN TEN MILES OF 16-01-06N 146-03-35E.
2. CANCEL THIS MSG 231230Z DEC 14.

(220617Z DEC 2014)

3822/14(81).
WESTERN NORTH PACIFIC.
MARIANA ISLANDS.
HAZARDOUS OPERATIONS.
DNC 12.
1. HAZARDOUS OPERATIONS 230200Z TO 232000Z DEC
IN AREA BOUND BY
13-10N 144-43E, 13-10N 144-30E,
12-45N 144-30E, 11-45N 143-00E,
11-00N 143-00E, 11-00N 144-45E.
2. CANCEL THIS MSG 232100Z DEC 14.

(220847Z DEC 2014)

3823/14(63).
INDIA-EAST COAST.
BAY OF BENGAL.
DNC 03.
TUG AQUA MARINE SANK IN 10-49.7N 079-53.0E.
ONE PERSON MISSING. VESSELS IN VICINITY REQUESTED TO
KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE. REPORTS TO
ANY COASTAL RADIO STATION.

(221017Z DEC 2014)

3824/14(73).
INDONESIA.
BANDA SEA.
DNC 04.
F/V DAVIA MAJU, 11 PERSONS ON BOARD, UNREPORTED. LAST KNOWN
POSITION VICINITY MAI ISLAND (05-24-04S 127-47-20E).
VESSELS IN VICINITY REQUESTED TO KEEP A SHARP LOOKOUT,
ASSIST IF POSSIBLE. REPORTS TO RCC BASARNAS,
PHONE: 62 216 586 7510, FAX: 62 216 586 7512,
E-MAIL: KAGAHAR@BASARNAS.GO.ID, KAGAHAR@YAHOO.COM,
KAGAHAR@GMAIL.COM

(221021Z DEC 2014)

3825/14(96).
WESTERN NORTH PACIFIC.
KURIL ISLANDS.
DNC 24.
1. DERELICT VESSEL ON FIRE AND ADRIFT VICINITY
47-04.5N 152-29.1E ON 22 DEC.
2. CANCEL THIS MSG 25 DEC 14.

(221035Z DEC 2014)

HYDROARCS

Messages in force 221600Z December 2014:

2010 series	2012 series	2013 series	131(16)	268(16)	366(GEN)
56(15)	112(15)	127(41)	158(15)	269(16)	367(GEN)
102(15)	160(15,16)	280(42)	222(15)	270(16)	
103(16,41)	193(15)	2014 series	232(42)	308(41)	
2011 series	220(GEN)	33(42)	240(16)	337(42)	
160(42)	260(42)	98(16,96)	241(16,96)	352(42)	

The summary of all HYDROARCS messages in force as of 17 December 2014 is given in Section III of NM 52/14.

HYDROARCS WARNINGS issued from 171500Z to 221600Z December 2014.

362/14 thru 365/14. CANCELED.

366/14(GEN).
1. HYDROARC WARNINGS IN FORCE AS OF 210900Z DEC 14.
   2010 SERIES: 56(15), 102(15), 103(16,41).
   2011 SERIES: 160(42).
   2012 SERIES: 112(15), 160(15,16), 193(15),
   220(GEN), 260(42).
   2013 SERIES: 127(41), 280(42).
   2014 SERIES: 33(42), 98(16,96), 131(16), 158(15),
   222(15), 232(42), 240(16), 241(16,96), 268(16),
   269(16), 270(16), 308(41), 337(42), 352(42), 358(15).
2. THE SUMMARY OF ALL HYDROARC WARNINGS IN FORCE AS
   OF 19 DEC 2013 IS GIVEN IN SEC III OF NM 52/13.
   WARNINGS ISSUED DURING THE SUBSEQUENT QUARTERS
   ARE SUMMARIZED IN NM 13/14, 26/14 AND 39/14.
3. CANCEL HYDROARC 229/13, 322/14, 329/14.

(211010Z DEC 2014)

367/14(GEN).
ARCTIC.
CANADA-NORTH COAST.
RADIO SERVICES.
1. MCTS IQALUIT CENTRE DISCONTINUED FOR SEASON
   AT 280459Z DEC. CONTROL OF NORDREG CANADA
   WILL BE TRANSFERRED TO MCTS PRESCOTT.
   ADDRESS NORDREG CANADA MSGS TO MCTS PRESCOTT,
   PHONE: 613 925 4471, FAX: 613 925 4519,
   E-MAIL: IQANORDREG@INNAV.GC.CA
   OR THE NEAREST MCTS CENTRE.
2. CANCEL THIS MSG 04 JAN 15.

(211119Z DEC 2014)

368/14. CANCELED.

MARAD ADVISORIES

MARAD ADVISORIES rapidly disseminate information on government policy, danger and safety issues pertaining to vessel operations and other timely maritime matters. They are periodically issued by the U.S. Maritime Administration (MARAD) to vessel masters, operators, and other U.S. maritime interests.

The text of all in-force MARAD ADVISORIES may be obtained by accessing the NGA Maritime Safety Web site (http://msi.nga.mil/NGAPortal/MSI.portal), by referring to Section I (paragraph 49) of US Notice to Mariners 1/15 for those in-force as of 23 December 2014, or by contacting the Maritime Administration, Office of Security, Code MAR-420, Room W25-308, 1200 New Jersey Avenue S.E., Washington DC 20590, Telephone (202) 366-1883, FAX (202) 366-3954, Cell (202) 641-5071.

MARAD ADVISORIES in force 22 December 2014: 00-7, 05-1, 06-1, 07-1, 10-6, 11-3, 11-5, 12-1, 13-1, 13-2, 13-3, 13-4, 13-5, 14-1, 14-2 and 14-3.

SPECIAL WARNINGS

SPECIAL WARNINGS, primarily intended to announce official government proclamations affecting shipping, are broadcast as needed. They are numbered consecutively and further promulgated in the Notice to Mariners.

The text of all in-force SPECIAL WARNINGS may be obtained by accessing the NGA Maritime Safety Web site (http://msi.nga.mil/NGAPortal/MSI.portal) or by referring to Section I (paragraph 5) of US Notice to Mariners 1/15 for those in-force as of 23 December 2014.

SPECIAL WARNINGS in force 22 December 2014: 1, 29, 92, 107, 114, 119, 120, 122, 123, 124, 125, 126, 127, 128, 129 and 130.

