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	Engineering and Design NAVIGATION AND DREDGING OPERATIONS AND MAINTENANCE GUIDANCE AND PROCEDURES	
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Project Operations
NAVIGATION AND DREDGING OPERATIONS AND
MAINTENANCE GUIDANCE AND PROCEDURES

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CHAPTER 1 - INTRODUCTION

1-1. Purpose. This pamphlet establishes the guidance for navigation and dredging operation and maintenance (O&M) activities of the U.S. Army Corps of Engineers and supplements Engineer Regulation (ER) 1130-2-520. If any conflict exists between this guidance and the Federal Acquisition System, the latter governs.

1-2. Applicability. This guidance applies to all USACE commands having responsibility for civil works functions.

1-3. References. See Appendix A.

1-4. Glossary.

a. Active CERF Fleet. Consists of those contractor's hopper dredge(s) which are currently performing under contracts of the U. S. Army Corps of Engineers and those dredges whose owners have completed a BOA for Corps of Engineers Reserve Fleet (CERF), have not completed a notice of non-availability, and have not forwarded the notice to HQUSACE, CECW-OD. These dredges are available, operational, and ready for use.

b. BOA Contracting Officer. The person executing the BOA on behalf of the government. Only this individual or successor has the authority to modify the terms and conditions of the basic ordering agreement. The Commander of the New Orleans District is the designated Contracting Officer for executing the BOA for CERF.

c. CERF Basic Ordering Agreement (BOA). A BOA is a written instrument of understanding with a method for determining prices for service. The BOA provides for an assured response to emergency and national defense dredging requirements through the vehicle of delivery orders. A BOA is not a contract.

d. CERF Emergency. A determination by the Director of Civil Works for CONUS dredging operations or the Commander, USACE for OCONUS dredging operations that Federal dredges are not available or suitable, that regular contractual procedures are not practical, and that CERF dredges must be activated.

e. CERF Fleet. Hopper dredges, whose owners have executed a current BOA for emergency and national defense dredging, and are not currently under an ongoing Federal dredging contract, and have not completed a notice of nonavailability. These dredges are available, operational, ready for use.

f. CERF Participating Contractors. Contractors who have voluntarily entered into it possess current basic ordering agreements providing for the placement of orders for emergency and national defense dredging requirements and have not notified HQUSACE, CECW-OD of unavailability.

g. CONUS. The 48 contiguous states.

h. Emergency Dredging. Dredging performed in response to unexpected situations requiring an immediate action to protect property or human life or to maintain or restore

navigation or flood control channels to provide for safe and efficient usage of the waterways, within the 48 contiguous States, Alaska, Hawaii, Puerto Rico, the Virgin Islands, or U. S. Trust Territories.

i. Hazardous Waters. For the purpose of this regulation, those waters in which turbulence and/or underlying currents create a potentially life-threatening environment.

j. Hydraulic Line. The line upstream and downstream of a structure established by hydraulic data and procedures described in Appendix AA.

k. Minimum Federal Fleet. Federally owned dredges.

l. National Defense Dredging. Dredging performed in response to requests from the Office, Secretary of Defense (OSD) or any other Federal entity related to defense needs.

m. OCONUS (Outside CONUS). Includes Alaska, Hawaii, Puerto Rico, the Virgin Islands, or U. S. Trust Territories.

n. Operational Considerations. Those aspects outlined in Appendix AB to be considered when determining if the Restricted Area boundary should be set farther from the structure than at the Hydraulic line.

o. Ordering Contracting Officer. The person executing orders under the terms of the BOA at U. S. Army Corps of Engineers Districts and Operating Divisions after appropriate approval by the Commander, USACE for OCONUS or the Director of Civil Works for CONUS.

p. Physical Barriers. Barriers which are structural in nature and placed in such a manner as not to allow entrance into a restricted area.

q. Restricted Area. For the purpose of this regulation, that area of water adjacent to civil works structures, as established by the hydraulic line plus operational considerations, that is off limits to the public.

CHAPTER 2 - AIDS TO NAVIGATION, NAVIGATION CHARTS, AND RELATED DATA

2-1. Purpose. This chapter establishes the procedures on aids to navigation, chart data, and publication of information on related USACE civil works water resources activities.

2-2. Background.

a. The USACE - by virtue of its lead role in construction, operations, and maintenance - often has primary source data for direct use by the marine industry as well as input to other agencies for use in carrying out their navigation missions. Besides construction and maintenance work itself, the USACE performs hydrographic surveys, publishes navigation charts for inland waters, evaluates and approves permit applications for Sec.10/404 work, and issues navigation regulations.

b. The U.S. Coast Guard (USCG) maintains the U.S. aids to navigation system and has mission responsibilities for management of vessel traffic. The USCG publishes the USCG Light List, and weekly Local Notices to Mariners (LNTM) with summary information on hazards, restrictions, aids to navigation changes, and National Ocean Service (NOS) chart updates. The USCG also broadcasts more time-sensitive Notices to Mariners by VHF-FM radio broadcast.

c. The National Ocean Service (NOS), under the National Oceanic and Atmospheric Administration (NOAA), prepares and publishes nautical charts for coastal (tidal) waters, the intracoastal waterways, and the Great Lakes; and publishes the U.S. Coast Pilot for these same areas for more detailed navigational information.

d. MSC/district commanders are responsible for preparing navigation charts for the inland waterways (those maintained by the USACE) which are not charted by the National Ocean Service (NOS).

e. Defense Mapping Agency (DMA) prepares worldwide nautical charts for Department of Defense use; for U. S. waters, coverage is essentially the same as NOS, and DMA works closely with NOS to share chart data. DMA also issues periodic Notices to Mariners for correction and update of DMA and NOS charts.

2-3. Guidance.

a. The USACE will provide information to the responsible agencies and minimize redundant publication of separate navigation information.

b. District commanders shall prepare channel survey/ condition reports from the results of each controlled survey, using ENG Forms 4020-R and 4021-R prescribed in Appendixes B and C for tabular reports. For coastal areas, a copy of the tabular reports and survey drawings/tracings will be forwarded within 60 days after completion to (see Appendix D for addresses):

(1) National Ocean Service (NOS)

(2) Defense Mapping Agency (DMA) - drawings only

(3) USCG District Aids to Navigation Office

c. Special reports shall be provided to the USCG and/or NOS for situations as outlined in Appendix E. Reports to the USCG will ordinarily be by telephone (within 24 hours - followed by hard-copy backup) where the information is time-sensitive for navigational use. Reports to NOS will ordinarily be by letter within 10 days.

d. Notices to Navigation Interests (NTNI) will use a distinctive format (see sample at Appendix F), and will highlight the waterway/state(s) affected.

(1) NTNI will be distributed by mail to appropriate USCG offices; other affected USACE elements; other affected Federal, state, or local agencies; port authorities; shipping companies and vessel operators; and other affected industry and public entities requesting copies. A limited/reasonable number of copies for each addressee will be distributed free of charge.

(2) A mailing list for NTNI will be maintained and updated at least annually.

e. The prompt dissemination of the latest detailed information concerning channel conditions is of utmost importance. Necessary measures will be taken to insure that such information is reported without delay simultaneously to the U.S. Naval Oceanographic Office, the USCG, the NOS and DMA. When a dangerous shoaling is found during the progress of a survey, information thereon will be furnished immediately to the abovementioned agencies, so that such information may be made available to mariners promptly, and buoys shifted to mark the shoal. Descriptions of any dredging or other operations in important channels in tidal waters, either in progress, and not already reported, or soon to be undertaken, together with a statement of the work and expected duration, will also be reported in order that Naval and other vessels may be warned to look out for dredges and other plant, temporary markers and lights.

f. District commanders having charge of improvements of harbors and waterways shown on charts of the DMA or of the NOS will send to both offices promptly, as ascertained for the correction of such charts, the following information: Descriptions of changes in channel location and depth, or of obstructions that may be discovered, with such prints and other information as may be necessary to permit the existing charts to be corrected to date. All maps should contain sufficient data to permit the fixed plane or reference, bench marks, base lines, etc., to be determined and located. The survey stations should be shown and, when no unreasonable expenditure of time or labor is involved, the map will show one or more triangulation station(s) of the NOS in such a way to facilitate connection of old or new work. The source of authority for the shoreline and topography should be stated on the map. The data supplied should indicate what charts are affected.

g. When any survey of areas covered by charts of the DMA or the NOS is completed, a print of each tracing will be sent direct to both the DMA and the NOS. It is not necessary that tracings be fully complete as to form and title when such prints are made. An informal manuscript title marked "Advance Sheets", and containing a description sufficient to identify the locality and the source of the map, will be sufficient.

h. Information relative to the improvement of harbors and waterways such as dredging operations, and precautions rendered necessary due to the presence of dredging or other plant will, when considered necessary, be brought to the attention of vessel owners or operators

regularly using the waterway. This will be done through issuing bulletins or notices by district commanders.

2-4. Cooperation with Coast Guard.

a. District commanders will consult with the USCG District Commander during design of channel and harbor improvement projects to discuss the aids to navigation requirements and all other facets of the projects that involve USCG responsibility. Project material furnished direct to USCG commanders will include: (1) Information as to the authorization by Congress of a project involving changes affecting aids, such as channel limits, breakwaters, including a copy of the project document; (2) The proposed operations on such projects during the next fiscal year, to be furnished annually on the release of the budget estimates; (3) Plans showing the final location of the channel limits or structures to be furnished at the time work is undertaken.

b. Changes in channel limits affecting navigation aids, made under general or specific provisions of the law, should be made the subject of a conference with the USCG District Commander. The Commander will be promptly informed as to the approval of such changes and the probable date of completion of the work.

c. USACE district commanders will furnish direct to the various USCG district commanders, for their immediate information, any facts which may come to their attention in connection with their duties which will be of benefit to the USCG in maintaining its system of aids to navigation. This should include statements as to the displacement of or defects in any such aids to navigation. It is recognized that, in some locations, the USACE does provide aids to navigation support to the USCG pursuant to formal MOU's between the two agencies.

d. If work involving harbor or channel improvements directly affects any existing aids to navigation or any structures of the USCG, USACE districts commanders will, when practicable, give notice to the USCG District Commander sufficiently in advance to permit taking steps deemed necessary by the USCG. If the USCG District Commander specifically requests that the affected structure be replaced, the USACE District Commander should inform the Commander, USCG of the estimated cost and the anticipated commencement and completion dates and the USACE District Commander will proceed with the work if so authorized by the Commander, USACE. On completion of the work, the USACE District Commander will promptly furnish the USCG District Commander, for settlement, an account of the expense incurred.

2-5. Navigation Aids of the Corps of Engineers

a. Whenever channel dredging or other channel improvements are being performed, necessary temporary markers, such as ranges and light poles, should be installed and maintained by the USACE District Commander pending the installation of permanent aids by the USCG. The USCG desires that information regarding aids to navigation installed or maintained by USACE district commanders in connection with harbor or channel improvement be furnished promptly. Such information is needed for inclusion in Notice to Mariners published by the USCG, on charts of the waters concerned, where desirable.

b. USACE district commanders will notify the USCG District Commander in every case where aids to navigation for marking works of harbor channel improvements are established or discontinued. Notice should be given of such aids as may be of use or interest to general navigation. Notice need not be given as to such buoys, lights, or fog signals as are of temporary

or unimportant character, or of importance only to the USACE. Omit also lights or fog signals on ferry slips and on piers used only by certain vessels, and stakes, bushes, and barrel buoys marking shallow and little-used channels.

c. In placing aids to navigation in connection with harbor or channel improvement works, USACE district commanders should see that they do not conflict in character or otherwise with other aids to navigation in the vicinity. USACE district commanders should confer with the USCG District Commander on this subject.

d. The USCG shall be furnished information, for publication, concerning markers installed as temporary aids to navigation, for new improvements, in advance of permanent aids, and other markers that may be established in connection with operations that may serve as important aids to navigation. Care will be exercised to see that all markers established are not misleading to general navigation and do not interfere with aids to navigation established by the USCG.

e. The necessary blank forms for reporting information regarding USACE aids will be furnished upon request by the USCG District Commander.

f. Colors of Dredging Buoys Established by USACE.

