

INTRODUCTION

General Remarks—The tenth edition of Chart No. 1, Nautical Chart Symbols Abbreviations and Terms incorporates the symbols contained in the International Hydrographic Organization (IHO) Chart 1 (INT 1). The various sections comprising the Table of Contents follow the sequence presented in INT 1; therefore the numbering system in this publication follows the standard format approved and adopted by the IHO.

Where appropriate, each page lists separately the current preferred U.S. symbols shown on charts of the National Ocean Service (NOS) and the National Imagery and Mapping Agency (NIMA). Also shown in separate columns are the IHO symbols and symbols used on foreign charts reproduced by NIMA.

This edition includes a schematic layout of a typical page showing what kind of information each column presents. In addition, a typical layout of an NOS chart is shown (Section A); a page outlining tidal levels and other charted tidal data has also been included (Section H).

For more information on the use of the chart, the practice of navigation, chart sounding datum, and visual and audible aids to navigation, the user should refer to NIMA Pub. No. 9, American Practical Navigator (Bowditch).

Tide and current data is contained in the Tide Tables and Tidal Current Tables. Detailed information on lights, buoys, and beacons is available in the Coast Guard Light List and NIMA List of Lights. In addition, color plates of the U.S. Aids to Navigation System and the Uniform State Waterway Marking System are contained in the Coast Guard Light Lists.

Other important information that cannot be shown conveniently on the nautical chart can be found in the U.S. Coast Pilots and NIMA Sailing Directions.

Metric Charts and Feet/Fathom Charts—In January, 1972 the United States began producing a limited number of nautical charts in meters. Since then, some charts have been issued with soundings and contours in meters; however, for some time to come there will still be many charts on issue depicting sounding units in feet or fathoms. Modified reproductions of foreign charts are being produced retaining the sounding unit value of the country of origin. The sounding unit is stated in bold type outside the border of every chart and in the chart title.

Soundings—The sounding datum reference is stated in the chart title. In all cases the unit of depth used is shown in the chart title and in the border of the chart in bold type.

Drying Heights—On rocks and banks that cover and uncover, the elevations shown are above the sounding datum, as stated in the chart title.

Shoreline—Shoreline shown on charts represents the line of contact between the land and a selected water elevation. In areas affected by tidal fluctuation, this line of contact is usually the mean high-water line. In confined coastal waters of diminished tidal influence, a mean water level line may be used. The shoreline of interior waters (rivers, lakes) is usually a line representing a specified elevation above a selected datum. Shoreline is symbolized by a heavy line (Section C1).

Apparent Shoreline is used on charts to show the outer edge of marine vegetation where that limit would reasonably appear as the shoreline to the mariner or where it prevents the shoreline from being clearly defined. Apparent shoreline is symbolized by a light line (Sections C32, C33 and C34).

Landmarks—A conspicuous feature on a building may be shown by a landmark symbol with a descriptive label (Sections E10 and E22). Prominent buildings that are of assistance to the mariner may be shown by actual shape as viewed from above (Sections D5, D6, and E34). Legends associated with landmarks, when shown in capital letters, indicate that they are conspicuous; the landmark may also be labeled "CONSPIC" or "CONSPICUOUS."

Buoys—The buoyage systems used by other countries often vary from that used by the United States. U.S. Charts show the colors, lights and other characteristics in use for the area of the individual chart. In the U.S. system, on entering a channel from seaward, buoys on the starboard side are red with even numbers, on the port side, green with odd numbers. Lights on buoys on the starboard side of the channel are red, on the port side, green. Mid-channel buoys have red and white vertical stripes and may be passed on either side. Junction or obstruction buoys have red and green horizontal bands, the top band color indicating the preferred side of passage. This system may not apply to foreign waters or in areas of the U.S. which are in IALA, Region A.

Light Visibility (Range)—(Other than on the Great Lakes and adjacent waterways.) A light's visibility (range) is given in nautical miles. Where the visibility (range) is shown as x/x M for a two (2) color light, the first number indicates the visibility (range) of the first color, while the second number indicates the visibility (range) of the second color. For example, FI W G 12/8M indicates the visibility (range) of the white light to be 12 nautical miles and the green light to be 8 nautical miles. Where a light has three (3) colors, only the longest and shortest visibilities (ranges) may be given, in which case the middle visibility (range) is represented by a hyphen. For example, FI W R G 12-8M indicates the visibility (range) of the white light to be 12 nautical miles, the green light to be 8 nautical miles, and the red light to be between 12 and 8 nautical miles.

IALA Buoyage System—The International Association of Lighthouse Authorities (IALA) Maritime Buoyage System (combined Cardinal-Lateral System) is being implemented by nearly every maritime buoyage jurisdiction worldwide as either REGION A buoyage (red to port) or REGION B buoyage (red to starboard). The terms "REGION A" and "REGION B" will be used to determine which type of buoyage is in effect or undergoing conversion in a particular area. The major difference in the two buoyage regions will be in the lateral marks. In REGION A they will be red to port; in REGION B they will be red to starboard. Shapes of lateral marks will be the same in both REGIONS, can to port; cone (nun) to starboard. Cardinal and other marks will continue to follow current guidelines and may be found in both REGIONS. A modified lateral mark, indicating the preferred channel where a channel divides, will be introduced for use in both REGIONS. Section Q and the color plates at the back of this publication illustrate the IALA buoyage system for both REGIONS A and B.

Aids to Navigation Positioning—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.

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 body 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, running ice, other natural causes, collisions, other accidents, or vandalism.

For the foregoing reasons a prudent mariner must not rely completely upon the position or operation of floating aids to navigation, but will also 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.

Colors—Colors are optional for characterizing various features and areas on the charts. For instance the land tint in this publication is gold as used on charts of the NOS; however, most charts of the NIMA show land tint as gray.

Heights—Heights of lights, landmarks, structures, etc. are referred to the shoreline plane of reference. Heights of small islets or offshore rocks, which due to space limitations must be placed in the water area, are bracketed. The unit of height is shown in the chart title.

Conversion Scales — Depth conversion scales are provided on all charts to enable the user to work in meters, fathoms, or feet.

Traffic Separation Schemes — Traffic separation schemes show recommended lanes to increase safety of navigation, particularly in areas of high density shipping. These schemes are described in the International Maritime Organization publication "Ships Routing".

Traffic separation schemes are generally shown on nautical charts at scales of 1:600,000 and larger. When possible, traffic separation schemes are plotted to scale and shown as depicted in Section M.

Correction Date — The date of each edition is shown below the lower left border of the chart. This is the date of the latest Notice to Mariners applied to the chart.

U.S. Coast Pilots, Sailing Directions, Light Lists, Lists of Lights —These related publications furnish information required by the navigator that cannot be shown conveniently on the nautical charts.

U.S. Nautical Chart Catalogs and Indexes— These list nautical charts, auxiliary maps, and related publications and include general information relative to the use and ordering of charts.

Corrections and Comments—Notices of Corrections for this publication will appear in the weekly Notice to Mariners. **USERS SHOULD REFER CORRECTIONS, ADDITIONS, AND COMMENTS TO THE NIMA CUSTOMER HELP DESK: 1-800-455-0899, COMMERCIAL 314-260-1236, DSN 490-1236, OR WRITE TO: DIRECTOR, NATIONAL IMAGERY AND MAPPING AGENCY, ATTN: CO, 8613 LEE HIGHWAY, FAIRFAX, VA 22031-2137.**