MARINE INFORMATION

NATIONAL OCEAN SERVICE OFFICES

Information concerning National Ocean Service (NOS) charts and related publications can be obtained by addressing;

NOAA Office of Coast Survey
1315 East-West Highway
Silver Spring, MD 20910-3282
Telephone: 1-888-990-6622
Submit an Inquiry: http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx
Web site: http://www.nauticalcharts.noaa.gov/staff/chartspubs.html

Direct sales of nautical charts and publications are only available for purchase from authorized Sales Agents or their sales outlets. Click the link below to navigate to the NOAA Nautical Catalog website and for a listing of Authorized Sales Agents and their outlets.

http://www.nauticalcharts.noaa.gov/mcd/ccatalogs.htm

Effective April 13, 2014, NOAA will no longer use traditional lithography to print paper NOAA nautical charts. Improved paper nautical charts, updated to the time of printing, will continue to be available for purchase from NOAA-certified print-on-demand chart sellers OceanGrafix (http://www.oceangrafix.com/buy/findaretailer) and East View Geospatial http://www.geospatial.com/store/type/series/term/2000024/text/noaa-nos-nautical-charts-all-scales/).

For additional information, visit http://www.nauticalcharts.noaa.gov/staff/news/2013/papercharts.html.

NOAA Regional Navigation Managers:

NOAA's navigation managers, stationed strategically in port areas along U.S. coasts and Great Lakes, work directly with pilots, mariners, port authorities, and recreational boaters. They help identify navigational challenges facing the marine transportation system, and provide the resources and services that promote safe and efficient navigation. For more information, visit http://www.nauticalcharts.noaa.gov/nsd/reps.htm.

HEADQUARTERS
U.S. ARMY CORPS OF ENGINEERS
441 G. STREET, N.W.
WASHINGTON, D.C. 20314-1000
TELEPHONE: 202-761-0011
http://www.usace.army.mil
email: hq-publicaffairs@usace.army.mil

DISTRICT OFFICES (COASTAL)

Concord, MA 01742-2718	696 Virginia Road, Tel. 978-318-8111 http://www.nae.usace.army.mil
Detroit, MI 48226-2523	477 Michigan Ave., Tel. 313-226-3387 http://www.lre.usace.army.mil
Buffalo, NY 14207-3111	1776 Niagara St., Tel. 800-833-6390 http://www.lrb.usace.army.mil
Chicago, IL 60604-1437	231 S. LaSalle St., Suite 1500, Tel. 312-846-5330 http://www.lrc.usace.army.mil
New York, NY 10278-0004	26 Federal Plaza, Room 2113, Tel. 917-790-8007 http://www.nan.usace.army.mil
Philadelphia, PA 19107-3390	100 Penn Square East, Tel. 215-656-6515 http://www.nap.usace.army.mil
Baltimore, MD 21201-2526	10 S. Howard St., Tel. 800-434-0988 www.nab.usace.army.mil

Norfolk, VA 23510-1011	803 Front St., Tel. 757-201-7500 http://www.nao.usace.army.mil
Wilmington, NC 28403-1343	69 Darlington Ave., Tel. 910-251-4625 http://www.saw.usace.army.mil
Charleston, SC 29403-4364	69-A Hagood Ave., Tel. 843-329-8123 http://www.sac.usace.army.mil
Savannah, GA 31401-3604	100 W. Oglethorpe Ave., Tel. 912-652-5279 http://www.sas.usace.army.mil
Jacksonville, FL 32207-8175	701 San Marco Blvd., Tel. 904-232-1177 http://www.saj.usace.army.mil
Mobile, AL 36602-3680	109 St. Joseph St., Tel. 251-690-2511 http://www.sam.usace.army.mil
New Orleans, LA 70118-3651	7400 Leake Ave., Tel. 504-862-2201 http://www.mvn.usace.army.mil
Galveston, TX 77550-3211	2000 Fort Point Rd., Tel. 409-766-3899 http://www.swg.usace.army.mil
JBER, AK 99506-0898	P.O. Box 6898, Tel. 907-753-2522 http://www.poa.usace.army.mil
Los Angeles, CA 90017-3409	915 Wilshire Blvd., Suite 1101, Tel. 213-452-3921 http://www.spl.usace.army.mil
San Francisco, CA 94103-1398	1455 Market St., Tel. 415-503-6804 http://www.spn.usace.army.mil
Portland, OR 97208-2946	333 S.W. First Ave., Tel. 503-808-4510 http://www.nwp.usace.army.mil
Seattle, WA 98134-2329	4735 East Marginal Way South, Tel. 206-764-3742 http://www.nws.usace.army.mil

U.S. ARMY CORP OF ENGINEERS DIVISION OFFICES (COASTAL)

North Atlantic	302 General Lee Ave., Tel. 347-370-4550 Brooklyn, New York 11252 http://www.nad.usace.army.mil
South Atlantic	60 Forsyth St., S.W., Tel. 404-562-5011 Atlanta, Georgia 30303-8801 http://www.sad.usace.army.mil
Mississippi Valley	1400 Walnut St., Tel. 601-634-5757 Vicksburg, Mississippi 39180-3262 http://www.mvd.usace.army.mil
Southwestern	1100 Commerce St., Suite 831, Tel. 469-487-7007 Dallas, Texas 75242-1317 http://www.swd.usace.army.mil
South Pacific	1455 Market St., Tel. 415-503-6503 San Francisco, California 94103-1398 http://www.spd.usace.army.mil
Northwestern	1125 NW Couch St., Tel. 503-808-3702 Portland, Oregon 97209-4141 http://www.nwd.usace.army.mil
Great Lakes and Ohio River	550 Main St., Room 10524, Tel. 513-684-3010 Cincinnati, Ohio 45202-3222 http://www.lrd.usace.army.mil
Pacific Ocean	Building 320, Tel. 808-438-4715 Fort Shafter, Hawaii 96858-5440 http://www.pod.usace.army.mil

UNITED STATES COAST GUARD DISTRICT OFFICES

Commander, 1st Coast Guard District, Capt. John Foster Williams Bldg., 408 Atlantic Ave., Boston, MA 02110-3350.
Phone, 617-223-8600
http://www.uscg.mil/d1
Commander, 5th Coast Guard District, Federal Bldg., 431 Crawford St., Portsmouth, VA 23704-5000.
Phone, 757-398-6390
http://www.uscg.mil/d5
Commander, 7th Coast Guard District, Brickell Plaza Federal Bldg., 909 S.E. 1st Ave., Miami, FL 33131-3050.
Phone, 305-415-6683.
http://www.uscg.mil/d7
Commander, 8th Coast Guard District, Hale Boggs Federal Bldg., 500 Poydras St., New Orleans, LA 70130-3310.
Phone, 504-589-6225
http://www.uscg.mil/d8
Commander, 9th Coast Guard District, 1240 East 9th St., Cleveland, OH 44199-2060.
Phone, 216-902-6118
http://www.uscg.mil/d9
Commander, 11th Coast Guard District, Coast Guard Island, Building 50-6, Alameda, CA 94501-5100.
Phone, 510-437-3701
http://www.uscg.mil/d11
Commander, 13th Coast Guard District, Jackson Federal Bldg., 915 Second Ave., Seattle, WA 98174-1067.
Phone, 206-220-7001
http://www.uscg.mil/d13
Commander, 14th Coast Guard District, 300 Ala Moana Blvd., Honolulu, HI 96580-4982.
Phone, 808-818-8724.
http://www.uscg.mil/d14
Commander, 17th Coast Guard District, P.O. Box 25517, Juneau, AK 99802-5517.
Phone, 907-463-2000.
http://www.uscg.mil/d17

NOAA CHART NEW EDITIONS AND THEIR AVAILABILITY

NOAA recognizes two paper nautical chart products: Print-on-Demand (POD) and traditional paper charts.