(1) In order to distinguish buoys placed and maintained by the USACE for dredging purposes from aids to navigation placed by the USCG, USACE working buoys will be white with the top two feet painted light green. The buoys need not be painted to achieve the proper color markings.

(2) If buoys with special markings are needed to indicate the different sides of the navigable channel, prior arrangements will be made with the USCG District Commander having jurisdiction.

(3) Information and regulatory marks are not considered aids to navigation. They shall conform to USCG standards where practical, however USACE standards in the Sign Standards Manual shall take precedence.

g. Information to be Furnished by the Corps of Engineers.

(1) District commanders responsible for harbors and waterways shown on charts of the NOS, will report the channel conditions promptly (as soon as possible), and as ascertained, using standard tabular forms to:

Director, Defense Mapping Agency
Navigation Information & Services
ST D44
4600 Sangamore Road
Bethesda, MD 20816-5003

National Ocean Service
Distribution Branch (N/CG33)
Riverdale, MD 20737-1199

District Commanders
U.S. Coast Guard

(2) Channel survey drawings furnished to the USCG are to include:

(a) Either NAD 83 or State Plane grids.

(b) Plots of the positions of aids to navigation.

(c) Written notations of the coordinates in NAD 83 or State Plane Coordinates of the fixed aids to navigation found during the survey.

(d) Soundings should be referenced to mean lower low water (MLLW) or other datum as appropriate.

(3) The standard tabular forms with illustrated data follow:

(a) For channels 400 feet wide and greater (ENG FORM 4020-R).

_____HARBOR _____(State)

Name of Channel	Date Survey	Project Feet width	Project Miles length	Project Feet depth	Minimum depth in each-1/4 width of channel entering from seaward: Left outside quarter feet	Left inside quarter feet	Mid-channel: Right inside quarter feet	Right outside quarter feet
Tybee Range--	6-58	500	1.64	30	30	31	28	23
Bloody Point--	6-58	500	2.81	30	30	30	29	25

ENG FORM 4020-R(Nov 90)

(b) For channels 100 to 400 feet wide (ENG FORM 4021-R).

_____HARBOR _____(State)

Name of Channel	Date Survey	Project Feet width	Project Miles length	Project Feet depth	Minimum depths in channel entering from seaward: Left outside quarter feet	Mid-channel for half project	Right outside quarter feet
Kings Island Channel	6-58	300	1.14	26	24	23	26
Whitehall Channel	6-58	200	1.81	26	27	26	25

ENG FORM 4021-R(Nov 90)

(c) For channels less than 100 feet in width, report controlling depths only based on at least 80 percent of project width, 40 percent on either side of centerline. (The submission of tabular forms is not required for channels having a project depth less than 10 feet except coastal inlets and harbors of refuge.

(d) The tabulations of depths should be amplified by footnotes or otherwise to show clearly and definitely the location of controlling shoals, tendency of shoals to recur, and all other critical information of special value and importance for safe navigation of the channel. Reaches of channel not presently named should be identified in the tabular form by reference to charted aids or features, or assigned identifying names, numbers or letters. For localized irregular project areas where the application of the tabular form would not be practical, the controlling depth based on a safe navigable width will be described as well as unusual or critical conditions of shoaling.

h. Charts will be updated and re-published on a regular basis. Update intervals will be based on the nature of the waterway and extent of changes, but will not exceed every seven years.

i. A NTNI will be disseminated approximately six months in advance of availability of a revised chart edition.

2-6. Special Reports.

a. Changes affecting navigation will be made promptly whenever information of immediate concern to navigation becomes known. Refer to ER 1130-2-520 for the circumstances requiring special reports. Items of information especially desired are: (1) channel condition as revealed by surveys; (2) changes in channel conditions, either by natural causes or by dredging or other work; (3) changes in approved projects for improvement with statements of results expected from proposed-operations; (4) descriptions of proposed dredging or other Federal work of improvement such as breakwater, pier, and revetment construction or alterations; (5) descriptions of proposed or completed municipal or private improvements in or affecting navigable waters; (6) accidents or equipment failures at USACE locks and dams or along navigable waterways, that will result in closure of the lock or waterway for 24 hours or more, or will result in a significant impact to navigation. For item (6), district commanders are to forward an incident report to HQUSACE (CECW-OD) through their MSC office as soon as possible following the incident. Reporting of navigation incidents to CECW-OD is required even though the districts may be sending situation reports to the HQ Emergency Operations Center during natural disasters or more regional or localized events.

b. Additional items of information desired are: descriptions of wrecks; uncharted shoals, and other obstructions to navigation and particulars as to proposed or completed removal of same; changes in buoys or lights; erection of new, or changes in existing bridges; new or revised Federal or local rules and regulations for harbors and channels; establishment or existence of danger areas in navigable waters. Reproductions of drawings or sketches which will be helpful in interpreting the data shall accompany the reports. The reports will not be limited to a reference to an accompanying drawing or sketch, but will contain a complete description in form suitable for publication in notices to mariners and the monthly supplements to the U.S. Coast Pilot. In this respect, the reports will provide enough information that a single notification to navigational interests will suffice. In the case of dredging or construction work, the mere

statement that work will commence or has commenced on a certain date is insufficient. All additional information possible, such as probable duration of operations and object of work, will be given. In the case of dredging, extent of the area to be dredged and the depth expected will be provided. The reports required by this paragraph will be identified by reference to the appropriate engineer manual or regulation and will be numbered consecutively by each district during the calendar year, starting with number 1 at the beginning of each year.

c. Format.

(1) Charts will be prepared in booklet form, with separate booklets for each major waterway (e.g., Lower Mississippi River, McClellan-Kerr). Additionally, booklets may be prepared for sale by reach or pool.

(2) Page size will be suitable for navigational use, and may vary depending on scale and detail appropriate to the waterway.

d. Content. Each chart booklet will contain:

(1) A general section at the front including, at a minimum:

(a) index

(b) legend of chart symbols and abbreviations

(c) general notes on waterway/chart usage

(d) copy of relevant navigation regulations (33 CFR)

(e) reference to USCG regulations for drawbridges

(f) reference to USCG Light List for characteristics

(g) chart availability information - address, cost

(h) update information - method of publishing changes

(i) date of next scheduled revision

(2) A graphic overview of the waterway, marked with rectangles to reference chart pages.

(3) Chart Pages, in conformance with "Charted features" and "Chart standards" below. (See Appendixes G and H.)

(4) Profile drawings for each bridge, lock/dam, and overhead crossing (except where a large number within a short distance makes this impractical to show) on the page opposite the relevant chart section. Profile drawings will include vertical and horizontal clearances for each bridge and overhead crossing, unless such clearances are identified beside the charted features. (See Appendix I.)

e. Charted features. Charts shall be drafted to depict necessary and useful features for navigation, avoiding excessive clutter with extraneous information. Each chart page will include the waterway name, scale, and direction of north. Charted features will include:

(1) Topography - shorelines (at selected datum), shoreline features, tributary rivers or creeks, location of cities and towns, selected railroads and highways. Levees and floodwalls significant to the USACE.

(2) Structures - lock/dams, bridges, overhead crossings (pipelines, power, communication lines), major shore structures (towers, tanks, radio towers, large buildings), docks and piers, selected waterfront facilities, mooring and protection cells. Sewage facilities and raw water intakes or outfalls.

(3) Obstructions and dangers - obstructions which are of a permanent or continuing nature (fixed location), including known wrecks and bars, pilings, submerged rocks, regulating structures (e.g., wing dams or dikes).

(4) Aids to navigation - navigation lights, daybeacons and daymarks (as established by the USCG and listed in the USCG Light List), permanent (lighted) buoys (as shown in the USCG Light List), and selected private aids to navigation (especially if lighted).

NOTE: Temporary (unlighted) buoys shall NOT be marked on charts, since their frequent change in number and position make them unreliable for establishing vessel position. Exception for pooled waters: unlighted buoys may be shown on charts, if accompanied (on each page where they are shown) with a special note that "Unlighted buoys are shown in common or typical locations, however their number and position are changed frequently where needed. The position of unlighted buoys shown on this chart should not be used by the navigator for locating his position."

(5) Other navigational information - sailing lines, river mileposts, river gages, direction of river flow (arrow).

(6) Limits and special operating areas - restricted areas submerged pipelines, submarine cable crossings, barge fleeting areas.

f. Chart Standards.

(1) A scale of 1"= 2000' will ordinarily be used, except where larger or smaller scale is more appropriate for the level of detail needed or size of area covered.

(2) Choice of colors should be consistent with NOAA Chart No. 1 colors. These colors have been tested and proven to work in all navigation conditions.

(3) Chart symbols will follow the U.S. standards as shown in NOAA Chart No. 1 and the USCG Light List. A copy of the more relevant symbols is provided in Appendix G.

(4) Lettering should be clear and consistent, using different size and/or type for different types of information. Lettering should generally be outside the channel area, if practicable.

(5) Abbreviations for light characteristics will conform to the USCG Light List.

(6) Level of detail for topography and structures (e.g., how many highways or buildings to show) will depend on how much detail there is to show within a reach, and how much is needed for general orientation. Excessive clutter should be avoided.

(7) Datum - Shorelines and obstructions which may be partially or occasionally submerged will be drawn at mean river stage. Vertical clearances will be shown with reference to stated elevation, river stage, or zero gage, as appropriate.

g. Distribution.

(1) Charts are provided to the industry and general public at a cost not less than the cost of printing/duplication.

(2) Charts will be provided free of charge (upon request) to other Federal agencies with operational requirements, and to other public service agencies such as local rescue squads or state conservation officers.

(3) Automatic distribution will include, at a minimum:

(a) HQUSACE (CECW-OD) - 2 copies

(b) Commandant (G-NSR-3) - 1 copy
U.S. Coast Guard
2100 Second Street SW
Washington, DC 20593-0001

(c) USCG District (see Appendix J for addresses) - copies for each office or unit with an operational interest for the area covered, including:

1. District Aids to Navigation Office

2. Aids to Navigation Units/Buoytenders

3. Marine Safety Offices

h. Corrections/Revisions. Significant changes or corrections to a chart will be published by means of a Notice to Navigation Interests. The Notice will provide sufficient detail to permit the chart users to correct the chart, or will provide an overlay for correction of the affected area on the chart. A separate request will be made for a Local Notice to Mariners, advising mariners where they can obtain the chart correction.

i. Conversion of existing charts. Existing charts will be revised to conform with these standards when the maximum update interval has been reached (seven years since the last edition), or when the nature and extent of changes require re-publication sooner than seven years.

j. Catalog of USACE Charts.

