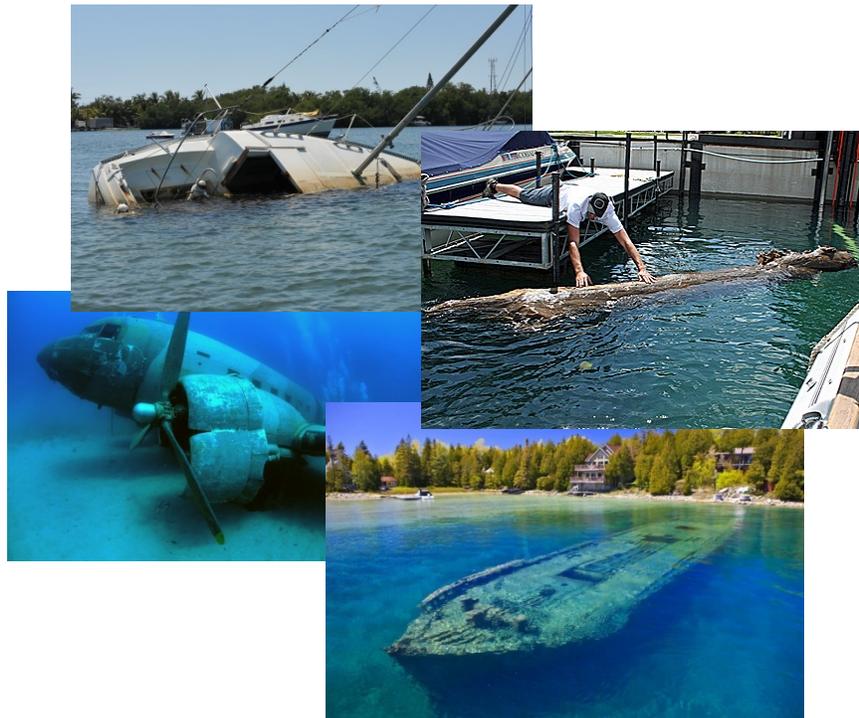




Waterways Management (WWM): Hazards to Navigation Tactics, Techniques, and Procedures (TTP)



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COAST GUARD TACTICS, TECHNIQUES, AND PROCEDURES 3-71.5

Subj: WATERWAYS MANAGEMENT (WWM): HAZARDS TO NAVIGATION

- Ref:
- (a) Marking of Structures, Sunken Vessels and Other Obstructions, 33 CFR Part 64
 - (b) Removal of Wrecks and other Obstructions, 33 CFR Part 245
 - (c) Definition of Marine Debris for the Purposes of the Marine Debris Research, Prevention, and Reduction Act, 33 CFR 151.3000
 - (d) Clean Water Act, 33 U.S.C. § 1251
 - (e) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. Chapter 103
 - (f) Abandonment of Barges, 46 U.S.C. Chapter 47
 - (g) Vessel Removal/Destruction under Federal Water Pollution Control Act or Comprehensive Environmental Response Compensation & Liability Act, COMDTINST 16465.5
 - (h) Abandoned Vessel Authorities and Best Practices Guidance, U.S. National Response Team Preparedness Committee
 - (i) Command Center QRC Tactics, Techniques, and Procedures (TTP), CGTTP 3-56.1
 - (j) Aids to Navigation Manual – Administration, COMDTINST M16500.7 (series)

1. **PURPOSE.** To provide sector and marine safety units (MSU) with Coast Guard tactics, techniques, and procedures (CGTTP) on how to safely, effectively, and efficiently manage hazards to navigation and obstructions within their Captain of the Port (COTP) zone, to include fundamental principles, considerations, processes and documentation.
2. **ACTION.** This CGTTP publication applies to sector waterways management and MSU staff, but can be leveraged by anyone responsible for managing hazards to navigation or obstructions. Internet release is authorized.
3. **DIRECTIVES/TTP AFFECTED.** None.
4. **DISCUSSION.** Successful management of hazards to navigation is vital to preventing marine casualties and maintaining a safe and vibrant marine transportation system in the United States. Sector commanders and commanding officers of MSUs are responsible for coordinating with federal, state, and local agencies, industry, and the public to ensure hazards to navigation are removed from navigable waterways, or are mitigated to the fullest extent possible. This CGTTP provides novice users with foundational and practical

knowledge necessary to understand and manage hazards to navigation. It also provides experienced personnel with a means of referencing current best practices, and standardizes common hazards to navigation management principles across the Coast Guard.

5. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is itself a rule. It provides guidance for Coast Guard personnel and does not impose legally-binding requirements on any party outside the Coast Guard.
6. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. While developing this publication, integrated process team (IPT) members examined environmental considerations under the National Environmental Policy Act (NEPA) and determined they are not applicable.
7. DISTRIBUTION. FORCECOM TTP Division posts an electronic version of this TTP publication to the CGTTP Library on CGPortal. In CGPortal, navigate to the CGTTP Library by selecting **References > Tactics, Techniques, and Procedures (TTP)**. FORCECOM TTP Division does not provide paper distribution of this publication.
8. RECORDS MANAGEMENT CONSIDERATIONS. Integrated Process Team (IPT) members thoroughly reviewed this publication during the TTP coordinated approval process and determined there are no further records scheduling requirements per Federal Records Act, 44 U.S.C. Chapter 31 § 3101 et seq., NARA requirements, and Information and Life Cycle Management Manual, COMDTINST M5212.12 (series). This publication does not have any significant or substantial change to existing records management requirements.
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10. REQUEST FOR CHANGES. Submit recommendations for TTP improvements or corrections via email to FORCECOM-PI@uscg.mil or through the TTP Request form on CGPortal. In CGPortal, navigate to the TTP Request form by selecting **References > Tactics, Techniques, and Procedures (TTP) > TTP Request**.

Info COMCOGARD FORCECOM NORFOLK VA//FC-P// on message traffic containing lessons learned applicable to this TTP publication.

PATRICK J. SHAW
Commander, U.S. Coast Guard
Acting Chief, FORCECOM TTP Division (FC-P)
By Direction of Commander,
Force Readiness Command

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Chapter 1: Introduction

Introduction

This chapter overviews the contents of this tactics, techniques, and procedures (TTP) publication. It also defines the use of notes, cautions, and warnings in TTP publications.

In This Chapter

This chapter contains the following sections:

Section	Title	Page
A	Introduction	1-2
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Section A: Introduction

A.1. Introduction

A successful marine transportation system is critical to the United States (U.S.) economy. To facilitate efficient movement of goods, protect the environment, and ensure the safety and security of the marine transportation system, navigable waters of the U.S. are charted, marked, and maintained to assist in vessel navigation. The United States Coast Guard (USCG), the United States Army Corps of Engineers (USACE), and the National Oceanic and Atmospheric Administration (NOAA) each play integral roles in operating and maintaining the U.S. navigation system.

The USCG is tasked with providing a safe, secure, and efficient navigation system to support domestic commerce, international trade, and national defense. This includes identifying, and either mitigating or removing hazards to navigation (HAZNAV) from navigable waterways.

This TTP publication provides a framework for USCG waterways managers to determine if an object in the water presents a risk to navigation safety, what that risk is, and the best way to resolve it. It outlines a process for waterways managers to follow when collaborating with other agencies and organizations to identify and minimize/remove a potential hazard. While each port has unique elements that affect decision-making, this TTP publication provides basic steps.

A.2. Audience and Scope

This TTP publication primarily serves sector and marine safety unit (MSU) Waterways Management (WWM) staff. Other sector or district personnel with a responsibility for mitigating or removing hazards to navigation in their area of responsibility (AOR) may also leverage this publication.

The process for managing hazards to navigation begins when a USCG unit becomes aware of a potential hazard to navigation in their AOR and needs to determine the level of impact to the navigable waterway. This process normally originates at the USCG sector or MSU. The process ends when the risk to navigation safety has been mitigated or removed.

Section B: Notes, Cautions, and Warnings

B.1. Overview The following definitions apply to notes, cautions, and warnings found in TTP publications.

NOTE: **An emphasized statement, procedure, or technique.**

CAUTION: **A procedure, technique, or action that, if not followed, results in risk to the safety or security of the port, marine environment, or facilitation of commerce.**

WARNING: *A procedure, technique, or action that, if not followed, carries significant risk to the safety or security of the port, marine environment, or facilitation of commerce, as well as damage to potential or actual prosecutions, defenses, or other litigation involving the USCG.*

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Chapter 2: Fundamental Principles

Introduction

The purpose of addressing a potential hazard to navigation is to minimize or remove safety risks to waterway users. Waterways managers need to consider a variety of factors, including the effects of their decisions; complexities of their waterways, especially dangerous conditions or areas; partnerships with other organizations (like USACE or harbor safety committees); and other port-specific information.

In This Chapter

This chapter contains the following sections:

Section	Title	Page
A	Key Terms and Definitions	2-2
B	Considerations	2-4

Section A: Key Terms and Definitions

A.1. General The following are key terms and definitions to help waterways managers determine whether an item is a hazard to navigation.

A.2. Navigable Waterway

Per 33 CFR 2.36, navigable waters of the U.S. include:

- Territorial seas.
- Internal waters that are subject to tidal influence.
- Internal waters that are, have been, or can be used as highways for substantial interstate or foreign commerce.

USCG authority to determine whether an object is a hazard to navigation only extends so far as the limits of the defined navigable waters of the U.S.

NOTE:

If the object is outside of the navigable waterway, the Coast Guard cannot deem it a hazard to navigation, and therefore cannot mitigate or remove it. Refer situation to USACE, state or local authorities.

A.3. Obstruction

Obstruction is anything that restricts, endangers, or interferes with navigation.

A.4. Hazard to Navigation

Hazard to navigation is an obstruction, usually sunken, that presents sufficient danger to navigation to require expeditious, affirmative action such as marking, removal, or redefinition of a designated waterway to provide for navigational safety.

NOTE:

Definitions of hazard to navigation and obstruction to navigation are in reference (a), and reference (b). The definitions are the same for the USCG and USACE.