- Print-on-Demand (POD) charts are distributed by OceanGrafix (http://www.OceanGrafix.com), and East View Geospatial, Inc. (http://www.geospatial.com/Default.aspx?tabid=120)

- Civilian users may obtain traditional NOAA/NOS paper charts through a local NOAA chart agent at http://aeronav.faa.gov/agents.asp (Note that this is an FAA site that lists both aeronautical and nautical chart agents), and -DOD and other authorized U.S. Government users may obtain traditional NOAA/NOS paper charts through the Defense Logistics Agency (DLA).

The Print-on-Demand Chart is available one to two days after NOAA clears a New Edition for release. The Traditional Chart is available two to eight weeks later. Each is official, should be put into service immediately, and meets Federal chart carriage requirements immediately upon its release. Each should be updated from the dates shown in the lower left corner of the chart. For questions contact NOAA at help@nauticalcharts.gov or call 301-713-1968 x 105. Dates of Latest Editions for charts are listed at http://nauticalcharts.noaa.gov.

12374	15th Ed. Dec 2014 NEW EDITION DUCK ISLAND TO MADISON REEF	NAD 83	(NOS Silver Spring, MD) 1:20,000

NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY'S IMPLEMENTATION OF A HARDCOPY TO DIGITAL TRANSITION STRATEGY

Since the mid-1990's, the National Geospatial-Intelligence Agency (NGA) has been working to improve digital navigation product support for the US Navy and other US Government users. The US Navy is transitioning to digital navigation, thus reducing the need for NGA to continue production of hardcopy charts. Therefore, NGA has begun a gradual transition from

hardcopy chart production to a digital data maintenance environment. This notice is to advise mariners, chart agents, and other users of this strategy.

During the gradual transition from hardcopy charts to digital charts, NGA will continue to make certain hardcopy charts available only to US Government-approved entities, in accordance with US law or international agreement. These particular charts will be identified as "bilateral charts," since they are the product of international bilateral agreements and are duplicates of foreign copyright charts. Each bilateral chart will carry an NGA chart number, a National Stock Number (NSN), a bar code, and will show the number of any existing NGA chart that it replaces only when the chart is a one-for-one replacement. For those charts that are not a one-for-one replacement, no canceled chart number will appear. In the case where more than one new chart is being introduced to replace a single NGA chart, the existing chart will not be canceled until all new replacement charts have been announced in the Notice to Mariners.

Bilateral charts are the result of NGA international agreements and are duplicates of foreign copyrighted charts. The charts are printed in English, use metric units, refer to WGS-84 datum and are marked as "Distribution Limited." However, certain bilateral charts have not yet been converted to WGS-84 datum, and are of sufficiently large scale (generally larger than 1:50,000) where the difference from WGS-84 datum is noticeable. These exception charts are printed with datum shift values, which must be applied in order to plot GPS-derived positions correctly. The exception charts are scheduled for eventual conversion to WGS-84 datum; until this occurs, their chart numbers will appear bold-faced in the announcement list below.

Bilateral charts will contain references to host nation charts and publications, and may use symbology not yet found in US Chart No. 1. In most cases, NGA will not attempt to change these references to the equivalent US charts, publications or symbology. However, it should be noted that relevant maritime information referenced in a foreign publication can also usually be found within Sailing Directions, Notice to Mariners No. 1 (Special Paragraphs), List of Lights, Radio Navigational Aids, or Chart No. 1. Updates to Sailing Directions and other electronic publications can be made through the application of digital patch files (PDU files), available for download from the NGA Maritime Safety Web site.

As the US Navy completes its transition to digital navigation, the use of bilateral charts will be gradually phased out. Until then, Section II of the Notice to Mariners, NGA/DLIS Catalog Corrections, will contain information about specific bilateral charts being announced as well as cancellation of any existing charts that they replace. Update information for bilateral charts will appear in Section I of the Notice to Mariners, Chart Corrections. Standard chart policy remains intact, in that NGA charts are not to be placed in service until their announcement appears in the US Notice to Mariners.

NGA has begun adopting bilateral charts in waters of Australia, Canada, Japan, and the UK, with additional countries to follow. What this further means is that NGA no longer provides certain hardcopy charts (i.e., those replaced by bilateral charts) for public sale. To obtain these hardcopy charts, civilian users will be required to purchase bilateral chart equivalents from their producer nations and their agents. Contact information for purchasing Australian, Canadian, Japanese, and UK charts is listed below:

Australian Hydrographic Service Web site: http://www.hydro.gov.au

Australian Distribution Network: http://www.hydro.gov.au/prodserv/distributors/distributors.htm

Canadian Hydrographic Service Web site: http://notmar.com/charts/index.php

Canadian Sales Agents: http://www.chs-shc.dfo-mpo.gc.ca/chs/en/Dealers/locate.htm

Japan Coast Guard and List of Agents Web sites: http://www1.kaiho.mlit.go.jp/jhd-E.html

UK Hydrographic Office Web site: http://www.ukho.gov.uk

UK Sales Agents: http://www.ukho.gov.uk/list_of_agents.html

NGA issues this notice weekly. It will also appear in the "What's New @ Maritime" section of the Maritime Safety Web site (http://msi.nga.mil/NGAPortal/MSI.portal); however, the following list of announced bilateral charts will only appear in the Notice to Mariners.