(1) Within 90 days of the publication date of this pamphlet, affected MSCs or districts shall submit to HQUSACE (CECW-OD) a copy of the most current chart for each waterway, price information for each chart, mailing address and phone number for requests from other agencies/public, and a schedule for publication of the next complete update.

(2) HQUSACE (CECW-OD) will maintain a current listing of all USACE charts, and will publish an annual catalog with information on cost, availability (source), and next planned update.

2-7. Information Pamphlets, Maps, Brochures and Other Material.

a. PL 85-480, approved 2 July 1958, authorizes the Commander, USACE to publish information pamphlets, maps, brochures, and other material on river and harbor, flood control, and other civil works activities, including related public park and recreation facilities that may be of value to the general public. This authority is limited to the facilities under jurisdiction of the Commander, USACE. Specific guidance on brochure format can be found in EP 310-1-6 Graphics Standards Manual. Brochure/pamphlet creation/revision should be in accordance with that manual and should be a coordinated effort including Operations, Public Affairs, and Information Management elements.

b. This public law authorizes the Commander, HQUSACE to provide for the sale of any material prepared under authority of the act of publications, charts, or other material prepared under direction of the Commander, HQUSACE pursuant to other legislative authorization or appropriation, and to charge therefor a sum of not less than the cost of reproduction.

c. District commanders are authorized to publish the material covered in paragraph 2-7a above, and to sell such material. Except for material specifically prepared for free distribution to the general public, the charges for such other published information will be not less than the cost of its reproduction.

d. Condition survey maps or charts, sold or otherwise distributed to the public, showing depths will specifically state the date or dates that the surveys were made. They shall also have the following notation printed or stamped thereon:

> "The information depicted on this map represent the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at that time."

CHAPTER 3 - PROTECTION OF PUBLIC HEALTH AND SAFETY AT JETTIES, GROINS, AND BREAKWATERS

3-1. Purpose. This chapter establishes guidance on determining the appropriate level of protection to be provided for public health and safety at USACE-maintained jetties, groins, and breakwaters in the absence of cost sharing for recreation.

3-2. Applicability. This chapter applies to all USACE commands having responsibility for civil works navigation functions and structures within the navigable waters of the United States.

3-3. Background.

a. The USACE currently operates and maintains 667 jetties, groins, and breakwaters in the coastal and Great Lakes regions of the United States. Approximately one-half (318) of these USACE structures are used by the public for recreation. This pamphlet will provide national consistency in the procedure for determining needs for public health and safety at all USACE jetties, groins, and breakwaters.

b. The physical nature and setting of jetties, groins, and breakwaters makes them inherently dangerous for general public use and at the same time, attractive to fishermen and recreationists.

3-4. Guidance. Three alternatives are provided to meet health and safety needs at USACE-maintained jetties, groins, and breakwaters. MSC commanders shall determine which alternative or combination of alternatives to select based upon site specific rationale.

a. No action. This “do nothing” alternative provides the lower end of a range of options, and may be appropriate for instances where negligible safety hazards exist or public access is not readily provided.

b. Post warning signs. Under this alternative, warning signs would be posted, regularly inspected, and replaced as often as necessary to inform and alert the public of hazardous conditions related to the jetty, groin, or breakwater. All signing will be in accordance with the Sign Standards Manual, EP 310-1-6a and b. This alternative provides safety warning for public visitors while not encouraging public use of these structures.

c. Deny entry or access. This alternative requires installation of a fence, barricade, or other suitable construction that precludes entry or access onto jetties, groins, and breakwaters. Before entry or access is closed to the public, consideration should be given to the extent of public use and determination of potential hazards. Such an option, on an individual basis, may be necessary in dealing with a particularly dangerous jetty, groin, or breakwater.

3-5. Providing other Minimum Facilities for Public Health and Safety. The policy for the protection of public health and safety at jetties, groins, and breakwaters precludes the construction of minimum facilities such as walkways, handrails, and sanitary facilities since these provisions tend to encourage public use and might increase the risk to safety of the visiting public. Where this is impractical, any such facilities will require approval by CECW-OD and CESO.

3-6. Program Implementation. MSC commanders will analyze and select one or more of the above alternatives to provide health and safety at USACE jetties, groins, and breakwaters. In determining the appropriate management, MSC commanders should consider visitation, health and safety problems including preparing an Activity Hazards Analysis, state and local laws and regulations, participation of local authorities, Federal liability with and without facilities, and the general public safety. MSC commanders shall complete a Hazard Analysis of all USACE jetties, groins, and breakwaters. This analysis should be reviewed periodically to determine the relative degree of hazard at each structure and the need for increased emphasis of public health and safety. Costs for health and safety will be allocated to project purposes and shared with project sponsors on the same basis as those purposes. Costs for the alternatives can be programmed using O&M, General funds or FC, MR&T, Maintenance funds as appropriate through normal budgeting procedures. However, at structures for which local cooperation agreements or contracts for cost sharing have been consummated, or were not required, non-Federal sponsors may be asked to provide or participate in the signing, fencing, etc., but cannot be required to do so.

CHAPTER 4 - REMOVAL OF WRECKS AND OTHER OBSTRUCTIONS

4-1. Purpose. This chapter establishes guidance on removing wrecks and other obstructions to navigation on waterways under the jurisdiction of the USACE.

4-2. Applicability. This chapter applies to all USACE commands having responsibility for civil works navigation functions and the removal of sunken vessels within the navigable waters of the United States. Wrecks which predate the Water Resources Development Act of 1986 (PL 99-662) are subject to the same policy, except where specifically noted otherwise. This chapter does not apply to obstructions other than vessels, which may be subject to removal under other statutory authorities and procedures.

4-3. Background.

a. Over the years, several significant court cases have circumscribed the scope of the law by defining "navigable channel," "abandonment," the owner's duty to mark/remove, the Corps' duty to protect navigation, and legal liability generally. The U.S. Code (Annotated) provides citations and summaries of several key cases for further reference. The agency's nationwide policies take the overall case history into consideration, but are not bound by the results of every individual case.

b. Coordination problems between the Corps of Engineers and the U.S. Coast Guard were highlighted by the National Transportation Safety Board (NTSB) in its 1978 report on the M/V DAUNTLESS COLOCOTRONIS Grounding. The NTSB recommended coordination between the Corps and the Coast Guard in better defining what constitutes a hazard to navigation, and periodic reviews (with the Coast Guard) of existing hazards to navigation. In October 1985, the Corps and the Coast Guard signed a Memorandum of Agreement to address these issues.

c. Funding priorities require us to take a conservative approach with respect to the removal of wrecks and other obstructions in our role of protecting and preserving navigable waters. Because of funding restraints, an administrative decision was made that for the general case, the geographic limit for the exercise of our authority need not be extended to cover the entire navigable river bed.

d. Enforcement Problems. One of the levers for effective enforcement is the ability to remove the wreck under Federal authority and then recover costs from the responsible party. In the past, the Corps' ability to enforce removal by the owner was seriously constrained by the requirement to prove negligence (in the sinking) and, sometimes, by difficulty in tracing a financially-viable owner. The Water Resources Development Act of 1986 (PL 99-662) eliminated the prerequisite of negligence and extended financial liability to vessel operators and lessees for wrecks occurring after November 17, 1986.

e. Insufficient cost controls have often limited our ability to recover Federal costs in removal. Challenges to the "reasonableness" of our expenditures can usually be traced to either excessive use of resources (where the cost really isn't reasonable) or inadequate documentation and accounting (where the costs are reasonable but we don't justify them well).

4-4. Guidance.

a. Hazard determination. Generally, anything that restricts or obstructs general navigation within a defined channel, or creates a similar restriction in a fairway, or has reasonably high potential for moving into any area of general navigation, can be considered a hazard to navigation. Other situations are considered on a case-by-case basis, where a hazard is defined in terms of specially significant factors. The determination is a judgment call by the District Commander, coordinated with the Coast Guard district.

(1) Those obstructions which affect only private wharves or canals (i.e., public access is restricted) do not fall within the scope of restricting "general navigation," and will not ordinarily be removed by the Corps. Similarly, wrecks alongside commercial docks, or obstructing local access channels to such docks, will not ordinarily justify the expenditure of Federal funds for removal.

(2) Obstructions which present only a minor inconvenience to marine traffic (e.g., outside the main channel, limiting the number of places where large tows can leave the channel for passing, but where nearby alternatives exist) will not ordinarily be removed.

(3) Obstructions which have a high potential for moving should be given special consideration, since any unexpected movement could create a special hazard to mariners.

(4) Where timeliness is not a critical factor, a court judgment to compel removal is the preferred first course of action before undertaking Corps removal. Before seeking a judgment, however, some attempt should be made to determine if the owner is likely to have the financial means to undertake removal.

b. Requests for HQUSACE approval (where contract costs for removal are estimated to exceed $100,000) shall be transmitted by letter through the MSC Commander to CECW-OD, and shall include a copy of the existing case file documentation as outlined below. Advance coordination by telephone is authorized and encouraged.

c. Documentation.

(1) Case file. The case file for each reported obstruction shall include the following information (items (i)-(m) apply only when Corps removal is undertaken):

(a) Location (shown on large-scale chart)

(b) Method of locating

(c) Description of the obstruction

(d) Identification of vessel (if ascertainable)

- name, flag, vessel type, documentation

- dimensions, construction (steel, wood, etc.)

- cargo

(e) Date/description of incident/sinking (if known)

(f) Identification of owner, operator or lessee

(g) Summary of consultation with Coast Guard

- Coast Guard point of contact
- notes re: all hazard-to-navigation factors
- remedial actions done/planned
- rationale for decisions

(h) Signature of decision-authority (Corps)

(i) Documentation establishing abandonment

(j) Authority cite (section 19 or 20)

(k) Cost estimate/schedule

(l) Procurement documentation

(m) Final disposition - date, cost, disposal

(2) Cost/expense records. Any case which results in Corps removal is potentially a case for reimbursement, even if the owner (or other responsible party) is not known at the time of removal. In all such cases, records shall be maintained to account for all Corps hired labor involved in the process, detailing for each individual the time spent by task (e.g., writing plans/specs for removal, monitoring contractor, etc.).

d. Choosing the responsible party. Historically, the owner has a special obligation for wreck removal, even while PL 99-662 extends jurisdiction to operators or lessees. In all cases where the owner can be identified and reached, the Corps will pursue removal by the owner, regardless of which party may have been responsible for the wreck/incident. (Note: owners cannot delegate liability or relieve themselves of liability by selling, transferring ownership or abandoning the wreck.) When the owner is not determinable or available (and the wreck occurred after November 17, 1986), the operator or lessee may be compelled to remove the wreck, again regardless of negligence or responsibility for the incident.

e. Abandonment issues.

(1) Abandonment is an owner's giving up the exclusive right to salvage.

(2) The lapse of 30 days with no action is sufficient legally to establish abandonment, however, Corps policy is to provide 30 days after notification to the owner of their legal obligation.

(3) After the Corps establishes abandonment (in cases where the Corps will undertake removal), a letter will be sent to the owner (or operator/lessee) as notification. Appendix K is a sample letter, which may be tailored to individual cases.

(4) A declaration of abandonment from the owner is sufficient to establish abandonment in less than 30 days. A declaration from any other party does not constitute a valid abandonment, since abandonment relates to title in the vessel. Before establishing abandonment on the basis of a declaration, the District Commander should ensure that the person being represented as the owner is in fact the legal owner.