A.5.
Marine Debris

As per reference (c), marine debris is “any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment or the Great Lakes.” NOAA and the USCG have jointly promulgated this definition.

The USCG does not have the authority or resources to investigate, respond to, or remove marine debris. NOAA is the lead Federal agency for marine debris and has a [marine debris program](#).

Understand that an obstruction or hazard to navigation might be marine debris, but marine debris is not necessarily an obstruction or hazard to navigation unless determined by the process outlined in this TTP publication.

Section B: Considerations

B.1. General The following considerations provide a foundation for future decisions that affect waterways and their users.

B.2. Abandoned or Derelict Vessels The Coast Guard's primary responsibility for the *removal* of obstructions to navigation on or adjacent to navigable waters of the U.S. pertains to prevention and mitigation of pollution related threats. This includes not only dumping or discharge of oil and hazardous substances, but also cases that pose a substantial threat of discharge. Coast Guard authorities for responding to these incidents are mainly captured under two statutes:

- Oil: Reference (d), Clean Water Act, 33 U.S.C. 1251 (CWA).
- Hazardous substances not covered under the CWA: Reference (e), Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Chapter 103.

Under each of these authorities, the Coast Guard must determine the following:

- There is a spill or release of a hazardous substance or a substantial threat to discharge or release,
- The responsible party is not mitigating or removing the pollution threat as required by law,
- Removal of the obstruction is the best option to mitigate the incident.

The Coast Guard also has the authority, under reference (f), to remove abandoned barges under certain circumstances. The most cost effective option is not to remove or destroy an obstruction or hazard to navigation. However, consider the threat of continued pollution when deciding whether to remove sunken or abandoned vessels.

Along with issuing Local Notice to Mariners and Broadcast Notices to Mariners, district commanders forward other amplifying information on wrecks and submerged obstructions as soon as reasonable after the data is acquired, for use in planning survey operations.

Address data to:

Director, Office of Coast Guard Survey (N/CS)
National Ocean Service/NOAA
1315 East West Highway STE 1
Silver Spring, MD 20910-3282

NOTE: See references (g) and (h) for addressing an abandoned or sunken vessel beyond navigational concerns. It is outside the scope of this TTP publication.

NOTE: Refer abandoned vessel issues that do not involve pollution or a hazard to navigation (eyesores) to state authorities. Some states or local jurisdictions create derelict vessel task forces in which the Coast Guard might play a supporting role.

B.3. Weather Waterways managers are familiar with weather patterns in their area of responsibility. Weather can change or limit options available to address a hazard to navigation, can increase or decrease the risk or urgency to respond, and can influence decisions and actions.

B.4. Public Perception Waterways managers are cognizant of public perception, political influence, or other factors that can increase pressure on the USCG and partners to take certain action. Weigh effects of decisions appropriately, ensuring that safety is the priority.

B.5. Charting Waterways managers are familiar with chart use and symbology. This knowledge ensures they understand potential hazards to navigation and the impacts of possible actions taken to address each hazard. Helpful information includes Chart 1, Light List, Coast Pilot, etc.

B.6. Stakeholders Various people, organizations, and agencies have a responsibility or stake in the outcome of addressing an obstruction or hazard to navigation.

B.6.a. Responsible Party The owner of the obstruction or hazard to navigation has the primary responsibility for it, including marking, relocating, or removing.

B.6.b. USACE USACE is charged with the protection and preservation of navigable waters of the U.S. USACE removes or destroys obstructions endangering navigation when the obstructions have existed for a period of more than 30 days or when abandonment is established legally in a shorter time.

In an emergency, such as when a vessel sinks in or otherwise delays operation of any government lock or canal, or sinks in any navigable water of the U.S. and stops, seriously interferes with, or endangers navigation, the USACE district engineer takes possession in order to remove or destroy the obstruction. USACE is responsible for dredging and maintaining the federal navigation channel and operates locks. In some ports, the agency may have a debris removal vessel or other equipment.

B.6.c. NOAA NOAA conducts hydrographic surveys of U.S. waters and maintains charts, including updating charts. They can provide important navigation, environmental, and weather information. Notify NOAA if the issue is potentially marine debris.

B.6.d. Port Partners Port partners play a key role in addressing navigational safety issues. Remember to consult with pilots, harbor safety committees, maritime associations, environmental groups, and other organizations or subject matter experts in your port.

B.6.e. State Authorities State authorities (e.g., Marine Police, Department of Ecology, or Department of Natural Resources) might have resources to remove abandoned or derelict vessels that are obstructions or hazards to navigation.

B.7. Communication and Collaboration Navigation safety affects multiple USCG operations at the sector level. Waterways managers share information regarding a potential or actual obstruction or hazard between departments. Also, share that information with external partners, especially waterway users but also other agencies and stakeholders. Understand whom an obstruction or hazard might affect, and ensure their notification.

Communication facilitates collaboration on reducing and removing obstructions and hazards. As mentioned in the previous section, multiple agencies and organizations have roles in removing or otherwise addressing obstructions or hazards. Ensuring the right level of collaboration maximizes effective use of resources.