NGA bilateral Australian, Canadian, Japanese, and UK charts announced to date:

Former US Chart No.	*Current US Chart No.*	*Foreign Chart No.*	*Originally Announced in NTM*	*Later Edition*
14002	14ACO14000	Can. 4023	23/04	
14005	14ACO14001	Can. 4012	23/04	
14006	14ACO14334	Can. 4016	9/09	
14009	14ACO14004	Can. 4015	23/04	
14009	14ACO14011	Can. 4047	23/04	
14009	14ACO14012	Can. 4002	29/04	
14009	14ACO14013	Can. 4013	29/04	
14009	14ACO14015	Can. 4045	29/04	
14014	14ACO14013	Can. 4013	29/04	
14040	14ACO14016	Can. 4010	29/04	
14041	14XHA14019	Can. 4011	29/04	
14042	14XHA14020	Can. 4396	1/05	35/12
14043	14AHA14021	Can. 4116	8/05	42/08
14044	14AHA14022	Can. 4117	14/05	36/12
14046	14BHA14023	Can. 4140	14/05	
14062	14XCO14025	Can. 4118	43/04	
14062	14XCO14026	Can. 4243	12/05	
14065	14BHA14027	Can. 4245	12/05	
14066	14XCO14026	Can. 4243	12/05	
14066	14XHA14028	Can. 4230	14/05	
14066	14XHA14029	Can. 4241	14/05	
14066	14XHA14030	Can. 4242	33/05	
14066	14XHA14031	Can. 4210	33/05	
14067	14XHA14029	Can. 4241	14/05	
14067	14XHA14032	Can. 4209	47/05	
14068	14XHA14032	Can. 4209	47/05	
14083	14AHA14035	Can. 4211	18/11	
14083	14AHA14036	Can. 4320	45/05	34/07
14085	14AHA14037	Can. 4328	45/05	
14087	14AHA14039	Can. 4385	46/05	
14088	14AHA14047	Can. 4201	46/05	
14089	14AHA14048	Can. 4202	39/06	
14090	14AHA14049	Can. 4237	6/05	
14091	14AHA14050	Can. 4203	48/06	
14093	14AHA14051	Can. 4236	25/07	
14100	14XHA14052	Can. 4235	25/07	
14100	14XHA14053	Can. 4234	25/07	
14105	14AHA14054	Can. 4321	22/07	
14115	14XCO14058	Can. 4227	29/04	
14121	14XHA14059	Can. 4374	23/07	
14123	14XHA14060	Can. 4375	23/07	
14125	14AHA14064	Can. 4376	22/07	
14133	14XHA14072	Can. 4278	23/07	
14134	14XHA14073	Can. 4279	23/07	
14136	14AHA14075	Can. 4266	25/07	
14141	14AHA14076	Can. 4462	22/07	
14144	14XHA14143	Can. 4950	38/03	11/08
14145	14AHA14077	Can. 4448	22/07	
14146	14XHA14078	Can. 4404	25/07	
14151	14XHA14079	Can. 4403	23/07	
14156	14BHA14080	Can. 4419	22/07	
14190	14ACO14096	Can. 4905	6/09	

Former US Chart No.	*Current US Chart No.*	*Foreign Chart No.*	*Originally Announced in NTM*	*Later Edition*
14202	14XHA14193	Can. 1432	38/03	
14202	14XHA14195	Can. 1431	42/03	11/08
14203	14XHA14195	Can. 1431	42/03	11/08
14221	14XHA14209	Can. 1311	32/08	
14221	14XHA14211	Can. 1312	40/03	5/08
14222	14XHA14211	Can. 1312	40/03	5/08
14227	14XHA14215	Can. 1316	39/03	38/12
14240	14XHA14217	Can. 1236	43/03	38/12
14241	14XHA14218	Can. 1233	39/03	38/12
14253	14ACO14004	Can. 4015	23/04	
14340	14ACO14334	Can. 4016	9/09	
14342	14BCO14336	Can. 4626	11/10	
14349	14AHA14339	Can. 4622	10/09	
14350	14AHA14334	Can. 4841	12/10	
14351	14AHA14334	Can. 4841	12/10	
14360	14ACO14348	Can. 4017	12/10	
14364	14AHA14359	Can. 4846	25/09	
14366	14AHA14359	Can. 4846	25/09	
14373	14BHA14362	Can. 4847	12/10	
14415	14ACO14377	Can. 4020	12/10	
14812	14XHA14809	Can. 2085	6/09	39/12
15008	15ACO15001	Can. 4730	12/10	
15011	15ACO15002	Can. 7050	16/08	
15017	15ACO15003	Can. 5450	33/07	
15018	15ACO15004	Can. 4700	12/10	
15020	15ACO15005	Can. 7011	12/10	
15041	**15ACO15007**	Can. 4731	41/08	
15061	15ACO15014	Can. 4732	42/08	
15070	15BHA15024	Can. 5143	6/09	
15080	15BHA15027	Can. 5023	46/07	
15120	15ACO15030	Can. 4775	31/07	
15140	15ACO15031	Can. 4776	12/10	
15160	15ACO15032	Can. 5300	34/08	
15312	15ACO15035	Can. 5400	6/09	
15670	15XCO15672	Can. 7570	44/09	
17008	**17ACO17007**	Can. 3002	40/08	
17005	**17ACO17010**	Can. 3001	41/14	
17412	**17XHA17410**	Can. 3890	40/08	
17413	**17ACO17411**	Can. 3802	42/08	
17414	**17BCO17415**	Can. 3854	42/08	
17416	**17BCO17417**	Can. 3853	41/08	
17438	17BHA17418	Can. 3960	43/08	
17438	17BHA17419	Can. 3959	41/08	
17438	17BHA17440	Can. 3956	12/10	
17441	17BHA17442	Can. 3927	12/07	
17441	17BHA17447	Can. 3746	25/07	
17444	17XHA17448	Can. 3955	32/08	
17445	17BHA17439	Can. 3957	12/10	
17464	17XHA17450	Can. 3724	12/10	
17465	**17XHA17451**	Can. 3742	41/08	
17480	17ACO17454	Can. 3744	12/10	
17485	17XHA17456	Can. 3936	44/09	
17486	17XCO17458	Can. 3727	13/09	