(5) Any declaration or offer of abandonment shall be acknowledged in writing. The reply shall not indicate in any way that the Corps is "accepting" abandonment or accepting responsibility/ liability for the wreck. The sample letter at Appendix L shall be used in such cases. If the letter was received from a party other than the legal owner, the reply should additionally recognize that fact.

(6) An abandonment, once established, generally cannot be retracted by the owner. The advice of counsel should be sought in such cases.

(7) Salvage by a third party (before or after abandonment) does not affect the obligation of the original owner to mark and remove the wreck.

f. Emergency removal authority under "Section 20" of the River and Harbor Act of 1899, as amended (33 USC 409, 411-415) should be used only when an expedited removal is necessary for the protection of life or property, or when an obstruction seriously impedes navigation. Emergency removals may involve a taking of private property by the Federal Government, with a potential for legal liability if not sufficiently justified by the circumstances. The exercise of this authority is always a special case, and therefore requires special notifications to HQUSACE when invoked.

g. Delegation limits. The authority to undertake removal up to $100,000 (contract cost) is delegated to district commanders (and MSC commanders for operating divisions). Further delegation is authorized, but must be in writing (either specifying individual name or job position). Delegation of emergency removal authority (Section 20 removals) may not be made below the level of the Chief, Construction-Operations Division (or Operations Division). Note: Emergency actions to prevent loss of life or significant property damage shall NEVER be delayed on the basis of estimated cost or lack of cost estimate.

4-5. Coordination with Coast Guard.

a. Coast Guard evaluations not binding. The MOA charges each agency with pursuing a joint determination of whether an obstruction constitutes a hazard to navigation. District commanders should not simply defer to the Coast Guard in this decision process. They should assess the situation from the Corps perspective, make a judgment, and attempt to reconcile that judgment with the Coast Guard district. It is anticipated that most determinations can be agreed upon at that level, but some may require referral up the chain of command, or to HQUSACE. The District Commander should also keep in mind that a hazard determination does not by itself dictate need for removal. The degree of hazard can, in some cases, be mitigated by other response actions.

b. Corps assistance with marking. The District Commander may, upon request, provide assistance to the Coast Guard in locating and/or marking a wreck; assistance shall be provided if resources are available and if the Corps has a special capability in the particular case. Such assistance is normally not reimbursable from the Coast Guard, unless the Coast Guard recovers marking costs from the responsible party as addressed in 33 CFR 64 - Marking of Sunken Obstructions. In all cases, cost records should be maintained for the possibility of later reimbursement (see 33 CFR 74).

c. Marking enforcement. When an owner or other responsible party undertakes removal, the Corps shall monitor the operation, including the maintenance of marking. The Corps shall not, however, enforce marking requirements. Marking problems shall be referred to the Coast Guard for enforcement.

d. USCG help in identifying responsible parties. The Coast Guard maintains a computerized Marine Safety Information System (MSIS), which can provide quick access to ownership and operator data for virtually all foreign vessels entering U.S. ports, and for most U.S. vessels which are documented, inspected or boarded by the Coast Guard or which have been involved in a reportable marine casualty. MSIS is accessible from every Marine Safety Office, Captain of the Port office, Marine Inspection Office, and district office.

e. Notifications to owner. The Corps and the Coast Guard shall consult to determine which agency will take the lead in notifying the owner (or other party) of their responsibility to mark and remove a wreck. This is a local decision, and may be made on a case-by-case basis or subject to a more general agreement. When the District Commander defers to the Coast Guard for notification to the owner, the Commander shall ensure that all the relevant elements of Appendix M are addressed. Separate notifications may be made, but are discouraged as not reflecting well on federal coordination.

f. Interagency notifications/correspondence. District commanders shall keep the Coast Guard district informed of status/progress of removal actions, any changes in status/ situation regarding the factors which were considered in determining hazard and remedial actions, any problems with marking as observed by the Corps, any pollution observed, and any other circumstances which may impact on navigational safety.

g. Coast Guard removals. In cases involving substantial threat to the human environment from pollution, the Coast Guard may exercise its own authority to remove or destroy a vessel. Some of these cases may also involve a hazard to navigation (triggering Corps jurisdiction) and some may not. When circumstances would permit removal by either agency, the decision as to which agency will take the lead shall be made locally, if possible. The Coast Guard will always make the final decision whether to invoke its authority for removal under 33 CFR 153 (Control of Pollution by Oil and Hazardous Substances Discharge Removal). However, the Corps may not invoke its emergency removal authority under Section 20 (33 USC 415) when the sole purpose of removal is for mitigating a pollution threat. Section 20 removal must always be tied to navigation impacts.

h. Annual reconciliation of cases. Status of all existing hazards to navigation shall be compared with the Coast Guard district at least annually. District commanders shall coordinate locally with the Coast Guard for appropriate format, schedule, etc.

4-6. Notifications/Reports.

a. Emergency removals. In all cases of emergency removal, district commanders shall ensure immediate telephone notification to their MSC and headquarters (CECW-OD), followed by message within 24 hours reporting the situation and actions taken/planned. Telephone notifications to HQUSACE after-hours shall be made through the Army Operations Center (703-695-2769), directed to a CECW-OD representative.

b. Significant cases. In all non-emergency cases involving a potential national-level interest by the public or media, or special interest groups, district commanders shall insure prompt notification to their MSC and CECW-OD by telephone or message, as appropriate.

c. Requests for HQUSACE approval. Where contract costs for removal are estimated to exceed $100,000, requests shall be transmitted by letter through the MSC Commander to CECW-OD, and shall include a copy of the existing case file documentation as outlined in paragraph 4-4 above. Advance coordination by telephone is authorized and encouraged.

d. Notifications to Coast Guard are covered in paragraph 4-5.

4-7. Funding.

a. Charging/accounting procedure. Funding for all Corps removal efforts under $100,000 shall initially be charged to the revolving fund. After completion of removal, the district shall submit a request through the MSC to CECW-OD for reimbursement from O&M, General. For cases over $100,000, instructions for funding may be provided with the approval from CECW-OD.

b. Reimbursable costs (those which are recoverable from the owner/operator/lessee) shall be all "reasonable" costs associated with removal, including:

(1) preparation of plans/specifications

(2) contract preparation

(3) contract administration (Corps personnel)

(4) cost to locate the wreck

(5) direct removal costs (by contractor or Corps)

(6) cost to maintain site safety during removal

(7) overhead (for all hired labor) and equipment

(8) disposal

c. Non-reimbursable costs are any which exceed the "reasonable" (i.e., necessary) removal cost in a given situation, and any of the agency's administrative costs not directly related to the removal including:

(1) investigation of obstruction

(2) consultation with Coast Guard

(3) resolution of dispute with Coast Guard

(4) internal Corps notifications and situation reports

d. Cost recovery from the owner/operator/lessee shall be initiated by letter correspondence (see sample letter at Appendix N). Review of cost documentation by counsel, before submission to the responsible party for payment, is encouraged.

4-8. Legal Actions.

a. Criminal actions. Generally, the pursuit of criminal penalties should be reserved for cases where:

(1) the case involves either gross negligence or willfulness,

(2) the individual to be prosecuted has not acted responsibly or diligently in removing the wreck, and

(3) other legal recourse does not provide sufficient remedy.

b. Civil actions. The Corps may, however, pursue a civil judgment against an owner/operator/lessee to compel removal, and may file suit to recover any loss or damages to the Corps.

c. License suspension or revocation. Any master, mate, engineer, pilot or operator holding a Coast Guard license may be subject to suspension and revocation proceedings concerning their involvement in the incident which resulted in the wreck. The local Coast Guard Marine Safety/Marine Inspection Office would normally initiate an investigation in such cases where there is evidence of misconduct, negligence, incompetence or violation of certain U.S. laws.

d. Collections. When an owner/operator/lessee does not respond within 30 days to a letter seeking reimbursement of removal costs, the case may be referred to counsel for collection through the courts.

CHAPTER 5 - WATERBORNE COMMERCE STATISTICS

5-1. Purpose. This chapter establishes guidance governing the Navigation Data Center (NDC) programs, their implementation and responsibilities, including the collection, compilation, publication, and dissemination of Waterborne Commerce Statistics and the collection, compilation, and reporting of data on waterway traffic through locks and regulated canals (e.g., the Chesapeake and Delaware Canal and the Cape Cod Canal).

5-2. Terminology. In order to facilitate the use of this pamphlet, terminology unique to the Waterborne Commerce Statistics Program are provided in Appendix O.

5-3. Background and Responsibilities. The Navigation Data Center (NDC) located at Fort Belvoir, Virginia is responsible for the Federal water transportation statistical programs including waterborne commerce statistics, port and waterway facilities, lock performance monitoring, and dredging statistics. The NDC is under the direction of the Director, Water Resources Support Center (WRSC) who has authority over three main interrelated areas comprising (1) planning, developing, and evaluating navigation data collection and processing systems; (2) ensuring that national and regional data bases are adequately integrated and efficiently operated and maintained; and (3) assessing the efficiency of data dissemination technology and procedures. Outlined below are the management responsibilities of NDC components:

a. The Waterborne Commerce Statistics Center (WCSC), located in New Orleans, Louisiana, is responsible for the following:

(1) Data collection, compilation, printing, and distribution of all domestic waterborne commerce statistics. Coding procedures are discussed in Appendix P. The WCSC discharges these functions by publishing the data collected on ENG Forms 3925, 3925B, 3925P or an authorized automated equivalent in the annual publication, Waterborne Commerce of the United States and the data collected on ENG Forms 3931 and 3932 in the annual publication, Waterborne Transportation Lines of the United States. A description of the publications and ton-mile computation methods is contained in Appendix Q.

(2) Continuous monitoring of data collection and recommending changes, as necessary, to the Chief of Engineers through the Director, WRSC.

(3) Handling special requests for waterborne commerce statistics. The WCSC will respond to special requests from USACE offices, other government agencies, and the general public as resources are available within the WCSC. Special requests that require substantial effort to produce will be handled on a cost reimbursable basis.

b. The Ports and Waterways Division of NDC is responsible for the collection, review, analysis, preparation, and publication of data on the physical and internodal characteristics of the coastal, Great Lakes, and inland ports and waterways in the United States.

c. The NDC, through the Lock Performance Monitoring System, has responsibility for the collection, editing, maintenance, and analysis of data collected at channelized waterways, regulated man-made canals, and all Corps-owned and operated locks. These data are collected on ENG Forms 3102b, 3102c, and 3102d as prescribed by ER 1130-2-520, Chapter 6. The

amount of information to be collected from vessel operators is to be held to a minimum, consistent with the essential needs of the U.S. Army Corps of Engineers, including data to meet valid requests of the public.

d. The NDC, through the Dredging Statistics Program, has the responsibility of collection, management, and distribution of data on Corps dredging contract activities. This includes data on bid schedules, location of contract, dredge type, and cubic yards.