Chapter 3: Hazard to Navigation Management Process

Introduction This chapter describes USCG actions once notified of a potential obstruction or hazard to navigation. USCG sector command centers (SCC) and sub units frequently receive reports of wrecks, floating debris, or other obstructions that might be hazards to navigation.

In This Chapter This chapter contains the following sections:

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E	Monitor the Situation and Follow Up	3-11

Section A: Receiving the Report

A.1. Initial Notification

Possible reporting sources for initial notification of a hazard or obstruction to navigation include, but are not limited to:

- Recreational boaters.
- Commercial mariners.
- Maritime pilots.
- Underway USCG units.
- Other Government Agencies.

SCCs and MSUs remain the primary point of contact for receiving the initial notification and initial processing, but are not always the first to be contacted by the reporting source. Other USCG units or offices who may receive the initial notification include, but are not limited to:

- Vessel traffic centers.
- Marine safety detachments.
- Stations.
- Aids to navigation teams.
- Waterways managers.

Regardless of who receives the initial notification, forward all reports of potential hazards or obstructions to the cognizant SCC or MSU for initial processing, which may include follow up actions, appropriate briefs to the sector or MSU staff, and issuing broadcast notice to mariners.

**A.2. Initial
Action**

Upon initial notification of a potential hazard or obstruction to navigation, collect the following minimum information from the reporting source, and if applicable, forward to the cognizant SCC or MSU:

- Name and contact information of the reporting source.
- Date and time the potential hazard or obstruction was observed.
- Position and description of the potential hazard or obstruction.
- Vessel details if the potential hazard or obstruction is a vessel.
- On-scene weather.

If a potential hazard or obstruction is reported directly to the SCC, ensure completion of the Hazards to Navigation (Obstructions) quick response card (QRC) per reference (i) and process in accordance with unit standard operating procedures.

**A.3. Follow-on
Actions**

After initial notification, completion of the Hazards to Navigation (Obstructions) QRC, and any required response actions, the SCC makes required notifications per unit standard operating procedures, and forwards the report to the waterways management staff for further processing.

Section B: Assessment

B.1. General

The waterways manager makes an assessment, determines risk, and identifies an appropriate course of action. This might first include gathering additional information.

B.2. Collect Additional Information

Consider the following questions to ensure that you have a thorough report.

- Is it in navigable waters of the U.S.?
- Is there pollution discharge or is it a potential threat of pollution?
- Has the owner been identified?
- Is the object floating, partially submerged, or fully submerged?
- Is the object adrift or stationary?
- What type of waterway is it (sound, bay, canal, narrow channel, cove, inlet, Intracoastal Waterway, etc.)?
- Was it identified in the past? Plot, evaluate, and verify coordinates of reported object against existing charted objects to ensure it is not already addressed.
- What waterway user group is it likely to affect (e.g., recreational, commercial, towing, deep draft, military)?
- Reach out to other sources, as needed, to gather additional information about the potential obstruction/hazard, waterway, and other factors.
 - Consider USCG and USCG auxiliary operations if air or surface assets are underway, or will be soon; they might be able to provide photos or other information.
 - Deploy professional divers to survey the hazard if it is fully submerged, partially submerged, lodged, or otherwise snagged or caught on something under the surface. Divers might be available from other government agencies (USN, USACE, state police, etc.).
 - Pilots are highly skilled in navigation and the geography of the waterways and recognize changes.
 - Recreational boaters can identify when something is out of place.
 - USACE are subject matter experts on the channel and experienced in debris removal. The USCG has a memorandum of agreement (MOA) with the USACE.

- Other government agencies have capabilities such as side scan sonar and underwater survey equipment. Harbor safety committee members and organizations such as marine exchanges represent a wide waterway user base. Know your port partners, and use these and other resources to ensure a thorough assessment.

B.3. Conduct Risk Assessment

Consider the risk of the potential hazard or obstruction and its affect on waterway and users.

- Plot the location of the potential hazard or obstruction. Then, consider the following questions as you determine the level of risk the object poses and its impact to navigation safety. These questions help frame the problem and potential solution, and more questions may arise depending on the sector, policy, or port.
 - Is there a pollution discharge or a potential threat of pollution?
 - Is the object causing an immediate safety hazard? If so, immediately mark it as per reference (j), or set a safety zone to mitigate the emergent hazard while you continue to address the problem.
 - Will it slow or stop traffic? If so, for approximately how long, how severely, and in what way? (Is it floating? Will it enter other lanes, other channels, etc.?)
 - Is the object in the channel? Is it a narrow channel? Will it affect shipping/trade routes? What is the depth of water?
 - What is the vessel traffic in the area, including types of vessels?
 - What is the general effect on maritime activity, including the environment, recreation, military operations, etc.? Will it create an increased cost for any part of the maritime sector?
 - Will the object move or break apart with tide, weather, or current?
 - What is the proximity to aids to navigation (ATON), anchorage areas, piers, limited access areas (LAA), critical infrastructure, cable areas, or other obstructions?
 - Is the object floating, moving, fixed, or submerged? Keep in mind that the status of the object can change (e.g., a fixed object can become loose and then start floating or moving; a floating object can become submerged, etc.) If submerged, determine the depth of water over the top and manage traffic appropriately in order to facilitate safe and orderly movements.
 - Are there environmental concerns? Refer to the area contingency plan and the Incident Management Division.

