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NVIC 7 86 30 Apr 1986

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 7-86

Electronic Version for distribution via the World Wide Web

Subj: Information on the Adequacy and Currency of Nautical Charts

Ref: (a) 33 CFR 164.33, Navigation Safety Regulations

- 1. <u>PURPOSE</u>. The purpose of this circular is to provide amplifying information and guidance for vessels required by the Navigation Safety regulations to carry marine charts when transiting the navigable waters of the United States. Regulations and Coast Guard enforcement policy guidance for navigation publications other than charts are not affected by the content of this circular.
- 2. <u>PUBLICATIONS AFFECTED</u>. The information contained in this circular will be incorporated into Volume I of the Marine Safety Manual (COMDTINST M16000.6).

3. BACKGROUND.

- a. The Navigation Safety Regulations, 33 CFR 164, adopted in 1977, established marine chart requirements for vessels 1600 gross tons or larger, transiting the navigable waters of the United States. The requirements were for these vessels to have charts of a large enough scale and sufficient detail to enable safe navigation, the most current edition available, and currently corrected.
- b. In practice, Coast Guard boarding officers often interpreted the above requirements to mean only the current edition of the largest scale National Ocean Service (NOS) chart of an area, corrected for all Notices to Mariners published by the Defense Mapping Agency, (DMA) available to the boarding officer as of the date of boarding.
- c. Worldwide chart availability and distribution problems made compliance with the requirements difficult, if not impossible, in many cases. In order to overcome compliance problems, the Coast Guard, in September, 1983, amended chart requirements of the Navigation Safety Regulations in 33 CFR 164.33. The amended regulations permit ships to carry earlier editions of charts of United States waters, provided they are corrected upto-date with all Defense Mapping Agency (DMA) Notices to Mariners, or equivalent foreign publications when foreign charts are used, reasonably available to the vessel and applicable to the vessel's route of transit.
- d. Navigation and Vessel Inspection Circular (NVIC) 9-83, issued September 14, 1983, provided guidance to mariners for complying with the amended regulations in 33 CFR 164.33, and standards for enforcement of these regulations by Coast Guard Captains of the Port

- a. Based upon information obtained subsequent to publication of NVIC 9-83, the Coast Guard has determined present standards for charts need to be modified to ensure mariners have available to them adequate navigation charts. The reasons for this modification are two fold: (1) chart corrections published in DMA Notices to Mariners apply strictly to current chart editions. Once an edition has been superseded, corrections no longer reference it; and (2) not all new navigation information affecting charts is published in the Notice to Mariners. Information pending at the time a new chart edition is compiled is incorporated into the new chart without appearing in the Notice to Mariners. Conscientious correction of previous editions cannot guarantee totally accurate, up-to-date navigational information.
- b. A further complicating factor is the lack of a speedy, comprehensive, worldwide nautical chart distribution system. Commercial chart sales agents are available in most ports but there is no assurance the agent will have charts needed for the ship's next U.S. port of call. At times it may be virtually impossible for a master to get the current edition of the needed chart, especially in foreign ports.
- Mariners should realize DMA Notices to Mariners are designed specifically to correct
 NOS and DMA charts. In some instances it may not be possible to apply these corrections
 accurately to charts of U.S. waters produced by foreign hydrographic authorities.
 Conversely, it may not be possible to correct NOS charts from notices to mariners issued
 by foreign hydrographic authorities.
- d. In recognition of the difficulties mariners may encounter in obtaining current-edition charts for U.S. waters, as well as their need for accurate, up-to-date information, NOS and DMA have embarked on a cooperative procedure to alert mariners to the reasons for publishing new NOS chart editions. DMA has begun to publish brief descriptions of the principal reasons for new NOS chart editions in its Notice to Mariners. While this information does not substitute for the current-edition chart, it does serve to advise the mariner of the key differences between new and superseded chart editions.

