U.S. Department of Homeland Security
United States Coast Guard

Commandant
United States Coast Guard

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COMDTCHANGENOTE 16500
1 NOV 2012

CANCELLED:
1 NOV 2013

COMMANDANT CHANGE NOTICE 16500

Subj: CH-1 TO AIDS TO NAVIGATION MANUAL - SEAMANSHIP, COMDTINST M16500.21A

1. PURPOSE. This notice publishes change one to the Aids to Navigation Manual - Seamanship, COMDTINST M16500.21A.

2. ACTION. All Coast Guard unit commanders, commanding officers, officers-in-charge, deputy/assistant commandants, and chiefs of headquarters staff elements shall comply with the provisions of this Directives Change Notice. Internet release is authorized.

3. DIRECTIVES AFFECTED. With the addition of this Commandant Change Notice, the Aids to Navigation Manual - Seamanship, COMDTINST M16500.21A, is updated.

4. MAJOR CHANGES. This change updates Chapter 4.E.2. regarding the required use of chain hooks, and Chapter 11.E.2. regarding crew requirements for cutter boats when conducting ATON operations.

5. DISCUSSION. This change to the Aids to Navigation Manual - Seamanship is based upon recommendations from the field, the NATON School, and Commandant (CG-NAV-1).

6. PROCEDURES. No paper distribution will be made of this change. An electronic version will be located on the Coast Guard Directives System (CGDS) sites located at: Internet: http://www.uscg.mil/directives; Intranet: http://cgweb.comdt.uscg.mil/CGDirectives/Welcome.htm and CG Portal: http://cgportal.uscg.mil/delivery/Satellite/CG612.

DISTRIBUTION-SDL No. 162

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NON-STANDARD DISTRIBUTION:

Remove and replace the following sections of the Aids to Navigation Manual - Seamanship, COMDTINST M16500.21A:

Remove	Replace
Pages 4-41, 4-42	Pages 4-41, 4-42
Pages 11-27, 11-28	Pages 11-27-11-28

7. DISCLAIMER. This document is intended to provide operational guidance for Coast Guard personnel and is not intended to, nor does it, impose legally-binding requirements on any party outside the Coast Guard.

8. RECORDS MANAGEMENT CONSIDERATIONS. This Commandant Change Notice has been thoroughly reviewed during the directives clearance process, and it has been determined there are no further records scheduling requirements, in accordance with Federal Records Act, 44 U.S.C. 3101 et seq., NARA requirements, and Information and Life Cycle Management Manual, COMDTINST M5212.12(series). This policy does not have any significant or substantial change to existing records management requirements.

9. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS.
   a. The development of this Commandant Change Notice and the general policies contained within it have been thoroughly reviewed by the originating office in conjunction with the Office of Environmental Management, and are categorically excluded (CE) under current USCG CE # 33 from further environmental analysis, in accordance with Section 2.B.2. and Figure 2-1 of the National Environmental Policy Act Implementing Procedures and Policy for Considering Environmental Impacts, COMDTINST M16475.1 (series). Because this Commandant Change Notice contains guidance on, and provisions for, compliance with applicable environmental mandates, Coast Guard categorical exclusion #33 is appropriate.

   b. This directive will not have any of the following: significant cumulative impacts on the human environment; substantial controversy or substantial change to existing environmental conditions; or inconsistencies with any Federal, State, or local laws or administrative determinations relating to the environment. All future specific actions resulting from the general policies in this Commandant Change Notice must be individually evaluated for compliance with the National Environmental Policy Act (NEPA), DHS and Coast Guard NEPA policy, and compliance with all other environmental mandates. Due to the administrative and procedural nature of this Commandant Change Notice, and the environmental guidance provided within it for compliance with all applicable environmental laws prior to promulgating any directive, all applicable environmental considerations are addressed appropriately in this Commandant Change Notice.

10. FORMS/REPORT. None.

Mark E. Butt /s/
Rear Admiral, U.S. Coast Guard
Assistant Commandant for Capability

Section A. Deck Tools

Introduction

Aids to navigation related evolutions employ a varied assortment of tools to facilitate safe and efficient operations. Many of these tools are specialized and are used solely for ATON related deck operations, while other tools can be used for various other non-ATON related operations. To ensure safety and efficiency during ATON evolutions, keep all tools in good working order and use the right tool for the job. The following are some of the more common deck tools employed in ATON work. It is not intended to be an exhaustive list of all the tools that might be used aboard vessels for every ATON operation.

E.1. Line Reeving Device

The Line Reeving Device is used to reeve or pass a line through the lifting bail on a buoy. It is made up of a U-shaped clevis and round spring activated bar usually affixed to an 8 to 12 foot pole. Attached to one end of the bar is a line which is connected at the other end to a sling. The line reeving device works by forcing the round bar through the lifting bale which reeves the line and sling through the bale. The line reeving device is lifted back on deck while still connected to the line that has been reeved through the lifting bale. This line is worked by hand until the sling has been passed through the lifting bale and brought back on deck (**see Figure 4-30**).