**B.4. Obstruction
or Hazard to
Navigation
Determination**

Determine if the potential hazard or obstruction meets the factors in 33 CFR 64.31.

NOTE:

If the potential hazard is neither an obstruction nor a hazard to navigation, then no further action is needed.

B.4.a. For a
Hazard to
Navigation

The district commander determines if the potential hazard meets the definition of a hazard to navigation.

Forward your recommendation to the district commander, endorsed by the sector commander, DPW, and any other relevant department. The district commander, in coordination with USACE, makes the final determination based on the information provided.

Continue to [Section C: Hazard to Navigation Course of Action](#).

NOTE:

If the report is of an existing, charted object, no further action is needed; close case if opened, etc.

NOTE:

If risk to safe navigation is high, or if you are unsure, mark with a temporary buoy or light as per reference (j). Issue a BNM before taking further action.

B.4.b. For an
Obstruction

The sector commander makes the designation if the potential hazard meets the definition of an obstruction per 33 CFR 64.06.

Continue to [Section D: Obstruction Course of Action](#).

Section C: Hazard to Navigation Course of Action

C.1. Hazard to Navigation Action

This section discusses possible courses of action to consider following formal determination of a hazard to navigation by the district commander. This generally means notifying the public and mitigating the hazard. Based on the situation, you might choose to do some, all, or a combination of options, or you might have additional port-specific requirements.

C.1.a. Notice to Mariners

Notify mariners of the hazard to navigation.

C.1.b. Mark the Hazard

The owner is required to mark obstructions or wrecks suitably until removal or abandonment per 33 U.S.C. 409. Sector commanders advise owners of their legal responsibility by phone, email, or letter. Refer the responsible party to the district private aids to navigation officer.

Consider issuing a COTP order with a requirement for the owner or operator to remove or mark the hazard. There is no statutory time limit for the owner to do this. Timing is driven by owner cooperation, location of the obstruction, urgency, and other similar factors. Allow reasonable time before taking enforcement action; however, each sector might have a different interpretation of “reasonable time” based on environmental factors, political factors, and effect on navigation and the public.

See 33 CFR 66.10-1 for marking systems.

- If the owner is unwilling or unable to mark the object, work with the closest ATON unit or station to establish a temporary marking plan. The district commander must approve the marking. The owner might be charged for the costs of marking the structure.
- If there is an urgent need to mark the object, consider marking it with a personal flotation device strobe light or a flashlight until temporary marking is established. Coordinate with state authorities as appropriate.
- If the owner complies with marking requirements, long term or permanent marking is private aid to navigation (PATON). Waterways managers help the owner secure a PATON permit from District (dpw). If the owner is unknown or does not comply with marking requirements, refer the case to District (dpw) for ATON establishment.

C.1.c.
Route Traffic

Temporarily route vessel traffic around a hazard until mitigation or removal, if necessary. The following tools can help:

- Consider establishing rulemaking such as a restricted navigational area, safety zone, or LAA to facilitate the safe flow of traffic.
- Consider using the VTS to route vessels around the hazard.

Conduct outreach as necessary when using these tools. This might include holding a public meeting or notifying the public through a BNM or local notice to mariners (LNM) to ensure all involved entities are properly informed.

C.1.d. Redefine
the Waterway

In rare cases, a hazard to navigation is significant enough to redefine the channel. USACE is responsible for dredging and maintaining Federal navigation channels as defined by Congress; the USCG would probably play a support role. Propose changes through the regulatory process.

C.1.e. Remove,
Reduce, or
Relocate

The owner has the primary responsibility to remove, reduce, or relocate the hazard to navigation. If the owner's action is not sufficient (assessed on a case-by-case basis), work with other government agencies, environmental organizations, local harbor masters, and the USACE to address removing, reducing, or relocating the hazard. As per the [Hazard to Navigation MOA between USACE and USCG](#), this is a USACE responsibility.

NOTE:

The USCG role is primarily to facilitate addressing the hazard and to coordinate with involved parties. Do not take responsibility for physically relocating/removing the hazard.

NOTE:

If the USCG decides to remove or destroy a vessel that is HAZNAV, or poses a threat to discharge oil or hazardous substances, follow guidance per reference (g). Route a written request to COMDT via district legal.

NOTE:

Removal of HAZNAV is always the desirable action; however, depending on circumstances, coordinating relocation of the HAZNAV might be a viable alternative.

NOTE:

The owner has primary responsibility for physically relocating or removing the HAZNAV. For liability reasons, the USCG normally takes responsibility for physically relocating or removing HAZNAV only if it relates to an emergent situation or a search and rescue mission.

NOTE:

USACE standards for determining the best course of action to remove a HAZNAV will vary from one district to another. As a result, some USACE districts might choose not to remove a HAZNAV under certain circumstances, such as one in a low commercial use area. In these situations, coordinate removal with state or local agencies, or mitigate the HAZNAV.

