DEPARTMENT OF HOMELAND SECURITY

Coast Guard

[Docket No. USCG-2019-0346]

Navigation and Vessel Inspection Circular 01-16 Change 2 – Use of Electronic
Charts and Publications in Lieu of Paper Charts, Maps and Publications

AGENCY: Coast Guard, DHS.

ACTION: Notice of availability.

SUMMARY: The Coast Guard announces the availability of the Navigation and Vessel
Inspection Circular (NVIC) 01-16 Change 2 issued May 21, 2020, together with a
Deregulatory Savings Analysis. The NVIC 01-16 Change 2 allows for U.S.-flagged
vessels to use previously downloaded, electronic copies of Inland Navigation Rules and
Vessel Traffic Service Rules, and to access voyage planning navigation publications
electronically, including through underway connectivity, to meet domestic carriage and
International Convention for the Safety of Life at Sea certification requirements.

DATES: The NVIC 01-16 Change 2 was issued May 21, 2020.

ADDRESSES: To view NVIC 01-16 Change 2, as well as other documents mentioned
in this notice as being available in the docket, please search for docket number USCG-

FOR FURTHER INFORMATION CONTACT: Please address questions or feedback
concerning this policy to Lieutenant Commander W. Christian Adams, Office of
Navigation Systems, Coast Guard; telephone 202-372-1565, email cgnav@uscg.mil.
SUPPLEMENTARY INFORMATION:

I. Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>FR</td>
<td>Federal Register</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships</td>
</tr>
<tr>
<td>NVIC</td>
<td>Navigation and Vessel Inspection Circular</td>
</tr>
<tr>
<td>SOLAS</td>
<td>International Convention for the Safety of Life at Sea</td>
</tr>
<tr>
<td>VTS</td>
<td>Vessel Traffic Service</td>
</tr>
</tbody>
</table>

II. Background

Navigation publications are a principal source of voyage planning information. Mariners use tide tables, the United States Coast Pilot, local notices to mariners, and other information sources to access relevant information for a particular transit. Since at least 2010, the Coast Guard has recognized the carriage of certain navigation publications electronically on U.S.-flagged vessels as meeting U.S. domestic regulations and International Convention for the Safety of Life at Sea (SOLAS) certificate requirements. This is an acceptance of common industry practice.

In response to recommendations from the Navigation Safety Advisory Council and the public, the Coast Guard is updating its policy on electronic carriage of the Inland Navigation Rules, Vessel Traffic Service (VTS) Rules, and navigation publications in general. Currently, the Coast Guard, the National Oceanic and Atmospheric Administration, and the National Geospatial-Intelligence Agency provide marine safety information in an updated electronic format, some of which is graphical and geographically selectable. Electronic devices (both hardware and software) have improved such that a mariner can efficiently access navigation publications when needed.

Furthermore, the Coast Guard recognizes that the maritime industry and mariners in general have made substantial investments to ensure vessels maintain internet
connectivity, even while underway. Because mariners use certain navigation publications primarily for voyage planning purposes, the Coast Guard recognizes the practicality of accessing required navigation information via the internet on an as-needed basis, versus keeping a publication or extract onboard. To encourage the use of electronic voyage planning products, the Coast Guard is providing the option for vessels to meet certain publication carriage requirements via internet access.

Therefore, we are revising Navigation and Vessel Inspection Circular (NVIC) 01-16 Change 1 and issuing Change 2 to allow publications required by the Code of Federal Regulations (CFR) Title 33 (parts 83, 161, and 164) and Title 46 (parts 26, 28, 78, 97, 109, 121, 130, 140, 184, and 196), and the SOLAS Chapter V Regulation 27 to be carried electronically, with the majority of publications accessed via web services. However, if a mariner chooses to use an electronic version of the Inland Navigation Rules and VTS Rules, which are designated as “ready reference” in 33 CFR 83.01(g) and 161.4, the mariner must be able to display ready reference current electronic editions on their electronic device without internet connectivity by producing a previously downloaded copy.