5-4. Enforcement of Reporting Policy. The USACE considers compliance with all reporting requirements established in conjunction with this regulation of the utmost importance and will use every means at its disposal to enforce it.

a. Section 11 of the Rivers and Harbors Appropriation Act of 1922 (42 Stat. 1043), as amended, is codified in 33 USC 555 and provides the following:

> Owners, agents, masters, and clerks of vessels and other craft plying upon the navigable waters of the United States, and all individuals and corporations engaged in transporting their own goods upon the navigable waters of the United States, shall furnish such statements relative to vessels, passengers, freight, and tonnage as may be required by the Secretary of the Army: Provided, That this provision shall not apply to those rafting logs except upon a direct request upon the owner to furnish specific information.
>
> Every person or persons offending against the provisions of this section shall, for each and every offense, be liable to a fine of not more than $5,000, or imprisonment not exceeding two months, to be enforced in any district court in the United States within whose territorial jurisdiction such offense may have been committed. in addition, the Secretary may assess a civil penalty of up to $2,500, per violation, against any person or entity that fails to provide timely, accurate statements required to be submitted pursuant to this section by the Secretary.

b. To identify vessel operating companies that should be reporting waterborne commerce data, the Corps will make use of, but will not be limited to, the following sources:

(1) Data on purchase and sale of vessels.

(2) U.S. Coast Guard vessel documentation and reports.

(3) Data collected at locks, canals, and other facilities operated by the Corps.

(4) Data provided by terminals on ENG Form 3926, Record of Arrivals and Departures of Vessels at Marine Terminals.

(5) Data provided by the other Federal agencies including the Internal Revenue Service, Customs Service, Maritime Administration, Department of Transportation, and Department of Commerce.

(6) Data provided by ports, local facilities, and state or local governments.

(7) Data from trade journals and publications.

(8) Site visits and inspections.

5-5. Data Collection and Reports. The Waterborne Commerce Statistics Center (WCSC) located in New Orleans, Louisiana, is responsible for the collection of waterborne commerce information. The waterborne traffic movements are reported to the USACE by all vessel operators of record on ENG Forms 3925 and 3925B, 3925P or an authorized automated equivalent approved by the Office of Management and Budget under the Paperwork Reduction Act of 1995, Public Law 104-13, May 22, 1995, 109 Stat. 163 (44 USC 3501-3520). To facilitate this data collection program, vessel operators are classified by domicile within Corps districts. With the exception of vessel operators domiciled within the Ohio River Division (Pittsburgh, Huntington, Louisville, and Nashville Districts) all vessel operation reports are to be filed with the USACE at the address specified below:

U. S. Army Corps of Engineers
Waterborne Commerce Statistics Center
P. 0. Box 61280
New Orleans, LA 70161-1280

a. "Ohio River Division (ORD)." Vessel operators with domicile within ORD (Pittsburgh, Huntington, Louisville, and Nashville Districts) are required to file vessel operation reports with the Huntington District at the address specified below:

District Commander
U. S. Army Engineer District, Huntington
Corps of Engineers
Attn: CEORH-PD-C
502 Eighth Street
Huntington, WV 25701-9959

b. For movements with cargo, the point of loading and the point of unloading of each individual commodity must be delineated.

c. Cargo moved for the military agencies in commercial vessels is reported as ordinary commercial cargo; military cargo moved in Department of Defense vessels is not collected.

d. Filing Requirements. Implementation of the waterborne commerce statistics provisions of the River and Harbor Act of 1922, as amended by the Water Resources Development Act of 1986 (PL 99-662) mandates the following:

(1) Except as provided in paragraph 5-5d(2)(c),(d),(e), of this manual, the person or entity receiving remuneration for the movement of vessels or for the transportation of goods or passengers on the navigable waters is responsible for assuring that the activity report of commercial vessels is filed in a timely manner.

(a) For vessels under lease/charter agreements, the lessee or charterer of any commercial vessel engaged in commercial transportation will be responsible for the filing of said reports until the lease/charter expires.

(b) The vessel owner, or his designated agent, is always the responsible party for ensuring that all commercial activity of the vessel is reported in a timely manner.

(2) The "Vessel Operation Reports (VORs)" are to include the following information:

(a) All movements of domestic waterborne commercial vessels shall be reported, including but not limited to: dry cargo ship and tanker moves, loaded and empty barge moves, towboat moves, with or without barges in tow, fishing vessels, movements of crew boats and supply boats to offshore locations, tugboat moves and movements of newly constructed vessels from the shipyard to the point of delivery.

(b) Vessels idle during the month must also be reported.

(c) Movements of supplies, materials, and crews to or from the construction site must be reported in a timely manner. Movements of vessels exclusively engaged in construction (e.g., pile drivers and crane barges) need not be reported.

(d) Vessel and dredge movements of dredged material (shell, sand, or gravel) dredged exclusively for sale or for beneficial purposes (e.g., land development, beach nourishment) must be reported to WCSC. Movements of dredged material resulting from routine channel maintenance or new construction and the movement of dredges to and from the dredging site need not be reported.

(e) Movement of recreational vessels, fire, police, patrol vessels, and those granted written exception by WCSC need not report.

(3) ENG Forms 3925, 3925B, 3925P or an authorized automated equivalent shall be completed and filed by vessel operating companies each month for all voyages or vessel movements completed during the month; (e.g., trip started 29 January and completed 10 February should be included for the month of February and filed before 31 March). Vessels that did not complete a move during the month shall be reported as idle or in transit.

(4) The vessel operating company may request a waiver from the Army Corps of Engineers, and upon written approval by WCSC, the company may be allowed to provide the requisite VORs on an authorized automated equivalent such as computer printouts, magnetic tape, diskettes, or alternate medium approved by the WCSC.

(5) Harbor Maintenance Tax information is required for cargo movements into or out of ports that are subject to the provisions of Section 1402 of the Water Resources Development Act of 1986 (PL 99-662).

(a) The name of the shipper of the commodity, and the shipper's Taxpayer Identification Number (TIN) or Social Security Number (SSN), must be reported on the form.

(b) If a specific exemption applies to the shipper, the shipper should list the appropriate exemption code. The specific exemption codes are listed in the directions for ENG Form 3925.

e. Reporting situation. A commercial vessel movement by an operator is required to be reported. Typical examples are listed in the instructions on the various ENG Forms. The following are five typical vessel movements that are required to be reported by vessel operating companies where Company A is the barge owner, and the barge transports corn from Minneapolis, Minnesota, to New Orleans, Louisiana, with fleeting at Cairo, Illinois:

(1) LEASE/CHARTER: If Company A leases or charters the barge to Company B then Company B is responsible for reporting the movements of the barge until the lease/charter expires.

(2) INTERLINE MOVEMENT: A barge is towed from Minneapolis to Cairo by Company A and from Cairo to New Orleans by Company B. Since Company A is the barge owner, and the barge is not leased, Company A reports the entire movement of the barge with an origin of Minneapolis and a destination of New Orleans.

(3) VESSEL SWAP/TRADE: Company A swaps barge with Company B to allow Company B to meet a delivery commitment to New Orleans. Since Company A has not leased/chartered the barge, Company A is responsible for filing the report. Company B is responsible for filing the report on the barge which is traded to Company A. The swap or trade will not affect the primary responsibility for reporting the individual vessel movements.

(4) RE-CONSIGNMENT: Barge is re-consigned to Mobile, Alabama. Company A reports the movements as originating in Minneapolis and terminating in Mobile. The point from which barge is re-consigned is not reported, only points of loading and unloading.

(5) FLEETING: Barge is deposited at a New Orleans fleeting area by Company A and towed by Company B from the fleeting area to New Orleans area dock for unloading. Company A, as barge owner, reports entire movements from Minneapolis to the unloading dock in New Orleans. Company B does not report any barge movement.

f. Towboat Reporting. A towboat operated between fixed points may be reported in terms of the total number of round trips completed during the month. For a towboat not operated between fixed points, its movements are reported in each direction during the calendar month. Note especially, however, that only those movements which have been completed in each direction during the calendar month are to be reported for that month. To avoid crediting a waterway with double the number of trips actually made, a towboat moving in a given direction which has not reached its final or planned destination at the end of the month should not be reported until the following month. For example, if a towboat traversed half the distance of a waterway stretch by the end of January and was reported for January and then again picked up in the February report for remainder of the stretch, two trips would be reported for this waterway when actually only one trip occurred.

g. Reporting Forms.

(1) ENG Form 3925 - Vessel Operation Report. Statement of Freight and Passengers Carried, submitted principally by operators of deep-draft vessels. The type of information collected monthly on this form includes the following:

(a) VESSEL DATA

1 - TRIP NUMBER

2 - YEAR

3 - TYPE OF VESSEL

4 - NAME AND NUMBER OF VESSEL

5 - NET REGISTERED TONS (NRT)

6 - FLAG

(b) CARGO DATA - LOADED AT AND DISCHARGED AT: (Fleeting areas should not be reported unless a vessel is loaded or unloaded at a fleeting area. If a loaded barge is left at a fleeting area for a future move to unload at a terminal, give the terminal as the destination. If a barge is loaded at a terminal and then moved to a fleeting area for future pick up, give the loading terminal as the origin.)

1 - PORT OR LOCALITY

2 - DOCK

3 - DATE

4 - ACTUAL DRAFT

(c) UNLOADED CARGO DATA - COMMODITY INFORMATION:

1 - COMMODITY - if the commodity is passengers the units field will indicate the number of passengers being transported.

2 - QUANTITY

3 - UNIT

4 - WEIGHT PER UNIT

5 - NET TONS

(d) HARBOR MAINTENANCE TAX INFORMATION: Vessel operating companies reporting domestic movements of commodities on a vessel transiting channels in U. S. Customs, ports subject to the Harbor Maintenance Tax (HMT) must also report the shipper information (name of shipper and the shipper's IRS or SSN, or an exemption code). Reference the Water Resources Development Act of 1986, PL 99-662 Title 14; 19 CFR Parts 3, 24, 146, and 178 (U. S. Customs). (Also see Corps Federal Register Announcement dated 25 March 1987; U. S. Customs Service Federal Register Announcement dated 30 March 1987 and amended in a Federal Register Announcement dated 14 July 1987). The HMT information must be provided for each commodity carried. If the commodity movement is exempt from the fee because of one of the exemptions given with directions to complete the forms, the applicable exemption code must be entered in the last column of the form and the name of the shipper and the shipper's IRS number (or SSN) may be omitted. If the commodity movement is not exempt, then the shipper's name and IRS number (or SSN) must be entered on the form.

NOTE: The "shipper" is defined as the company or person paying the freight charges to the vessel operating company. The shipper should provide the vessel operating company all information necessary to fill in the user fee information items.

(e) ALTERNATE CHANNELS: When more than one route is possible, the vessel operator is required to identify alternate channels used.

(2) ENG Form 3925B - Vessel Operation Report. Optional Form for Use by Inland Waterways Operators in lieu of ENG Form 3925, submitted monthly by inland and intracoastal operators. ENG 3925B allows the operator to report vessel movements of several vessels (up to 10) on one form. Multiple trips for the same vessel may also be recorded on one line of this form provided the origin, destination, commodity, and alternate channels used are the same. The type of information collected on this form includes the following:

(a) VESSEL DATA:

1 - NUMBER OF TRIPS

2 - VESSEL NAME

3 - COAST GUARD NUMBER

4 - VESSEL TYPE

(b) VESSEL ORIGIN/DESTINATION INFORMATION:

1 - PORT NAME

2 - DOCK NAME

3 - RIVER, MILE, AND BANK

4 - DATE (MONTH/YEAR)

(c) SERVICE - For each cargo movement the service code will be provided in this field. The service codes are defined below:

1 - if carriage is regulated by the Interstate Commerce Commission.

2 - if carriage is for compensation but exempt from regulation by the Interstate Commerce Commission.

3 - if carriers, goods are being transported in their own vessels.

4 - if unknown

(d) CARGO DATA:

1 - COMMODITY

2 - TONS

3 - ALTERNATE WATERWAYS: When more than one route is possible, the vessel operator is asked to identify the alternate channels used.