Section D: Obstruction Course of Action

D.1. Obstruction Action	This section discusses possible courses of action following formal determination of a hazard to navigation by the sector commander.
D.1.a. Identify and Locate the Owner	Take all reasonable measures to identify the owner(s) of the object and notify them of their responsibility to mark, relocate, or remove their property.
D.1.b. Broadcast Notice to Mariners	Issue a notice to mariners (SMIB, BNM, UMIB, or other broadcast as appropriate per 33 CFR 72.01-25) notifying the public of the location and nature of the obstruction. Remember to cancel the broadcast when necessary. Requests for BNM involving obstruction to navigation and debris include the following: <ul style="list-style-type: none">• Nature of obstruction (debris, partially submerged derelict, etc.).• Reporting source.• Range and bearing to prominent point of land.• Time of obstruction (local).• Estimated extent of obstruction to the mariner (e.g., the mariner must use extreme caution, stay 2 miles clear of, avoid area if possible, etc.).
D.1.c. Local Notice to Mariners	Include the details in the LNM.
D.1.d. Marking	Consider marking per 33 CFR 64.33 and 64.06.
D.1.e. Safety Zone	Consider establishing a safety zone if needed, e.g., to facilitate safe removal of the object.
D.1.f. Charting the Obstruction	Contact NOAA to determine charting requirements (in the case of a fixed object such as a sunken vessel).

NOTE:

Remember to cancel the BNM or LNM once charted. Ensure all involved entities are properly informed (14 U.S.C. 141).

Section E: Monitor the Situation and Follow Up

E.1. Monitor Take steps to follow up once the object is determined to be an obstruction or a hazard. Determine follow-up actions on a case-by-case basis. The following are possible actions the waterways manager considers.

E.1.a. Collect Updates WWM Division takes the lead to collect status updates and brief the chain of command.

E.1.b. Remove If applicable, assist USACE with the removal until complete.

E.1.c. Redefine If redefining waterway, work with USACE until complete.

E.1.d. Danger to Navigation Contact the local NOAA navigation manager to issue a danger to navigation (DTON) report. The DTON report expedites a chart update as necessary (<http://www.nauticalcharts.noaa.gov/nsd/reps.htm>).

DTON are inadequately charted natural and cultural features (<http://www.nauticalcharts.noaa.gov/mcd/DTON.html>). Potential dangers include:

- Submerged features with depths less than 11 fathoms (66 feet) in navigable waters.
- Items found to be significantly shallower than charted.
- Incorrect or uncharted clearances of bridges or overhead cables.
- Off-position or incorrectly labeled floating or fixed aids.

E.1.e. Set the Pace Set battle rhythm; get updates; conduct teleconferences with industry or port representatives as needed. This applies if the situation is ongoing.

E.2. Follow-Up Upon final relocation or removal of the hazard to navigation, ensure all notifications are made and all pending items are complete.

E.3. Close Actions Close out COTP orders, MISLE activities, and other pending actions as necessary.

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Appendix A: Acronyms

ATON	Aid to navigation.
AOR	Area of responsibility.
BNM	Broadcast notice to mariners.
CFR	Code of Federal Regulations.
CWA	Clean Water Act.
(dpw)	District prevention waterways staff symbol.
DTON	Danger to navigation.
HAZNAV	Hazard to navigation.
LAA	Limited access area.
LNM	Local notice to mariners.
MOA	Memorandum of agreement.
MSU	Marine safety unit.
NOAA	National Oceanic and Atmospheric Administration.
PATON	Private aid to navigation.
QRC	Quick response card.
SCC	Sector command center.
SMIB	Safety marine information broadcast.

TTP	Tactics, techniques, and procedures.
U.S.	United States.
UMIB	Urgent marine information broadcast.
USACE	United States Army Corps of Engineers.
USC	United States Code.
USCG	United States Coast Guard.
USN	U.S. Navy.
VTC	Vessel traffic center.
WWM	Waterways management.

Appendix B: Hazard to Navigation MOA between USACE and USCG

Coast Guard and Department of the Army Responses to Marking and Removal of Sunken Vessels and Other Obstructions to Navigation

MEMORANDUM OF AGREEMENT
BETWEEN
THE DEPARTMENT OF ARMY AND THE U.S. COAST GUARD

SUBJECT: Coast Guard and Department of Army Responses to Marking and Removal of Sunken Vessels and Other Obstructions to Navigation

1. Purpose. The purpose of this memorandum of agreement (MOA) is to improve the efficiency and effectiveness of the Coast Guard and the Department of Army responses under each agency's respective authorities for the marking and removal of sunken vessels and other obstructions to navigation.

2. Provision of Agreement. This agreement provides procedures on coordination to determine whether an obstruction is a hazard to navigation and procedures to determine the appropriate corrective actions to be taken by both agencies.