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17489	17XHA17488	Can. 3598	12/10	
17495	17ACO17493	Can. 3605	6/07	
17513	17XHA17497	Can. 3539	8/05	1/08
17515	17XHA17496	Can. 3513	6/09	
17517	17XHA17498	Can. 3512	44/09	
17518	17BHA17499	Can. 3463	31/07	
17519	17BHA17500	Can. 3526	23/07	
17543	17ACO17501	Can. 3604	1/08	
17546	**17XCO17510**	Can. 3603	31/10	
17548	17BCO17511	Can. 3671	31/07	
17550	17ACO17514	Can. 3602	24/07	
18401	18BHA18404	Can. 3459	42/08	44/10
18405	18BHA18426	Can. 3493	25/07	49/11
18406	18BHA18435	Can. 3481	23/07	36/12
18407	18BHA18436	Can. 3494	12/07	
18408	18BHA18437	Can. 3495	42/08	
18413	18BHA18442	Can. 3442	31/07	
18414	18XHA18451	Can. 3478	31/07	
18415	18BHA18461	Can. 3441	24/07	
18416	18AHA18462	Can. 3440	24/07	
18418	18AHA18466	Can. 3419	24/07	
18420	18BHA18467	Can. 3479	12/07	16/08
18475	18XHA18472	Can. 3685	43/08	
35009	35ACO35002	UK 266	19/04	3/07
35009	35ACO35003	UK 268	19/04	1/12
35009	35ACO35004	UK 273	19/04	1/12
35009	35ACO35005	UK 278	23/04	4/07
35009	35ACO35006	UK 1191	24/04	8/13
35009	35ACO35010	UK 1192	28/04	12/06
35009	35ACO35013	UK 1409	23/04	35/13
35009	35ACO35014	UK 1407	23/04	33/09
35016	35ACO35015	UK 2635	26/06	31/12
35022	35ACO35017	UK 1128	16/08	21/12
35023	35ACO35018	UK 1129	37/07	
35031	35ACO35019	UK 1127	4/06	6/08
35032	35ACO35020	UK 1125	7/07	
35036	35ACO35024	UK1123	3/07	20/07
35040	35ACO35006	UK 1191	24/04	8/06
35060	35ACO35010	UK 1192	28/04	
35080	35ACO35014	UK 1407	23/04	33/09
35081	35BHA35035	UK 734	28/04	23/14
35082	35BHA35037	UK 735	31/04	2/12
35084	35BHA35045	UK 1481	32/04	8/13
35086	35BHA35048	UK 736	32/04	34/14
35088	35BHA35050	UK 190	28/04	9/13
35100	35ACO35013	UK 1409	23/04	49/04
35101	35BHA35052	UK 223	33/04	3/12
35120	35ACO35055	UK 115	23/04	34/13
35130	35ACO35056	UK 1942	12/06	35/13
35135	35ACO35057	UK 2249	27/07	39/10
35136	35ACO35058	UK 2250	27/07	39/10
35141	35ACO35059	UK 2162	21/07	33/09
35144	35XCO35062	UK 2584	27/07	49/08

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35150	35ACO35063	UK 1119	27/07	11/13
35155	35ACO35064	UK 1234	27/07	
35159	35ACO35065	UK 3271	30/07	39/10
35160	35ACO35066	UK 1233	27/07	11/13
35163	35ACO35067	UK 3272	27/07	
35166	35ACO35068	UK 3283	27/07	39/10
35169	35ACO35071	UK 3281	29/07	25/13
35170	35ACO35072	UK 3282	30/07	25/13
35200	35ACO35001	UK 1954	28/04	33/09
35205	35ACO35073	UK 2720	27/07	10/13
35210	35ACO35074	UK 1785	27/07	6/08
35220	35ACO35075	UK 2721	37/07	8/13
35230	35ACO35078	UK 1794	24/07	27/13
35236	**35AHA35079**	UK 2207	28/07	39/10
35237	35AHA35089	UK 2208	30/07	25/13
35239	**35AHA35090**	UK 2210	28/07	18/13
35243	**35BHA35091**	UK 3146	37/07	6/08
35246	35ACO35092	UK 1795	21/07	13/10
35247	35AHA35093	UK 1796	28/07	39/10
35248	**35BHA35094**	UK 2209	38/07	
35250	35BHA35095	UK 2540	29/07	17/13
35255	35AHA35096	UK 2171	30/07	23/14
35256	35AHA35097	UK 2390	24/07	35/13
35260	35ACO35104	UK 2722	27/07	8/13
35265	35ACO35106	UK 1778	27/07	33/09
35270	35AHA35109	UK 2169	29/07	24/14
35272	35ACO35110	UK 1770	12/07	
35277	35BHA35113	UK 2326	22/06	23/14
35278	35BHA35114	UK 2343	4/06	23/14
35279	35BHA35115	UK 2397	29/06	23/14
35295	35BHA35116	UK 2481	22/06	23/14
35296	35BHA35117	UK 2396	25/06	23/14
35298	35BHA35118	UK 2168	7/07	23/14
35299	35ACO35119	UK 2724	26/06	5/07
35300	35ACO35121	UK 2723	18/06	
35302	35ACO35123	UK 2798	46/05	22/14
35307	35ACO35126	UK 2199	5/06	8/13
35308	35ACO35127	UK 2198	25/06	44/12
35310	35ACO35128	UK 2725	27/06	
35350	35ACO35131	UK 2173	12/07	
35380	35ACO35138	UK 2254	30/06	
35390	35ACO35139	UK 2423	22/06	
35400	35ACO35140	UK 2424	5/06	
35420	35ACO35147	UK 2049	18/06	10/13
35421	35AHA35148	UK 1777	46/05	
35423	35AHA35149	UK 1773	46/05	
35424	35AHA35151	UK 1765	46/05	26/10
35011	35XCO35172	UK 219	8/08	17/13
36010	36ACO36000	UK 1121	26/06	
36015	36ACO36001	UK 2649	47/05	
36040	36ACO36002	UK 1410	47/05	
36060	36ACO36006	UK 1141	12/07	
36061	**36BHA36007**	UK 1468	20/07	