(e) CONTAINERS AND CONTAINERIZED CARGO - The cargo being transported in containers must be delineated by commodity type and tonnage. If empty containers are being transported the entry under commodity type will be "Empty Containers" and the weight of the empty containers will appear in the tonnage field.

(3) ENG Form 3925P - Vessel Operation Report. Optional Form for use by Passenger Operators, in lieu of ENG Form 3925, submitted monthly by passenger vessel operators. ENG Form 3925P is designed to facilitate the completion of the required information by passenger vessel operators. The vessel type “1", commodity code “00040" and the service code “2" are printed on the form. The vessel operator is not required to enter these data. The form will allow the submission of multiple moves for the same vessel to and from a turn around point. The type of information collected on this form includes the following:

(a) VESSEL DATA:

1 - YEAR

2 - VESSEL TYPE - Encoded as “1"

3 - NAME AND NUMBER OF VESSEL

4 - NET REGISTERED TONS (NRT)

5 - COAST GUARD NUMBER

(b) CARGO DATA:

1 - NUMBER OF TRIPS

2 - PORT OR LOCALITY NAME

3 - DOCK NAME

4 - DATE (MONTH AND DAY)

5 - ACTUAL DRAFT

6 - TURN AROUND POINT

7 - SERVICE - Encoded as “2" (Exempt, for hire)

(c) PASSENGER DATA

1 - COMMODITY CODE - Encoded as “00040: for passengers

2 - NUMBER OF PASSENGERS

3 - ALTERNATE WATERWAYS - When more than one route is possible, the vessel operator is asked to identify the alternate channel used.

(d) HARBOR MAINTENANCE TAX INFORMATION: Same as ENG Form 3925

(4) ENG Form 3926 - Record of Arrival and Departure of Vessels at Marine Terminals. Submitted by dock or wharf operators upon request of WCSC on a voluntary basis. Submission of this form will be requested only when and if essential to ensure adequate and correct coverage of vessel movements in United States harbors and channels.

(a) WHARF OR DOCK - The name of the facility making the report to WCSC.

(b) PORT OR LOCALITY - The location or port name where the facility is located.

(c) NAME OF VESSEL - Self-explanatory.

(d) TYPE OF VESSEL - Defined in directions

(e) VESSEL ARRIVAL/DEPARTURE

(1) DATE - The month and year that the vessel arrived or departed.

(2) UNLOADED/LOADED CARGO - The entry for this field is either a "YES" or "NO" to indicate that the vessel unloaded and/or loaded cargo at the facility.

(3) FOREIGN, DOMESTIC, OR BOTH - Indicate the type of cargo handled.

(f) REMARKS - This field is usually used to provide the tonnage of cargo handled.

h. Waterborne Transportation Lines Survey. The WCSC will conduct an annual survey of vessel operators within the United States. ENG Forms 3931 and 3932 described below will be used to conduct the survey. The data collected are designed to take a snapshot picture of the status of the domestic vessel fleet as of the last day of each calendar year and to provide a quality control feature for the verification of the filing requirements of ENG Forms 3925 and 3925B, and 3925P or an authorized automated equivalent. ENG Forms 3931 and 3932 should be filed in accordance with the procedures set forth in paragraph 5-5, page 5-3.

(1) ENG Form 3931 - Description of Vessels. The following information is collected annually on this form:

(a) OPERATOR NAME, TELEPHONE NUMBER, AND ADDRESS - This should be the individual, company, or corporation operating the vessel or vessels.

(b) VESSEL NAME OR NUMBER AND COAST GUARD NUMBER - The vessel name or number listed in this block should be identical to that shown on the vessels, or on registration papers.

(c) VTCC CODE - The VTCC Code that most appropriately describes the vessel is given here. The VTCC Code represents the alphanumeric code for the vessel type, construction, and characteristics. The definitions and explanations of vessel type, construction, and characteristics (VTCC Code) are listed on ENG Form 3932 (Description of Operations). For example, if the type of vessel is a self-propelled tanker, constructed of steel and was characterized as a liquid bulk tanker, the VTCC Code would be 2A22.

(d) NET REGISTERED TONNAGE - The net registered tonnage for each vessel is provided here. This information is provided on the registration papers; otherwise, it may be determined as the volume of space available for the accommodation of passengers and the stowage of cargo expressed in units of 100 cubic feet per each net registered ton.

(e) LENGTH, BREADTH, AND DRAFT - The dimensions, registered and overall, and the drafts, loaded and light, of the vessel should be reported in feet to the nearest tenth, (e.g., 155.2; 8.1; 2.9; etc.).

(f) HORSEPOWER - The horsepower as given in Merchant Vessels of the United States. If not listed therein, this represents the rated horsepower as given on the official Certificate of Documentation (U.S. Coast Guard).

(g) CARGO CAPACITY - The fully loaded capacity in short tons (2,000 lbs.) is provided where practicable. Otherwise, the commodity carried, capacity of the vessel in the commodity unit of measurement (gallons, bushels, etc.), and weight per unit of measurement may be provided.

(h) HIGHEST FIXED POINT ON VESSEL - This is given as the distance between the waterline of the vessel, when light, and the highest fixed point on the vessel. If the highest point of the vessel is a hinged stack or retractable pilothouse, then it is given as distance to hinge or top of pilothouse in lowered position.

(i) CARGO HANDLING EQUIPMENT - Permanent fixtures are given such as cranes, derricks, hoists, pumps, etc. Also given are the handling capacity and type of power used to operate the equipment such as steam, electric, diesel, etc.

(j) VESSEL OPERATING BASE - This is the name of the city or locality which is the operating headquarters of the vessel.

(k) YEAR BUILT OR REBUILT - This will indicate the year in which the vessel was built. If the vessel was rebuilt, the year rebuilt will be followed by an asterisk (*).

(2) ENG Form 3932 - Description of Operations. The following information is collected on this form:

(a) OPERATOR NAME, TELEPHONE NUMBER, AND ADDRESS - This should identify the individual, company, or corporation operating the vessel or vessels.

(b) SERVICE - Use Code:

1 - if carriage is regulated by the Interstate Commerce Commission.

2 - if carriage is for compensation but exempt from regulation by the Interstate Commerce Commission.

3 - if carriers' goods are being transported in their own vessels.

9 - if unknown

(c) PRINCIPAL COMMODITIES CARRIED - This should identify the commodities carried by vessels being operated.

(d) POINTS OR LOCALITIES AND WATERWAY ON WHICH VESSEL MOVEMENTS TAKE PLACE - This identifies the general area in which activity is conducted.

5-6. Violation Procedures. Appendix R delineates explicitly that which constitutes an offense and violation of this reporting requirement. In the event of a reporting violation, the Director, WCSC, will bring it to the attention of the responsible party and allow 30 days for the reports to be filed after the fact. If the reports are not filed within this 30-day grace period, appropriate civil or criminal actions may be undertaken by the Army Corps of Engineers, up to and including the proposal of civil or criminal penalties for non-compliance. Typical cases for criminal or civil action include, but are not limited to, those violations which are willful, repeated, or have a substantial impact in the opinion of the Director, WCSC. For the vast majority, however, penalties incurred as a result of a violation are civil action penalties. The Director, WCSC, assesses their gravity and consequences. Assessment and processing procedures involve the following:

a. Authorization to assess a civil penalty. The Director, WCSC, assesses a civil penalty in accordance with the Class I penalty provisions of 33 CFR Part 326. Provided, however, that the procedures in the CFR Part 326 specifically implementing the Clean Water Act [33 USC 1319(g)(4)], public notice, comment period, and state coordination, shall not apply.

b. Initiation of a civil penalty order. Upon assessment of a civil penalty, the Director, WCSC, prepares a proposed civil penalty order, including a statement on the assessed penalty, the rationale leading to it, and the application provisions of 33 CFR Part 326.

c. Recourse available to the recipient of a civil penalty order. The recipient of a proposed civil penalty may prepare a written request for a hearing or other provision, in accordance with 33 CFR Part 326, addressed to the Director, WRSC, Casey Building, Fort Belvoir, VA 22060-5586. Following the hearing or other review of the case, the Director, WRSC will act according to what has transpired. In all cases, the Director is expected to provide the violator a reasonable opportunity to redress or explain the violation. Thereafter, the Director, WRSC, will issue a final order.

d. Authorization to initiate criminal action order. The Director, WRSC has the authority to refer certain violations to the local U.S. Attorney for prosecution, penalty collection, injunction, or other appropriate action.

5-7. Release of Data.

a. The USACE policy on the release of waterborne commerce statistics can be found in 33 CFR 209.320 and will be followed throughout the collection and publication process of these

data bases. Data released by the Corps to state and local government agencies, private companies, and the general public are done in accordance with the Freedom of Information Act (5 USC 552) and the Paperwork Reduction Act (44 USC 3501-3520).

b. The WCSC will not release any data or information furnished by vessel operators and others with the understanding that it will not be disclosed, except in compilation form. Any request for information or data not in compilation form which could identify the commercial activity of specific companies or persons that supplied the data to the USACE will be handled in accordance with the procedures pertaining to release of information under the Freedom of Information Act (5 USC 552) and the Paperwork Reduction Act (44 USC 3501-3520) giving due regard to the proprietary nature of this information.

c. All exchanges of data by the WCSC, to other agencies except those under the Freedom of Information Act, will be accompanied by the following legend:

NOTICE OF RESTRICTED DATA

USE OF DATA LIMITED

Information contained in this data has been furnished to the WCSC with the understanding that it will not be further disclosed except in compilation form. This data is being furnished to you with that expressed understanding. Accordingly, you are under an obligation to protect the data from release.

The data shall be handled in accordance with established Government procedures for safeguarding proprietary information against unauthorized disclosure. Government employees are subject to the sanction in 18 USC 1905 for unauthorized disclosures.

5-8. Release Statement. In the preparation of a news release, report, or bulletin using data extracted from WCSC publications (Appendix P), the following statement will accompany each report or release, "In reproducing, wholly or in part, the data contained herein, indicate source: Corps of Engineers, U.S. Army."

5-9. Data Retention.

a. Once the final Waterborne Commerce of the United States publication is distributed, the original ENG Forms 3925, 3925B, 3926, and equivalents may be destroyed.

b. Once the final Waterborne Commerce Transportation Lines of the United States publication is distributed, the original ENG Forms 3931 and 3932 may be destroyed.

c. The encoded data obtained on ENG Forms 3925, 3925B, or an authorized automated equivalent will be archived on electronic media and retained indefinitely. This archive will contain data from 1970 to the most recent completed calendar year.

5-10. Approval Required to Add, Modify, or Delete Tables from the Waterborne Commerce of the United States.

a. The district commanders are the primary initiating authority for additions, modifications, or deletions of Corps of Engineer projects that appear in the Waterborne Commerce of the United States (WCUS), Parts 1 - 4 tables. The district engineer will forward, through the division engineer, the initial request and statement of justification of said changes through the Director, WCSC, to the Director, NDC, the approving authority.

b. The WCSC may also initiate recommendations for additions, modifications, or deletions to Corps of Engineers projects as they appear in Waterborne Commerce of the United States, Parts 1 - 4 tables. The recommendations must be coordinated with the district commander of the affected district and approved by the Director, NDC.

c. Proposed changes to the Waterborne Commerce of the United States, Part 5 must be approved by the Director, NDC.

d. Any change to the definition of a port area or the establishment of a new port area must meet one of the following criteria:

(1) Port limits defined by legislative enactments of state, county, or city governments.