3. Definitions. For the purpose of this agreement, the following definitions apply:

a. **Obstruction:** Anything that restricts, endangers, or interferes with navigation. Obstructions can be authorized man-made structures such as bridges, pier heads, offshore towers, etc., or unexpected interferences which must be assessed as to their effect on navigation.

b. **Hazard to Navigation:** An obstruction, usually sunken, that presents sufficient danger to navigation so as to require expeditious affirmative action such as marking, removal, or redefinition of a designated waterway to provide for navigational safety.

c. **Responsible Field Officers Are:**

(1) Department of the Army:

(a) District Engineer, Army Corps of Engineers District, and

(b) Division Engineer, Army Corps of Engineers Pacific Ocean and New England Divisions.

(2) Coast Guard: Chief, Operations Division, Coast Guard District.

4. Objectives.

a. Promote close coordination and cooperation between the Department of Army and the Coast Guard leading to prompt and decisive action in marking or removal of obstructions declared to be hazards to navigation.

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acceptable alternative to other corrective actions.

(5) Removal Issues.

(a) Where an obstruction is declared to be a hazard to navigation and removal is the agreed appropriate corrective action, the respective Army Corps of Engineers shall:

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f. Field level offices of both agencies shall periodically review the status of existing obstructions to determine the adequacy of corrective action(s), to determine if a resurvey of the obstruction's location is necessary, to revise appropriate records, and to update public notification records.

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(4) Marine activity in the vicinity of the obstruction.

(a) Type of commercial and recreational vessel traffic.

(b) Density of commercial and recreational vessel traffic.

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Rear Admiral, U.S. Coast Guard
Chief, Office of Navigation
16 OCT 1985
(Date)

Major General, USA
Director of Civil Works
10 OCT 1985
(Date)

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MEMORANDUM OF AGREEMENT
BETWEEN
THE DEPARTMENT OF ARMY AND THE U.S. COAST GUARD

SUBJECT: Coast Guard and Department of Army Responses to Marking
and Removal of Sunken Vessels and Other Obstructions
to Navigation

1. Purpose. The purpose of this memorandum of agreement (MOA) is to improve the efficiency and effectiveness of the Coast Guard and the Department of Army responses under each agency's respective authorities for the marking and removal of sunken vessels and other obstructions to navigation.

2. Provision of Agreement. This agreement provides procedures on coordination to determine whether an obstruction is a hazard to navigation and procedures to determine the appropriate corrective actions to be taken by both agencies.

3. Definitions. For the purpose of this agreement, the following definitions apply:

a. Obstruction: Anything that restricts, endangers, or interferes with navigation. Obstructions can be authorized man-made structures such as bridges, pier heads, offshore towers, etc., or unexpected interferences which must be assessed as to their effect on navigation.

b. Hazard to Navigation: An obstruction, usually sunken, that presents sufficient danger to navigation so as to require expeditious affirmative action such as marking, removal, or redefinition of a designated waterway to provide for navigational safety.

c. Responsible Field Officers Are:

(1) Department of the Army:

(a) District Engineer, Army Corps of Engineers District, and

(b) Division Engineer, Army Corps of Engineers Pacific Ocean and New England Divisions.

(2) Coast Guard: Chief, Operations Division, Coast Guard District.

4. Objectives.

a. Promote close coordination and cooperation between the Department of Army and the Coast Guard leading to prompt and decisive action in marking or removal of obstructions declared to be hazards to navigation.

b. Provide guidance on the parameters and procedures for making multi-agency decisions for determining when an obstruction should be declared a hazard to navigation.

c. Provide the chain-of command and relationships for resolving differences of opinion between the Department of Army and the Coast Guard as to the appropriate corrective action to initiate for hazards to navigation.

d. Assure timely and effective action to provide safe navigation to the maritime community.

5. Required Actions. Upon receiving reports of sunken vessels or other obstructions to navigation, each agency through its field office will take the following actions:

a. Assess the impact upon navigation of each reported obstruction and expeditiously identify appropriate corrective actions. In emergency situations, the agency first on scene should initiate immediate actions to mitigate the hazardous situation.

b. Decide through joint consultation and agreement between agency field offices if an obstruction is a hazard to navigation, agree upon appropriate corrective action(s) to reduce the danger to navigation to an acceptable level, and decide which agency shall act as lead agency for contacting the owner, if one exists, of the obstruction and executing corrective actions.

(1) Personal Contacts between agency field offices are encouraged to facilitate decision-making.

(2) Timely response dictates that decisions are made at the field office level when possible.

(3) Decisions concerning corrective actions shall be supported by records appropriate to the specific case.

(4) Marking Issues. In every case where an obstruction is declared to be a hazard to navigation, the owner will mark the location immediately. In the event that the owner cannot be identified, refuses to mark the obstruction, inadequately marks the obstruction, or is otherwise unable to properly mark it, the Coast Guard has authority under 14 U.S.C. 86 to take appropriate action. When necessary the Department of Army will assist the Coast Guard in locating and marking hazards to navigation. Marking of an obstruction determined to be a hazard to navigation does not by itself remove the "hazard to navigation" status of the obstruction; however, under sane circumstances it can be an acceptable alternative to other corrective actions.

(5) Removal Issues.