5. PROCEDURES.

- a. NOS: will develop brief statements of the reason(s) for publishing new NOS chart editions. These descriptive statements will be issued by the chief reviewers, as new chart editions are processed through the final NOS quality assurance review.
- b. <u>DMA</u>: will publish the NOS-issued reasons for publishing new chart editions in the Catalog Correction-Charts section of its Notice to Mariners. The following are examples of some types of phrases used to describe reasons for new chart editions. More than one reason may be stated. Conversely, NOS may determine no statement is appropriate for a new edition, particularly if no significant navigational information has changed:
 - 1. Hydrography
 - 2. Shoreline and/or topography
 - 3 Aids to navigation

- '. I raffic routing systems
- 8. Notice to Mariners
 - 9. Data quality
- 10. Various major changes, or general changes.

Examples of the new chart edition advisories, extracted from recent Notices to Mariners, appear as enclosure (1).

- c. Mariners: should endeavor to obtain the current edition of NOS charts or their foreign equivalents for the U.S. waters they intend to transit. Then the current edition cannot be obtained, the most recent previous edition available should be used. Regardless of which edition is being used, charts must be updated to the fullest extent possible with correction information contained in all the reasonably available Notices to Mariners applicable to the intended route of transit in U.S. waters. DMA Notice to Mariners information is now available to individual users worldwide through electronic transmission. Enclosure (2) contains information for obtaining this service.
- d. Mariners are cautioned that use of previous editions entails the risk of missing navigational information. Masters should consult the DMA Notice to Mariners, SECTION I, CATALOG CORRECTIONS-CHARTS, to determine, if possible, the reason for new NOS chart editions when deciding whether or not to rely on a previous edition for a transit of U.S. waters.
- e. <u>Coast Guard</u>: NVIC 9-83 directed Captains of the Port (COTP) to evaluate the adequacy of charts and publications on vessels entering their zones, as part of the Coast Guard's ongoing vessel boarding program. This evaluation must be tempered by an appreciation for the accuracy limits inherent in superseded chart editions. Corrected superseded editions may continue to be functionally adequate for a particular route but their super-session would require more than a cursory review for adequacy by the COTP. Also, the inherent limitations on applicability of Notice to Mariners corrections to superseded editions must be borne in mind. For example, shoreline revisions may have no impact on the safety of navigation. On the other hand, shifted loran lattices could be critical in areas with hazardous offshore approaches. A side-by-side comparison of the current and superseded editions may be necessary to determine continuing acceptability.
- f. Publication of a new chart edition does not automatically mean a superseded edition cannot be used when it is the best information reasonably available to the mariner. Use of superseded chart editions does not relieve mariners of the responsibility to make all reasonably available Notice to Mariners corrections applicable to their intended route of transit in U.S. waters.
- g. Captains of the Port should review the DMA Notice to Mariners, SECTION I, CATALOG CORRECTIONS-CHARTS, regularly upon receipt, to determine the current editions of NOS charts for their waters. The phrases describing the reasons for new chart editions, while not providing detailed information about the differences between current and superseded editions, will at least indicate the significance of changes and justification if appropriate for requiring only current NOS chart editions or foreign equivalents of

charts, examine the small correction information in the lower left margin to determine the Notice to Mariners (year and paragraph number) which may have been applied. If the small correction print date is at least as recent as the edition date of the equivalent NOS chart, and if the foreign chart is otherwise of adequate scale and detail, the chart may be considered the functional equivalent of the current NOS chart.

- h. NVIC 9-83 encouraged Captains of the Port to disseminate as widely as possible, 1 listings of acceptable and unacceptable charts and publications covering their waters. This policy remains in effect. The information should be updated periodically as necessary to reflect publication of new NOS chart editions.
- i. The contents of this NVIC should be distributed widely to local pilots, agents for shipping lines, representatives of national and international maritime organizations, etc.) with further republication encouraged.