E.2. Chain Hooks

Chain hooks are made of steel and approximately three feet long with a handle at one end and a hook at the other. The chain hook shall be used by personnel to assist in moving buoy chain ¾" in diameter and larger on deck to minimize the risk of injury. For smaller chain, best practices, including the use of gloves, should be followed. (See figure 4-31).

WARNING

Handling buoy chain by hand, even while wearing gloves, may result in personnel injury. Additionally, chain under tension should never be handled by hand.

Figure -4-30
Line Reeving Device

Figure -4-31
Hammers and Chain Hooks

E.3. Hammers

There are various styles of hammers and punches used during buoy and construction deck operations. The following are some of the more common varieties.

1. Split Key Hammer (also referred to as a Blacksmith Chisel Hammer) is primarily used to spread shackle split keys. Most split key hammer heads have a flat surface on one end (to be struck by another hammer) while the other end is angled (approx. 20° to 45°) to spread the split key (hammer on left in **figure 4-32).**
2. Drift Pin Hammer is primarily used to drive shackle pins from the shackle clevis. One end is flat (to be struck by another hammer) while the other end is a rounded punch the approximate size of a shackle's pin that is able to punch the pin free of the shackle (second from left in **figure 4-32)**.
3. Split Key Punch is primarily used to drive a split key out of the shackle pin slot. One end is flat (to be struck by another hammer) while the other end is small enough to drive a split key through the shackle pin slot when removing.
4. Sledge Hammers are available in various sizes and weights and are used for a variety of purposes aboard ATON vessels. A few examples are tripping a mechanical chain stoppers, pelican hook bails, seating the chain in the chain stopper, forming rivet pins (heat and beats), shackle pins, setting head blocks, etc (see top of **figure 4-31).**

Section E. Cutter Boat Operations

Introduction

Occasionally, the River Tender may be required to launch the cutter boat to recover a stray buoy or one that cannot be reached by the cutter. This section covers the processes to be followed while using the cutter boat.

E.1 General Precautions

General precautions that relate to any evolution shall be taken into account and exercised prior to the boat getting underway from the cutter. These precautions include:

a. Risk Assessment (i.e., GAR Model)

b. Evaluation of weather and other environmental factors.

c. Evaluation of current and hazards in the area (i.e., submerged dikes)

E.2. Crew Requirements

The minimum crew requirements described in reference (b) are minimum requirements. Three personnel are required for cutter boat operations when slipping buoys or servicing Aids to Navigation ashore, except when doing so would exceed the boat's maximum weight capacity. The personnel shall consist of a coxswain and two crewmembers; one of the crewmembers may be a break-in. For all other ATON operations, units shall follow the minimum boat crew requirements specified in reference (b).

E.3 Floating Buoy Task List

Because the area of operations and operating environment varies greatly between cutters, it is hard to standardize the evolution and come up with a step by step checklist. The following procedures should be followed for recovering a buoy in an area where the cutter cannot safely navigate and deviations shall be minimized as much as possible. If towing a buoy alongside, the towline shall be rigged to slip.

a. Approach the buoy to be slipped into the prevailing current, but not directly downstream from the buoy.

b. Grab the buoy in a way to rotate it so the shackle will rotate inboard (between the buoy and cutter boat), this is normally accomplished by grabbing one of the outboard lifting eyes on the buoy.

c. As the cutter boat slowly comes ahead (into the current), the buoy will gain some slack in the mooring, this will allow the buoy to rotate up and lay up against the small boat's hull.

d. If the cutter boat goes ahead too fast or too far, there will not be enough

slack in the mooring to allow the buoy to float up against the cutter boat. If this happens, release the buoy, drift down current, and make another approach to the buoy.

e. Once the buoy is floating alongside the cutter boat, the crewmember holding the buoy will release the shackle connecting the buoy to the mooring.

f. Once the mooring is cast off, the buoy is towed back to the barge and recovered using the standard evolution from the river using the procedure in B.2.b of this chapter.

E.4 Beached Buoy Task List

The following procedures should be followed for recovering a buoy in an area where the cutter cannot safely navigate. Deviations from this task list shall be minimized as much as possible.

a. If a buoy has washed up on a bank and the buoy is deemed to be safely recoverable, the cutter boat shall be launched to recover the buoy.

b. Once on scene, the boat crew will determine the feasibility of recovering the buoy and the best plan of action to re-float the buoy.

c. If the buoy cannot be placed in the boat, a line shall be secured between the buoy and cutter boat.

d. Once the buoy is refloated, the buoy shall be secured to one of the bow cleats on the cutter boat and towed alongside the cutter boat back to the cutter. (See **Figure 11-12)**

e. When the cutter boat arrives alongside the cutter with the buoy in tow, the standard evolution for the cutter and barge shall be used, see paragraph B.2.b of this chapter. (See **Figure 11-13**)

11-12
Securing a Refloated Buoy

11-13
Refloated Buoy Being Recovered by Cutter