(2) The corporate limits of a municipality.

e. The petitioning party must forward the initial request for an addition or change to port definitions to the Director, WCSC. Said request must include a statement of justification and citation of authority in response to criteria mentioned above. Denials may be appealed to the Director, WRSC.

CHAPTER 6 - LOCK PERFORMANCE MONITORING SYSTEM

Reserved.

CHAPTER 7 - OPERATIONS AND MAINTENANCE UNIFORM PROGRAM

7-1. Purpose. This chapter establishes guidance on uniforms for civilian USACE Lock Operations and Maintenance (O&M), floating plant, lake contract maintenance inspector, and lake maintenance personnel, and authorizes an initial uniform allowance and subsequent replacement allowances to personnel required to wear the uniforms. Utilization of this guidance to require civilian lock and floating plant O&M personnel to wear the uniforms herein is at the discretion of each MSC Commander.

7-2. Guidance - Uniforms and Usage.

a. Uniform Classifications and Definitions.

(1) Uniform classes shall be designated A, B, and C in accordance with the following descriptions. (See Appendixes S through V for examples and other information on each class.) The three classes of uniforms authorized are: Class A Dress Uniform; Class B Duty Uniform; and Class C Work Uniform.

(2) The Maternity Uniform (see Appendix V) is optional for those that require it and wish to wear a uniform. This uniform may be worn while in a maternity status. Appropriate relief from regulations to wear uniforms during pregnancy shall be given upon request.

b. MSC commanders have been granted the authority to:

(1) Determine what "class(es)" of uniform will be worn by each employee [both single (A, B, or C) and multiple uniform class determinations are permitted depending upon the job requirements]. The requirement to wear the Class A Dress uniform shall be determined by the MSC commanders for their respective MSC. In addition, to provide uniformity, all employees in like positions on the same project or site or to the extent practicable on the same river system shall be required to wear the same class uniform.

(2) Authorize a uniform allowance to help defray the cost of uniforms. Initial and replacement allowances will be in accordance with the provisions in paragraph 7-2c below. ENG Form 4891-R, Uniform Allowance, is to be used to assess and authorize appropriate uniform allowances.

c. Uniform Allowance Limits.

(1) Uniforms are supplied through a credit allowance system. This allowance may or may not be sufficient to defray all uniform-connected costs. Initial and replacement allowances will be in accordance with the provisions of PL 98-63. The present maximum is $400 per year. The credit allowance system is regulated as follows:

(a) Initial and replacement allowances are based on an annual amount. If a person changes status or uniform category during the year, that person may be authorized an increased allowance to help defray the cost of the new or additional items. For example, if a person is authorized Class B/C, has received $250, and then is promoted to a position authorizing Class A/B/C, an additional $150 can be authorized to help defray the purchase of Class A items.

(b) Maternity Uniform. If a person has received a replacement allowance and then needs a Maternity (Class A or Class B) Uniform, an additional allowance is authorized to help defray the purchase of the maternity uniform items.

(c) The table in Appendix X lists the initial and replacement allowances for permanent [full-time and While Actually Employed (WAE)] and temporary personnel for all uniform classes.

(d) The total uniform allowance authorized for an employee in any one year period will not exceed $400.

(e) The MSC/District responsible for the nation-wide procurement contract, as described in paragraph 7-3a below may make recommendations to HQUSACE, CECW-O for revisions to the uniform allowances in Appendix X, subject to the statutory limits.

(f) The allowance amount authorized for each employee is intended for use only by that employee, and any unused funds reduce the net cost to the Federal Government. Therefore, ordering uniform items for another person, with or without remuneration is prohibited.

d. Items not covered by Uniform Allowance.

(1) Items not covered by the uniform allowance are listed in Appendix X. As stated, certain job-related safety items can be provided by the Government. The cost of these items will not count against initial or replacement allowance limits.

(2) Provisions shall not be made for the cleaning and laundering at Government expense of uniforms furnished or provided for by monetary allowance under the authority of the Federal Employees Uniform Allowance Act and this regulation.

7-3. Guidance - Uniform Procurement.

a. Uniform Procurement. CECW-O will designate an MSC to assign one of its districts to develop, advertize, negotiate, award, and manage a contract for the nation-wide procurement of uniforms and to develop and manage the necessary accounting procedures to oversee the nation-wide distribution. Uniform garment specifications developed will be patterned after the uniform items as specified in Appendices S, T, U, and V of this chapter.

b. If an MSC Commander chooses to require uniforms, they shall be procured through the nation-wide contract.

7-4. Guidance - Appearance. Supervisors are responsible for the general appearance of their uniformed personnel. Supervisors will ensure that uniforms meet standards prescribed by this regulation and that those personnel required to wear the uniform are properly attired.

a. When personnel are required to wear a specific class of uniform, the complete uniform will be worn. The uniform is not complete without all the prescribed articles for the class of uniform being worn.

b. Articles of clothing, patches, or other items not prescribed for uniform wear will not be worn with the uniform, unless advance approval is obtained from CECW-O. This does not include personal protective clothing and hardhats.

c. Personnel authorized to wear the uniform will obtain all required items for their assigned position. When a change in uniform specifications occurs, employees may continue to utilize the previously prescribed items until replacement is necessary unless directed otherwise.

d. Uniforms will be kept clean and neat. Faded or poorly fitting uniform items will not be worn. Pockets will be buttoned and free of bulging objects. If "T-shirts" are worn under shirts, only white or uniform grey T-shirts are permissible. Other undergarments that are not visible under the employee's uniform may be any style or color. This includes heavy socks that are worn under boots and are not ordinarily visible.

e. Personnel authorized to wear the uniform will maintain a well-groomed personal appearance.

CHAPTER 8 - DREDGING

8-1. Purpose. This chapter establishes guidance governing accomplishment of dredging at USACE projects.

8-2. Applicability. This chapter applies to all USACE commands performing and/or managing dredging. MSC commanders are authorized to develop specific written guidance to supplement ER 1130-2-520, Chapter 8, Dredging, as necessary, provided, they are fully consistent with the policies in that regulation and guidance in this pamphlet.

8-3. General. Subjects covered in this chapter include the performance of dredging contracts, navigation channel conditions, CERF, CEMDC, small business dredging program, inspection of dredging operations, and plant operations reports.

8-4. Definitions. An explanation of dredging terms applicable to this regulation is contained in the USACE Dredging Desk Reference.

8-5. Performance of Dredging.

a. Project Dimensions: A sectional view of the required prism and technology indicating project dimensions and quantity of material considerations are shown in Figure G-1, Appendix G, ER 1110-2-1302. Detailed descriptions of definitions used for the required pay prism are also provided in Appendix G.

(1) Authorized navigation projects will be maintained to full constructed channel dimensions when feasible and justified. See Figure #1 in Appendix Y.

(2) Allowable overdepth dredging (depth and/or width) outside the required prism is permitted to allow for inaccuracies in the dredging process. Allowable overdepth in excess of two feet or the use of zero allowable overdepth requires the prior approval of the MSC commander. See Figure #2 in Appendix Y.

(3) Written justification for advanced maintenance dredging is required. As a minimum, the justification for advance maintenance should describe historical shoaling rates, frequency of dredging, and cost analysis. Advance maintenance shall not be used to provide navigation channel dimensions for vessels that exceed the design limitations of the project. Before using advance maintenance, the integrity of structures adjacent to the channel and the possibility of the existence of material in the advance maintenance portion of the channel as significantly different from maintenance material should be reviewed. See Figure #3 in Appendix Y.

(4) Unless otherwise provided in the project authorization documents, depths and widths will be construed as actual dredging limits (exclusive of allowable overdepth and advanced maintenance dredging) and not the draft and width limits of any vessel to be accommodated.

b. Side Slopes. Side slopes may be dredged by:

(1) Dredging along the slope of the required dimension.

(2) Dredging an equivalent box cut at the base of the side slope for the required dimension. Material removed from the box cut is payable up to that amount of material above the side slope line. Before using a box cut, the integrity of structures adjacent to the channel should be reviewed. See Figure #2 in Appendix Y.

8-6. Dredging Contracts.

a. Development of Contract Documents. The development of contract documents is applicable to new work dredging, maintenance dredging, and dredging for other purposes such as beach nourishment, dike and levee construction, and other beneficial uses.

(1) Team members responsible for preparation of construction contracts for dredging shall ensure that plans and specifications accurately describe the work to be accomplished, the conditions existing at the work site, the required dredging quantities for unit price contracts, the required prism, allowable over depth, the limits of the work area, and any environmental considerations at the work site.

(2) District commanders shall establish procedures which ensure that appropriate technical and contract administration personnel with dredging experience (both office and field) are included in the constructibility, biddability, and operability reviews of all dredging plans and specifications.

(3) Terminology and standard sections used in contract documents shall be consistent with standard definitions and figures depicted herein.

(4) When zero allowable over depth is specified, the contract documents shall clearly indicate that all material from within the required dredging prism must be removed. The contractor may dredge below the required depth to ensure that all material is removed from within the required prism, however, the contract documents will make clear that no payment will be made for yardage removed below the required prism.

(5) New work dredging plans and specifications, where hard materials exist (e.g., dense clays, rock, or manmade materials), shall have a required depth, required overdepth, required advance maintenance and allowable overdepth, in order to ensure future maintenance of the project to the authorized dimensions.

b. Dredging Contract Methods. Unit price construction contracts are the preferred method of accomplishing dredging work within the Corps of Engineers.

(1) Unit Price Contracts - Volume Measure. To ensure that volume measure unit price contracts are effectively used, the District Commander will:

(a) define the scope of work and determine the required and allowable overdepth dredging quantities;

(b) define bid quantities to reflect the total required and allowable overdepth quantities;

(c) perform payment surveys in an accurate and timely manner;

(d) assure specifications are written to allow the use of all types of dredge plant capable of efficiently, effectively, and safely performing the work in an environmentally sound manner; and

(e) assure that the surveys specified in the contract are sufficient to verify that the contract requirements are met;

(2) Unit Price Contracts - Area Measure. To ensure that area measure unit price contracts are effectively used, the District Commander will:

(a) define the scope of work and determine the depth of the cut;

(b) perform payment surveys in an accurate and timely manner;

(c) assure specifications are written to allow the use of all types of dredge plant capable of efficiently, effectively, and safely performing the work in an environmentally sound manner;

(d) assure that the surveys specified in the contract are sufficient to verify that the contract requirements are met; and

(e) determine that the area to be dredged is the overriding cost factor rather than the depth of cut, but the required channel depth is achieved.

(3) Unit Price Contracts - Time Measure. Leased equipment dredging contracts may be used when the quantities of material to be dredged cannot be accurately estimated (e.g., areas of active or erratic shoaling, where shoaling cannot be determined or is difficult to predict prior to bid opening, or where rapidly fluctuating river stages exist), and accurate and timely surveys are difficult to accomplish. To ensure that leased equipment dredging contracts are effectively used, the district commander will:

(a) assure specifications are written to require adequate plant and personnel to complete contract requirements in a timely, safe, and environmentally sound manner; and

(b) require quality assurance representatives on board the leased dredge whenever the dredge is working for pay.