J. H. PARENT
Acting Chief, Office of Marine
Environment and Systems

Enclosure:

- (1) NOS New-Chart-Edition Advisory Examples
- (2) Defense Mapping Agency Navigation Information Network

Non-Standard Distribution:

- C:e Baltimore (45); Alameda (40); Port Arthur) Honolulu, Seattle (35); Miami, Mobile, Long Beach (25); Norfolk, Jacksonville, Portland OR (20); Boston, Portland ME, Charleston, Anchorage (15); Cleveland (12); Cincinnati, Louisville, Memphis, Nashville, Paducah, Pittsburgh, St. Louis) Savannah, San Juan, Tampa, Galveston, Buffalo, Chicago, Detroit, Duluth, Milwaukee, San Diego, Juneau, Valdez (10); Providence) Huntington, Wilmington, Corpus Christi, Toledo (5).
- C:m New Orleans (140); New York (70); Philadelphia (35); Houston (25); St. Ignace (5); Sturgeon Bay (4).
- D:1 CG Liaison Officer MILSEALIFTCOMD M-65 STRAT MOB, CG Liaison Officer JUSMAGPHIS (1).

NOS NEW-CHART-EDITION ADVISORY EXAMPLES

EXTRACTED FROM DEFENSE MAPPING AGENCY NOTICES TO MARINERS

SECTION I

CATALOG CORRECTIONS - CHARTS

Note: Underlining indica	Inderlining indicates that column in which a correction has been made or new information added.		Edition			
Stock No./Chart No.	Charts	Scale:-1:	No.	Date	Price Category	Volume Page
25XHA25659	Puerto Maunabo (New edition because automated)	20,000	7	<u>6/85</u>	NOS	II-57 _.
16XHA16041	Demaracation Bay and Approaches (Shoreline changes)	51,639	6	10/85	NOS	I-72
16BCO16343	Port Heiden (Loran-C and topographic revision)	80,000	6	6/85	NOS	I-72
25XHA25679	Bahia de Guania (New datum)	10,000	<u>8</u>	<u>7/85</u>	NOS	II-57
11AHA11537	Cape Fear River - Cape Fear to Wilmington (New edition due to extensive Notice to Mariners corrections)	40,000	<u>24</u>	<u>9/85</u>	NOS	I-70
16XHA16042	Griffin Point and Approaches (New edition due to shoreline revision)	5 1,024	5	<u>9/85</u>	NOS	I-72
13BHA13225	Providence Harbor (Excessive Notice to Mariners corrections, shoreline and hydrographic revisions)	10,000	<u>31</u>	10/85	NOS	1-71
WOPGN514 (INT. 814)	Bering Sea (Northern Part) (LORAN-C)	3,500,000	4	4/81	NOS	I-6, II-6, III-6, IV-6, V-6, VII-6, VIII-6, IX-6, X-4
11ACO11330	Mermentau River to Freeport (LORAN-C) (Excessive Notice to Mariners corrections and hydrographic revisions)	<u>250,000</u>	<u>3</u>	<u>9/85</u>	NOS	I-12, 70

DEFENSE MAPPING AGENCY NAVIGATION INFORMATION NETWORK

The Defense Mapping Agency, through the Navigation Information Network (NAVINFONET), has made the Automated Notice to Mariners System (ANMS) data files more accessible to individual users. The NAVINFONET system was designed to provide users with navigational data in various user-specified formats via multiple communications links. The ANMS is a special service to mariners worldwide, who have rudimentary automated data processing capability. It can be used in port through TELEX, TWX, or standard telephone circuits. It can be accessed from sea via INMARSAT using TELEX or voice grade telephone. The ANMS features electronic mail to DMAHTC; chart corrections for all DMA and NOS charts back to the current edition date or 1975, whichever is sooner; all in-force radio navigation warnings; current Lists of Lights data; and other similar or related informational items. The cost for this service is strictly the communications connect time paid by the user to the common carrier plus the purchase cost of equipment used, if any. Further information concerning the ANtS may be had by writing:

Director
Defense Mapping Agency Hydrographic/Topographic Center
ATTN: ANMS
Washington, DC 20315-0030

or calling

Area Code 202-227-3146