

NOAA Nautical Charting Calendar

Sounding Selection

Soundings for a chart are selected individually by hand. Selecting the best handful from among tens of thousands in a hydrographic survey is the most difficult skill in nautical cartography. Guidelines like those below help cartographers convey to mariners where safety lies.

Least Depths: Least depth soundings over features (pinnacles, domes, ridges) should always be identified because they are associated with hazardous shoal areas. When applying hydrography from larger to progressively smaller scales, a series of shoals may be generalized into a single-shoal feature. The shallowest sounding is selected to represent the least depth over a generalized shoal. The least depth of a natural channel (the controlling depth) is also charted. Every natural channel has at least one controlling sounding, which identifies the minimum depth of the channel.

Critical Soundings: Within each isolated feature bound by a depth curve, the shallowest seaward sounding must be selected. This critical sounding is given even if the same as the depth curve. Critical soundings represent least depths in proximity to known or potential navigational routes. While a critical sounding is almost always a least depth, a least depth is not always a critical sounding; the location of the sounding is also an important factor.

Deep Soundings: Soundings which are approximately 10% to 20% deeper than their surroundings are considered important soundings and will usually be selected. If chart space is constrained, however, a deep sounding does not normally take precedence over an adjacent critical shoal sounding.

Supportive Soundings: Supportive soundings supply additional information about the shape of the bottom. They are also used to provide identifiers for depth curves and to show changes in bottom slope away from shoals or deeps. The most important function of supportive soundings is to provide depth information for navigation between shoals, islands, and other obstructions.

Fill Soundings: Fill soundings are used to portray smooth bottoms or deep areas between shoals that are not adequately defined by supportive soundings. Fill soundings provide information about large, gradually sloping depressions that are not deep enough to be enclosed by a depth curve. Ideally fill soundings radiate away from the deep sounding.

Channel Range Soundings: When a range is charted to show the centerline of a channel, a line of soundings is selected on the range. This policy does not apply to improved (dredged) channels.

Changeable Areas: All hydrographic detail, including soundings and floating aids, may be omitted from all areas known to undergo continual and rapid change, such as ocean inlets and openings between barrier islands

Soundings in Slips and Around Piers: Soundings in docks, slips, and around piers should be shown where space allows. Cartographers should select soundings far enough off piers to provide depths at the keel lines of vessels.

Depths over Rocks: A sounding over an isolated rock shall have the label "Rk" placed next to it.

October 2006						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	Prepared by the Office of Coast Survey, National Ocean Service, NOAA, www.NauticalCharts.NOAA.gov , 1-301-713-2770			