(a) Where an obstruction is declared to be a hazard to navigation and removal is the agreed appropriate corrective action, the respective Army Corps of

Engineers District Engineer may take the initiative in accordance with 33 CFR 209.190 (h) where in removal of an obstruction under the provisions of Section 19 of the River and Harbor Act of 1899 (33 U.S.C. 414) may be undertaken without prior approval of the Chief of Engineers if the obstruction has been in existence over 30 days or its abandonment by the owner can be legally established in a shorter period, the cost of removal will not exceed \$100,000 for each incident, and all reasonable efforts to require the owner to remove the wreck himself within a reasonable period have been exhausted. If an emergency condition exists, the district engineer may undertake removal under Section 20 of the River and Harbor Act of 1899 (33 U.S.C. 414), which eliminates the necessity to establish abandonment. The district engineers' authority under Section 20 is limited to those removal incidents costing less than \$100,000. For all incidents costing more than \$100,000, prior approval from the Chief of Engineers must be obtained under either Section 19 or Section 20.

(b) The Coast Guard has authority for the alteration or removal of obstructive bridges under 33 CFR 114 and has authority to remove sunken vessels when they create a substantial pollution threat to the public health or welfare under 33 CFR 153.

c. The Coast Guard has authority to disseminate and maintain navigational safety information pertaining to obstructions and is the lead agency responsible for this type of information. This mission is complemented by related services offered by other sources, including the Army Corps of Engineers. Each agency's field offices will immediately notify their counterpart of any reported obstructions and will maintain close coordination to ensure that navigational safety information is disseminated in a timely and effective manner. Free exchange of information related to obstructions, including owner's name and address, will be made between agencies, subject to the requirements of the Privacy Act, 5 U.S.C. 522a.

d. Disagreements arising over the resolution of problems raised by hazards to navigation. The district engineer and the Chief of Operations will document the area(s) of disagreement and present them to each other for consideration at least 14 days before forwarding of the issue to higher authority. If resolution cannot be achieved, the problem should be forwarded to the next higher level of authority. At the next higher level, a similar exchange of reviews should be made in the same time frame. If resolution cannot be reached here, a similar referral process should be made until resolution is achieved or the highest referral possible is made. Paragraph 8 delineates the chain-of-command for the purposes of this agreement.

e. The Coast Guard and Department of Army shall develop individual agency instructions to implant the MDA.

f. Field level offices of both agencies shall periodically review the status of existing obstructions to determine the adequacy of corrective action(s), to determine if a resurvey of the obstruction's location is necessary, to revise appropriate records, and to update public notification records.

6. Applicability. This agreement applies to the navigable waters of the United States, as defined in Title 33 CFR 2.05-25.

7. Decision-making Guidance.

a. Options to consider in formulating appropriate action(s):

- (1) No action.
- (2) Charting.
- (3) Broadcasting and publication of navigational safety information.
- (4) Marking.
- (5) Redefinition of navigational area, e.g., channels fairway, anchorage, etc.
- (6) Removal.
- (7) Combination of the above.

b. Factors (not to be taken as all inclusive) to be considered in determining if a sunken vessel or other obstruction is a hazard to navigation and in determining which course of action(s) listed in paragraph 7.a. is appropriate to increase safety to an acceptable level:

- (1) The degree to which the obstruction restricts, endangers, or interferes with the navigability of a body of water.
 - (a) Location with respect to navigational traffic patterns.
 - (b) Navigational difficulty at the site of the obstruction.
 - (c) Clearance or depth of water over obstruction.
 - (d) Fluctuation of water level and other hydraulic characteristics.
- (2) Physical characteristics of the obstruction, including cargo (if any exists).
- (3) Possible movement of the obstruction.
- (4) Marine activity in the vicinity of the obstruction.
 - (a) Type of commercial and recreational vessel traffic.
 - (b) Density of commercial and recreational vessel traffic.

(c) Trends of waterway use.

(5) Location of obstruction with respect to existing aids to navigation.

(6) Prevailing and historical weather conditions.

(7) Length of time the obstruction has been in existence.

(8) History of vessel accidents involving obstruction.

8. Chain-of-command Relationships for Resolution of Differences.

a. Chief, Operations Division, Coast Guard District/District Engineer, Army Corps of Engineers District.

b. District Commander, Coast Guard District/Division Engineer, Army Corps of Engineers Division.

c. Chief, Office of Navigation, Coast Guard/Director of Civil Works, Office, Chief of Engineers.

9. Amendment, Duration, and Termination.

a. This MOA may be modified or amended by mutual Consent of the signatories to this agreement or their designees. All such changes will be documented by written agreement.

b. This MOA is intended to remain in effect for as long as it continues to serve the purpose and objectives defined herein.

c. Either agency may terminate this MOA six months after giving formal written notice of intent to terminate.

10. Effective Date. This MDA is effective 90 days after execution by the Chief, Office of Navigation, U.S. Coast Guard, and the Director of Civil Works, Department of the Army.

Rear Admiral, U.S. Coast Guard
Chief, Office of Navigation

16 OCT 1985
(Date)

Major General, USA
Director of Civil Works

10 OCT 1985
(Date)