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36062	36BHA36008	UK 1415	4/06	44/12
36063	36BHA36009	UK 1447	12/07	9/13
36081	36BHA36011	UK 1753	7/07	34/14
36098	36AHA36012	UK 2221	47/05	
36103	36BHA36014	UK 2126	9/07	
36104	36BHA36016	UK 2220	6/07	
36106	36BHA36017	UK 2131	47/05	38/11
36108	36BHA36018	UK 2000	4/06	13/12
36110	36BHA36019	UK 2007	8/06	18/11
36115	36BHA36020	UK 1994	3/07	21/14
36116	36AHA36021	UK 1867	23/05	26/10
36117	36BHA36022	UK 1907	11/07	
36118	36BHA36023	UK 2383	25/06	
36119	36BHA36024	UK 2491	4/06	
36120	36ACO36025	UK 1826	13/07	24/13
36127	36BHA36030	UK 3746	32/06	23/14
36128	36BHA36030	UK 3746	32/06	23/14
36137	36AHA36032	UK 1478	39/04	37/13
36138	36AHA36033	UK 3275	39/04	34/13
36139	36BHA36034	UK 3274	39/04	35/13
36140	36ACO36035	UK 1178	39/04	10/13
36141	36BHA36036	UK 2878	41/04	37/13
36161	36BHA36039	UK 1152	52/04	45/12
36162	36BHA36041	UK 1182	1/05	45/12
36163	36BHA36042	UK 1176	1/05	40/13
36165	36BHA36044	UK 1165	17/05	52/12
36180	36ACO36049	UK 2565	27/05	9/13
37043	37AHA37003	UK 1267	15/06	
37044	37AHA37004	UK 30	25/05	39/10
37045	37AHA37006	UK 1901	25/05	34/13
37046	37AHA37007	UK 1613	34/05	25/13
37047	37XHA37008	UK 1902	25/05	22/13
37060	36ACO36050	UK 442	25/05	
37075	37ACO37015	UK 2454	25/08	1/12
37079	37AHA37016	UK 2625	32/05	34/13
37081	37AHA37017	UK 2045	32/05	25/13
37083	37AHA37019	UK 2037	25/05	31/13
37084	37AHA37020	UK 2036	5/06	27/13
37086	37AHA37021	UK 2631	31/05	18/13
37119	37AHA37027	UK 1698	8/06	45/14
37122	37AHA37028	UK 1828	19/05	40/13
37141	37AHA37040	UK 1607	9/05	21/14
37145	37AHA37051	UK 1185	37/04	21/14
37147	37BHA37052	UK 1975	36/04	21/14
37150	37ACO37055	UK 1504	37/04	40/13
37170	37ACO37057	UK 1503	38/04	29/14
37175	37ACO37058	UK 1187	38/04	8/08
37180	37ACO37059	UK 1190	38/04	40/14
37182	37AHA37062	UK 109	38/04	33/09
37183	37BHA37066	UK 1188	6/05	34/14
74071	74BHA74072	Aus. 615	35/07	
74071	74BHA74073	Aus. 616	35/07	
74071	74BHA74074	Aus. 617	35/07	

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74141	74XHA74142	Aus. 618	35/07	
74141	74XHA74143	Aus. 610	35/07	
74151	74AHA74154	Aus. 809	12/07	
74152	74BHA74150	Aus. 208	8/07	44/10
74153	74BHA74155	Aus. 207	8/07	
74162	74BCO74163	Aus. 811	13/07	
74162	74BCO74164	Aus. 810	13/07	
74183	74AHA74180	Aus. 237	9/07	
74186	74AHA74189	Aus. 238	47/05	
74192	74BHA74213	Aus. 818	9/07	
74201	74BHA74199	Aus. 246	8/07	
74202	74BHA74208	Aus. 247	13/07	
74204	74BHA74209	Aus. 819	14/07	
74205	74BHA74244	Aus. 245	45/10	
74206	74AHA74212	Aus. 244	15/07	
74210	74BCO74245	Aus. 820	13/07	
74221	74BCO74227	Aus. 821	11/07	
74229	74BHA74226	Aus. 250	13/07	
74229	74BCO74246	Aus. 824	16/08	
74229	74BCO74247	Aus. 249	16/08	26/13
74231	74BHA74226	Aus. 250	13/07	
74232	74BHA74216	Aus. 256	10/07	
74234	74BHA74237	Aus. 257	11/07	45/10
74252	74BHA74258	Aus. 263	41/10	
74253	74BCO74262	Aus. 830	13/07	
74271	74BCO74275	Aus. 833	18/07	
74271	74BCO74277	Aus. 280	35/07	
74272	74BHA74267	Aus. 834	13/07	
74287	74BHA74279	Aus. 289	52/06	
74293	74ACO74311	Aus. 839	12/06	25/13
74294	74BCO74300	Aus. 292	47/05	
74294	74ACO74311	Aus. 839	12/06	
74310	74BCO74395	Aus. 302	18/07	
74320	74BCO74313	Aus. 303	18/07	
74330	74BCO74387	Aus. 304	52/06	
74340	74BCO74384	Aus. 305	35/07	
74350	74BCO74383	Aus. 306	35/07	44/10
74376	74BCO74377	Aus. 715	35/07	
74391	74BHA74390	Aus. 720	35/07	
74391	74BHA74396	Aus. 721	35/07	
74393	74BHA74397	Aus. 26	47/06	
74394	74BHA74397	Aus. 26	47/06	
74415	74ACO74416	Aus. 726	35/07	
74430	74ACO74431	Aus. 315	22/08	48/08
74450	74ACO74451	Aus. 319	34/07	48/08
74517	74ACO74031	Aus. 743	12/06	
74521	75AHA75147	Aus. 744	19/06	
74555	74ACO74593	Aus. 334	34/07	
74581	74AHA74585	Aus. 112	18/07	
75010	75ACO75111	Aus. 341	36/07	
75010	75ACO75114	Aus. 342	36/07	
75110	75ACO75111	Aus. 341	36/07	
75120	75ACO75114	Aus. 342	36/07	

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75132	75BHA75137	Aus. 137	19/06	42/08
75170	75ACO75166	Aus. 788	14/06	
75170	75ACO75167	Aus. 789	14/06	
75170	75ACO75168	Aus. 790	17/06	
75171	75AHA75164	Aus. 144	44/10	
75171	75AHA75165	Aus. 143	21/06	20/08
75171	75AHA75174	Aus. 158	18/06	25/13
75173	75AHA75174	Aus. 158	18/06	
75175	75AHA75178	Aus. 154	18/06	24/13
75261	75AHA75274	Aus. 808	11/07	
75264	75AHA75269	Aus. 201	12/07	
75264	75AHA75267	Aus. 202	48/06	
75265	75AHA75266	Aus. 197	17/07	
95261	95BCO95263	Jpn. W145	9/12	
95264	95BHA95266	Jpn. W1155A	5/12	
95268	95BHA95122	Jpn. W1162A	52/12	
95258	95BHA95257	Jpn. W1160	23/14	
95271	95BHA95277	Jpn. W1183	5/13	
95272	95BHA95278	Jpn. W1162B	1/13	
95273	95BHA95279	Jpn. W1197	5/12	
95276	95BHA95284	Jpn. W1193	46/10	
95282	95BHA95288	Jpn. W1167	10/11	
95285	95BHA95289	Jpn. W1166	29/12	
95342	95AHA95339	Jpn. W1265	46/12	
96940	96BHA96933	Jpn. W7	51/12	
96942	96BHA96931	Jpn. W5	21/11	
96961	96BHA96951	Jpn. W1033A	46/10	21/14
97041	97BHA97044	Jpn. W65	21/11	38/12
97042	97XHA97045	Jpn. W71	46/11	
97043	97XHA97046	Jpn. W1091	45/11	12/12
97060	97ACO97050	Jpn. W54	46/11	1/13
97063	97XHA97054	Jpn. W1099	16/13	
97063	97XHA97058	Jpn. W1093	36/13	
97064	97BHA97055	Jpn. W1100	39/12	3/14
97082	97BHA97084	Jpn. W64A	9/12	33/14
97083	97BHA97085	Jpn. W64B	9/12	34/14
97108	97BHA97095	Jpn. W1049	38/12	3/14
97141	97BHA97132	Jpn. W1067	52/12	
97143	97AHA97133	Jpn. W1062	11/11	
97144	97AHA97134	Jpn. W1081	9/11	52/12
97146	97AHA97135	Jpn. W1083	46/10	
97148	97XHA97136	Jpn. W1085	18/11	
97149	97AHA97137	Jpn. W66	46/10	3/14
97150	97XHA97139	Jpn. W67	46/10	
97151	97AHA97168	Jpn. W1061	21/11	
97154	97BHA97171	Jpn. W1042	52/11	
97155	97AHA97172	Jpn. W1065	21/11	
97156	97BHA97173	Jpn. W92	49/11	
97181	97BHA97089	Jpn. W1051	42/12	
97182	97BHA97090	Jpn. W1053	21/12	
97183	97BHA97028	Jpn. W95	16/13	
97184	97BHA97030	Jpn. W1055A	49/11	37/13
97185	97BHA97031	Jpn. W1057B	49/11	