III. Summary of Public Comments and Changes

On September 20, 2019, the Coast Guard published a Notice of Availability of Navigation and Vessel Inspection Circular 01-16 Change 2-Use of Electronic Charts and Publications in Lieu of Paper Charts, Maps and Publications (84 FR 49545) that sought public comments on any concerns related to these proposed policy changes and the supporting economic analysis. After the public comment period closed on November 4,
2019, the Coast Guard reviewed and analyzed the comments contained in the six public submissions received. Below we summarize and respond to these public comments.

**Subchapter T inspection checklist:** One commenter suggested that we amend the NVIC to address carriage of 46 CFR parts 166 to 199 in electronic or paper version because a subchapter T inspection checklist recommends that those parts be carried on board. Although 46 CFR parts 166 to 199 may be carried on board in electronic or paper versions in response to the checklist recommendations, this NVIC Change 2 is meant to address the carriage of navigation-related publications that are required by certain parts of CFR titles 33 and 46 to be carried on board. Since 46 CFR parts 166 through 199 are not required to be carried on board, they are not addressed in this NVIC. The Coast Guard did not revise the NVIC Change 2 in response to this comment.

**Training courses on use of electronic publications:** The same commenter suggested that the Coast Guard address mariner credentialing in the NVIC Change 2, and, specifically, recommend training courses and programs that are permitted and encouraged to train students in the use of electronic publications. Another commenter recommended that approved mariner credentialing courses and programs be permitted to train students in the use of electronic publications, including the applicable CFR sections. The scope and intent of this NVIC Change 2 is to provide voluntary equivalency for the purposes of carriage requirements between paper and electronic charts and publications required for navigation. It is not meant to prescribe the use of certain courses or programs, or the content of maritime courses and programs. For this reason, the Coast Guard did not revise the NVIC Change 2 in response to this comment. However, we are
forwarding the recommendations regarding courses on the use of electronic publications to the Coast Guard’s Office of Merchant Mariner Credentialing for their consideration.

**Ready reference requirements:** Two commenters raised concerns about the NVIC interpreting the “ready reference” requirements of the CFR for certain publications as meaning displayable within 2 minutes. One of the commenters believed it was arbitrary and could lead to unwarranted penalties for mariners during the Coast Guard’s marine safety inspections and boardings. The commenter recommended that Section 4 of NVIC 01-16 Change 2 Memo be amended to read, “To be eligible for the electronic charts and publications equivalency under this NVIC, mariners must be able to access the Inland Navigation Rules via the internet or produce a downloaded copy on their electronic device within a reasonable amount of time of the request of the boarding officer or marine inspector under the given circumstances.” In addition, the commenter recommended that Section F.1 of Enclosure (2) to NVIC 01-16 also be revised to read, “For publications stored or accessed electronically and which must be available for ready reference, the publications must be displayable within a reasonable amount of time under the given circumstances.”

We disagree with changing the standard to being able to display the publication within a reasonable amount of time. Section 83.01 of 33 CFR requires that the Inland Navigation Rules be carried as “ready reference” on board each self-propelled vessel 12 meters or more in length. Similarly, 33 CFR 161.4 requires each VTS user to carry on board and maintain for ready reference a copy of the VTS Rules. Practical use and reference to the Inland Navigation Rules and VTS Rules while underway may be directly related to a situation with vessels meeting, as well as navigation or communication
requirements within VTS areas. A delay in accessing these rules is a safety concern. For this reason, we cannot amend the standard to “within a reasonable amount of time.” However, we are amending NVIC 01-16 Change 2 to require that, if an electronic version is to be used, those publications designated as “ready reference” be previously downloaded so as to be accessible without internet access.¹

Without the traditional requirements of having a paper copy on board a vessel, the proposed 2-minute standard was intended to set a reasonable limit on how “ready reference” could be interpreted for an electronic version that comes from a computer drive or the internet. The proposed time standard was also meant to reduce the inherent and unavoidable variation which results from marine inspections being conducted by many different inspectors with a variety of backgrounds and experience. We have not set such a specific time duration standard for paper copies in 33 CFR 83.01 or 161.4, and, if we are to introduce such a standard for the electronic equivalent, that would best be done by amending those regulations. If a maximum time period is to be established to access “ready reference” publications, it should apply equally whether the rules are viewed on a printed page or an electronic screen.