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97188	97BHA97033	Jpn. W1052	38/12	
97189	97BHA97034	Jpn. W1055B	49/11	
97204	97AHA97191	Jpn. W131	11/11	
97218	97BHA97216	Jpn. W134B	37/13	
97220	97AHA97197	Jpn. W1103	29/12	
97221	97AHA97198	Jpn. W106	11/11	
97225	97AHA97210	Jpn. W150A	46/11	
97226	97XHA97211	Jpn. W1110	3/12	29/14
97227	97XHA97212	Jpn. W1146	30/13	
97228	97AHA97213	Jpn. W123	29/14	
97229	97AHA97214	Jpn. W101A	29/12	
97230	97AHA97215	Jpn. W101B	20/12	
97233	97BHA97252	Jpn. W153	12/11	21/14
97234	97BHA97253	Jpn. W137A	45/11	3/14
97235	97BHA97254	Jpn. W165	27/13	
97236	97BHA97255	Jpn. W137B	46/11	3/14
97237	97BHA97256	Jpn. W1121	6/12	
97241	97BHA97259	Jpn. W1124	21/11	
97261	97BHA97293	Jpn. W141	12/11	49/11
97262	97BHA97294	Jpn. W104	12/11	
97263	97BHA97295	Jpn. W132	9/11	
97263	97BHA97965	Jpn. W1361	45/11	
97272	97BHA97306	Jpn. W126	46/11	
97274	97AHA97308	Jpn. W127	9/11	
97277	97AHA97311	Jpn. W1102	40/13	
97280	97BHA97315	Jpn. W1106	45/11	
97285	97AHA97319	Jpn. W1262	11/11	45/12
97286	97AHA97321	Jpn. W1263	11/11	52/12
97287	97AHA97322	Jpn. W1264	11/11	21/14
97303	97BHA97324	Jpn. W110	6/12	
97340	97ACO97327	Jpn. W1221	42/13	
97343	97BHA97330	Jpn. W214A	21/14	
97360	97ACO97333	Jpn. W1222	40/13	
97383	97BHA97337	Jpn. W206	3/12	
97410	97XHA97358	Jpn. W166	6/12	
97423	97BHA97363	Jpn. W1227	3/14	
97465	97BHA97370	Jpn. W222A	49/11	
97466	97AHA97371	Jpn. W243	13/12	
97469	97AHA97373	Jpn. W228B	48/11	
97481	97BCO97375	Jpn. W1205	49/11	
97343	97BHA97567	Jpn. 214B	21/14	
97563	97AHA97568	Jpn. W50	4/12	

MARINE INFORMATION REPORT AND SUGGESTION SHEET INSTRUCTIONS

We value your suggestions to improve our products. The Marine Information Report and Suggestion Sheet is provided for users to submit corrective information. Please be complete and accurate in your description/suggestion and include the information as detailed below:

Observer: name(s) of person(s) making observation and rank, rate or title.
Ship/Organization: name of vessel or organization.
Address: complete mailing address. Also include telephone number, fax, and/or e-mail address, if available, in case clarification is required.
Date of Observation: day, month and year at which the observation was made.
Time of Observation: local time at which the observation was made.
Latitude/Longitude: exact position of the observation expressed as accurately as possible.
Datum: horizontal datum to which the observed position is referred (e.g. WGS, NAD83, local foreign datum, etc.).
Navigation System: method used to determine the position of the observation (e.g. radar, GPS, Loran, etc.). Include details about the equipment used, if deemed pertinent.
Verified by Navigator: indicate whether observation was verified by navigator.
Product(s) Affected: product number(s) and/or name(s) to which the observation applies (e.g. Chart 62400, Sailing Directions Pub. 127, etc.).
Edition: edition number and/or year of affected product.
Latest correction applied: the latest Notice to Mariners to which your copy of affected product has been corrected.
Sounding sensor or method used: equipment or method used to collect soundings. When reporting soundings, please provide an annotated echogram, if available, for verification.
Soundings corrected for draft: indicate whether soundings have been corrected for vessel's draft. If not, please include observed draft along with the details of information reported.
Details of Information Reported: use this space to provide details of the observation/suggestion. When referring to a charted feature, please describe it exactly as it appears on the chart. When referring to a publication, please indicate page number(s) and line number(s) or station number(s) as applicable. Use additional sheets as necessary and include diagrams, photocopies of the product(s) involved and/or photographs to describe observations in greater detail. If possible, include the designation, point of contact, telephone number, fax number and/or e-mail address of the local port authority to enable NGA to update our records and obtain additional or later information.
User Feedback: use this space to provide feedback and suggestions for improving NGA products and services.

Please detach, fold and mail the pre-addressed form and include any other relevant material or supporting information.

Reports which present an immediate hazard to navigation should be sent to the nearest NAVAREA Coordinator via coast radio stations. In general, these hazards would include major aids to navigation anomalies, discovery of obstructions or shoals with depths of less than 30 meters, floating dangers to shipping, and any situation deemed critical to safety of life at sea. For further information consult Notice to Mariners No. 1, paragraph 43 (Worldwide Navigational Warning Service).

Due to the large volume of information received, NGA cannot acknowledge receipt of every report. Some reports containing useful data are filed for use in the compilation of the next edition of the affected product. Others confirm or clarify previously reported information. Echogram traces are digitized and become part of out Bathymetric Database. Acknowledgment is made by inclusion in the Observer's List of the Notice to Mariners (page ii), or in some cases by letter from the Agency involved.

For additional information about various Hydrographic Reports, consult The American Practical Navigator (Chapter 30).

MARINE INFORMATION REPORT AND SUGGESTION SHEET

Observer _____ Ship/Organization _____

Address _____

_____

Email address _____

Date of Observation _____ Time of Observation (Local) _____

Latitude _____ Longitude _____ Datum _____

Navigation System _____ Verified by Navigator: Yes _____ No _____

Product(s) Affected _____ Edition _____

Latest correction applied: N.M. _____

Sounding sensor or method used _____ Sounding(s) corrected for draft: Yes ____ No _____

Details of Information Reported (continue on additional sheets as necessary) _____

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User Feedback (continue on additional sheets as necessary)

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FIRST-CLASS MAIL
POSTAGE & FEES PAID

NGA
PERMIT NO. G-2

MARITIME SAFETY OFFICE
MAIL STOP N64-SH
NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
7500 GEOINT DRIVE
SPRINGFIELD, VA 22150-7500

HYDROARC REPORT SHEET

Observer _____

Ship/Organization _____

Phone _____ Email Address_____

Describe Hazard (e.g. dredge, buoy, current meter, operations):_____

_____

_____

_____

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_____

Is hazard remotely monitored? Yes_____ No_____

If yes, list Internet URL where most recent position will be posted (if any): _____

Depth water column is occupied (e.g. “bottom to surface”, “surface to 500m”): _____

Date of Insertion_____ Latitude _____ Longitude_____

Date of Expected Removal _____

Most Recent Observation: Date _____ Time (Local) _____

Latitude _____ Longitude _____ Datum _____

Navigation System _____ Verified by Navigator: Yes _____ No_____

Sounding sensor or method used _____

Sounding(s) corrected for draft: Yes _____ No _____

Details of Information Reported (continue on additional sheets as necessary): _____

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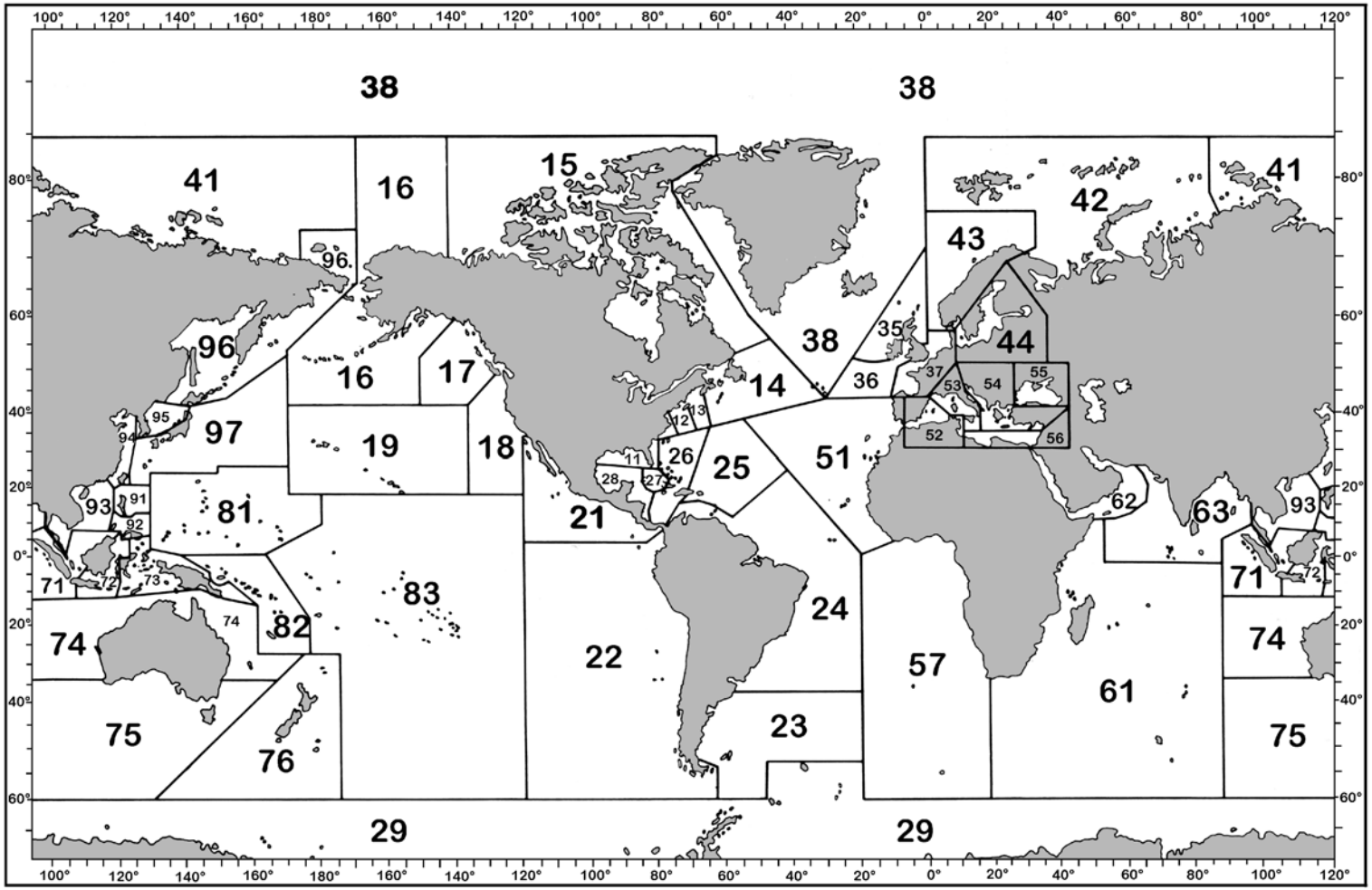

GEOGRAPHIC LOCATOR

For chart numbering purposes, the world is divided into nine regions, each corresponding to the geographic limits of one of the nine regions in the NGA/DLIS Catalog of Maps Charts and Related Products. Each Region is further subdivided into the numbered Subregions in the above graphic. The first two digits of all five-digit chart numbers indicate the geographic subregion to which the chart pertains. Users can locate corrections in this Notice for charts of their immediate interest by determining the two-digit Subregion number of the pertinent geographic area, and then turning to the page or pages that list the chart numbers beginning with those two digits.

IMPORTANT

NAVIGATIONAL INFORMATION

TIME—DATED

NOTICE TO MARINERS

PLEASE EXPEDITE DELIVERY