In terms of the time it takes to display an electronic version of the publication, the “ready reference” standard applies to an electronic version as if it were a paper version of the publication on a vessel. In consideration of the decision to allow "carriage via internet access,” the Coast Guard recognizes that many of the navigation publications required to be carried are used primarily for voyage planning. These publications must be current and accessible, but not ready reference.

¹ This was the only substantive change to NVIC 01-16 Change 2 we made from the version we posted in the docket when we invited comments in September 2019.
Depending on vessel heading, masts or other topside obstructions may block antennas from receiving a signal. Additionally, connectivity may be intermittent or unavailable for short durations of a voyage. This temporary unavailability may not interfere with voyage planning activities, but even brief periods of unavailability could result in an unacceptable delay in accessing the Inland Navigation Rules and VTS Rules that are required to be ready reference. Maintaining downloaded copies will also ensure continuous access while maneuvering through close quarters situations when these ready reference publications may be most needed.

It should be noted that NVIC 01-16 Change 2 provides a voluntary equivalency for the purposes of carriage requirements between paper and electronic charts, and between paper and electronic versions of the Inland Navigation Rules and VTS Rules required for navigation. Vessel operators may continue to meet carriage requirements for all publications, including VTS Rules and the Inland Navigation Rules, in the traditional fashion by maintaining a paper (hard copy) reference.

Publication subscription service: Another commenter suggested that his company could sell a specific subscription service that provides up-to-date electronic versions of all the publications required for the purpose of carriage, but they were unable to obtain Coast Guard approval for this service at the time it was originally proposed. The Coast Guard does not require the use of any fee-based service to access these rules and publications. Nor does the Coast Guard prohibit the establishment of fee-based services to aid with the carriage of publications. However, all publications required for carriage under the CFR titles referenced by this NVIC are available free of charge from their respective governmental agencies’ public websites.
Citing an example of issues his company encountered relating to providing printed oil record books, the same commenter stated that there is a need for the Coast Guard to clearly state what it wants with respect to this NVIC Change 2. We believe that the NVIC 01-16 Change 2 policy is very clearly written, so that companies seeking to offer products to enable mariners to use electronic charts and publications, as well as Coast Guard inspectors, will understand exactly what is required to meet NVIC 01-16 Change 2 equivalency standards. Regarding the commenter’s example, we note that oil record books, which are required under the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex I, and 33 CFR part 151, are outside the scope of this NVIC. The Coast Guard did not revise the NVIC Change 2 in response to this comment.

Support for proposed action: Two other commenters were supportive of the proposed NVIC announced in September 2019 and of allowing certain navigation publications to be accessed electronically.

The Coast Guard appreciates all the comments received. We will continue to study this issue in light of the comments received and our experience with mariners’ implementation of this policy before issuing other notices or policy letters on this matter.

IV. Cost Savings Analysis

The Coast Guard prepared a Deregulatory Savings Analysis for the September 2019 initial notice of availability of NVIC 01-16 Change 2 that identified and examined the potential costs and cost savings associated with implementing the new equivalency determination for carriage. The Coast Guard received no comments on this analysis, but we did receive comments on the NVIC that caused us to change our ready reference equivalency standard. Changing this standard impacts the estimated cost savings. Additionally, the Coast
Guard identified typographical and other grammatical errors that have been corrected in the final version along with updating the cost savings estimates based on the changes to the final notice. This analysis is available in the docket, where indicated under the Addresses portion of this document.

V. Public Availability of NVIC 01-16 Change 2

A version of NVIC 01-16 Change 2 with an issue date of May 21, 2020, will be placed in the docket for this notice. Also, NVIC 01-16 Change 2 will be located on the following Commandant web site: https://www.dco.uscg.mil/Our-Organization/NVIC/.

This version contains the NVIC’s enclosures – Enclosure (1), Equivalency determination for “Marine Charts,” “Charts,” or “Maps;” “Publications;” and navigation functions; and Enclosure (2), Guidelines for inspecting and using electronic charts and publications.


R. V. Timme,
Rear Admiral, U. S. Coast Guard,
Assistant Commandant for Prevention Policy.
[FR Doc. 2020-11363 Filed: 5/26/2020 8:45 am; Publication Date: 5/27/2020]