(4) Unit Price Contracts (Other) - Scow or Bin Measure. Scow or bin measure contracts may be used when the contracting officer determines that a contractor will be at risk of receiving insufficient credit for work performed due to rapid shoaling and/or significant changes in bottom conditions. To ensure that scow or bin measure contracts are effectively used, the District Commander will:

(a) provide quality assurance representatives on board the vessel at all times, or provide a method to determine that the dredging process is being performed in accordance with the specifications;

(b) assure specifications describe the relationship between the quantity of in place material and the measurement of the material. Typically, the relationship might include bulking factor or insitu density;

(c) assure the necessary drawings and/or measurements of vessels used to haul dredged material are available to provide a basis for quantity determination of work accomplished;

(d) assure the specifications provide the dredging depth (required + allowable), and a computation method based on the after dredging survey to determine excess dredging; and

(e) assure specifications are written in order to complete contract requirements in a safe, timely, and environmentally sound manner.

(5) Firm Fixed Price - Lump Sum Contracts. The firm fixed price - lump sum method of payment for dredging contracts may be used primarily for maintenance work, when the contracting officer determines that the rate of shoaling in the navigation channel is slow and/or predictable over the length of the contract. The District Commander will consider the following guidelines to assure that a lump-sum contract is effectively used:

(a) acceptance surveys are sufficient to assure that all material is removed from the required prism and that all contractual requirements are met;

(b) assure specifications are written to allow users of all types of dredge plant capable of efficiently, effectively, and safely performing the work in an environmentally sound manner;

(c) define the necessary parameters in the contract specifications so that prospective bidders can prepare reasonable bids. (District commanders will make available, and contract specifications shall indicate which information is available to prospective bidders.); and

(d) justify the use of firm fixed price - lump sum contracts. (The justification and use of firm fixed price - lump sum contracts will be approved by HQUSACE.)

8-7. Navigation Channel Conditions.

a. Hydrographic Surveys (For Dredging Projects). The performance of hydrographic surveys in support of dredging shall be in accordance with EM 1110-2-1003, Hydrographic Surveying.

(1) Frequency of Surveys.

(a) Project Condition and Reconnaissance Surveys. Active waterways and harbor projects shall be surveyed at a frequency sufficient to maintain adequate information on available project dimensions. Either project condition surveys (Class 2) or more economical reconnaissance surveys (Class 3) may be performed, depending on project requirements. Unless unique circumstances are present, project condition survey schedules should not be more frequent than the maintenance dredging cycle for a given project. General reconnaissance surveys should be performed each year on projects which are dredged at infrequent periods (i.e., less than once per year).

(b) Dredging Measurement, Payment and Acceptance Surveys. Contract hydrographic dredging surveys will be conducted, as needed, during the contract period to ensure that the work is in accordance with the contract plans and specifications.

(2) Execution of Dredging Measurement, Payment, & Acceptance Surveys. The clause at FAR 52.236-16 may be used for dredging or underwater material placement when payment is to be based on quantity surveys. Under that clause, quantity surveys may be performed either by government in-house personnel or by independent contractors. Before approving use of the Alternate I clause, MSC commanders should require district commands to provide sufficient rationale and justification. Hydrographic surveys performed for dredging measurement, payment, and acceptance purposes shall be performed using the following selection progression:

(a) USACE Forces: Government-performed surveys using qualified in-house (hired labor) hydrographic survey forces.

(b) Architect-Engineer (A-E) Contractor Forces: If government forces are not available, then qualified, independent A-E hydrographic survey contractor forces shall be used. A-E contractors shall be selected using Brook's Act (PL 92-582) qualification-based selection procedures.

(c) Dredge Contractor's Forces: If neither Government nor independent A-E survey forces are available, then the use of the dredging contractor's forces may be used, provided that a qualified government representative is on board the contractor's vessel during the surveying operation.

(3) Survey Time Constraints. Plans and specifications surveys will be performed as close to the advertisement date as possible, fully considering the historical shoaling conditions of the project. Before dredging surveys shall be completed as close to the start of dredging as possible, but generally within two (2) weeks prior to commencement of work in the reach to be dredged. After Dredging and/or Final Acceptance surveys shall be completed as close to the end of dredging an acceptance section as possible, but generally within five (5) days after completion of work in the applicable acceptance section or channel reach.

(4) Disposition of Survey Data. Survey data shall be reduced, edited, and plotted as expeditiously as possible, generally within two (2) days after completion of the survey. Government survey data shall be made available to the contractor or a designated representative in accordance with the plans and specifications before requiring the contractor to redredge any portion of the work. If requested, the results of government dredging surveys pursuant to the contract paragraph entitled "Final Examination and Acceptance" shall be furnished to the contractor or an authorized representative after the acceptance section(s) is surveyed. Final Acceptance surveys will be verified by the contracting officer and furnished to the contractor in writing.

(5) Inspection of Dredging Surveys.

(a) When quantity surveys for dredging are performed by the dredging contractor, the surveys shall be inspected and monitored by a qualified government representative on board the contractor's vessel. The government representative shall verify that all survey equipment is properly calibrated at all times and that surveying techniques and equipment conform to the contract specifications and EM 1110-2-1003. When dredging surveys are performed by the government or its independent A-E contractor, the dredging contractor shall have the option to inspect and monitor the surveys in progress.

(b) Survey contract specifications shall include requirements for electronic positioning and depth finding equipment, a safe and suitable vessel meeting U. S. Coast Guard requirements, and personnel staffing and qualifications.

b. Channel Sweep Surveys. Sweep surveys shall be performed as necessary to locate underwater obstructions within the navigation channel limits or when dredging is performed in hard material (e.g., dense clays, rock, or manmade materials). Equipment capable of detecting obstructions will be used to ensure that the project is clear for navigation. Mechanical sweeps may be used for all bottom conditions and shall consist of a drag capable of being moved for complete coverage of the dredged area. Acoustic sweep systems (multiple transducers on booms or interferometric, multi-beam swath/sweep transducer systems) may be used when appropriately designed to provide accurate and full coverage of bottom conditions.

c. Channel Clearing. ER 1105-2-100 provides the policy and procedure to perform emergency snagging and clearing work to benefit navigation, under authority of Section 3 of the River and Harbor Act approved 2 March 1945. For routine maintenance, the project authorization document provides the authority for snagging and clearing for navigation. ER 1130-2-520, Chapter 4, Removal of Wrecks and Other Obstructions provides the policy for removal of wrecks and other obstructions to navigation.

8-8. Corps of Engineers Reserve Fleet. Procedures for assuring response of private industry hopper dredges to support emergency and national defense dredging requirements are provided in Appendix Z of this pamphlet.

a. The CERF program is used to augment the Corps Minimum Fleet hopper dredges, and when it is not feasible or practical to use routine contractual procedures for hopper dredges.

b. All hopper dredging invitation for bids (IFB) shall contain the appropriate instructions and/or clauses for the CERF.

c. The Contracting Officer (CO) for the district making the CERF request shall send a request with justification concurrently to its commanding MSC and HQUSACE (CECW-OD). If approved, the ordering CO will place an order against the Basic Ordering Agreement (BOA). This will establish a contract with the owner of the CERF dredge. Progress payments will be made in accordance with the terms of the BOA.

8-9. Corps of Engineers Minimum Dredge Fleet.

a. The Corps of Engineers Minimum Fleet vessels are national assets available at all times to respond to emergency and national defense needs, both CONUS and OCONUS, as determined and directed by the Chief of Engineers and/or the Director of Civil Works.

b. MSC commanders are responsible for ensuring that Minimum Fleet vessels are maintained in a fully operational and ready state, sufficient to respond to emergency and national defense needs both in CONUS and OCONUS, at all times.

c. MSC commanders will notify HQUSACE (CECW-OD) immediately of any and all instances where a Minimum Fleet vessel is expected to be inoperable for more than 72 hours or is involved in a reportable accident of any kind.

d. In accordance with PL 95-269, the U.S. Army Corps of Engineers minimum dredge fleet is comprised of the following vessels:

Dredge Name	Type	Owning District
ESSAYONS	Hopper	Portland
MCFARLAND	Hopper	Philadelphia
WHEELER	Hopper	New Orleans
YAQUINA	Hopper	Portland
HURLEY	Dustpan	Memphis
JADWIN	Dustpan	Vicksburg
POTTER	Dustpan	St. Louis
THOMPSON	Cutterhead	St. Paul
CURRITUCK	Special Purpose	Wilmington
FRY	Sidecaster	Wilmington
MERRITT	Sidecaster	Wilmington
SCHWEIZER	Sidecaster	Wilmington

8-10. Small Business Dredging Program. In support of Section 722 of PL 100-656, MSC and district commanders will:

a. Become fully informed of the requirements and goals of the Small Business Dredging program, as well as the Small and Disadvantaged Business program;

b. Actively support these programs on a regional level;

c. Ensure coordination with the local Corps small business specialist for acquisition planning of dredge contracts to comply with implementing procedures.

8-11. Inspection of Dredging Operations.

a. Accurate and complete information and data shall be recorded in official logs and reports covering all significant actions or incidents occurring during work progress. Particular attention shall be given to occurrences which could lead to future claims by or against the United States Government.

b. The level of inspection required for dredging operations will be determined by the District Commander. On leased dredges operating at an hourly rental rate, full-time inspection and careful logging of various pay-time items shall also be performed.

c. The inspector shall have knowledge of the dredging operation, hydrographic surveying methods, and safety requirements applicable to the work. Use of the Dredging Inspectors Guide, EP 1130-2-310, and the Safety and Health Requirements Manual, EM 385-1-1, is required. The inspector must be trained in preparing and submitting all dredging reports and any records to be maintained.

d. CECW-OD personnel shall conduct periodic field inspections of each MSC and district command to ensure that dredging operations are conducted in accordance with the requirements in this regulation. Inspections of dredging operations shall also be made by MSC personnel as necessary to ensure that policies and guidelines are carried out in a consistent, timely, and effective manner.

8-12. Plant Operations Reports (Reports Control Symbol ENG CW-O-13).

a. For dredging work performed by contract, district commands shall prepare and submit plant operational reports through their MSC to CECW-OD.

b. For dredging work performed by hired labor, reporting requirements are described in ER 1130-2-500, Chapter 7, Subchapter 3, Inspection, Operation, Maintenance, and Repair of Floating Plant.

c. The Dredging Information System is currently used as a central database containing all Corps performed (in-house) and contracted dredging contracts. Each district has the responsibility for entering and maintaining their district data and monthly transmitting a file to the central database in the Navigation Data Center.

CHAPTER 9 - CONVENTION ON THE PREVENTION OF MARINE POLLUTION BY DUMPING OF WASTES AND OTHER MATTER - DREDGED MATERIAL OCEAN DISPOSAL

Reserved.

CHAPTER 10 - RESTRICTED AREAS FOR HAZARDOUS WATERS AT DAMS AND OTHER CIVIL WORKS STRUCTURES

10-1. Purpose. To establish guidance on restricting areas upstream and downstream of certain project structures for public safety purposes and establishing a standard criteria for determining the extent of these restricted areas. The procedures for establishing restricted areas shall be applied at all Corps-owned locks and dams, flood control dams, multi-purpose dams, reregulation structures, and any other structures with similar hazards to boating or visitor safety.

10-2. Boundary Determination.

a. To establish the minimum area subject to restriction, determine the hydraulic line by using guidelines at Appendix AA.

b. To establish the buffer area between the hydraulic line and the final boundary of the restricted area, evaluate operational considerations by using the questionnaire at Appendix AB. The evaluation team (see Chapter 10 of ER 1130-2-520) will conduct an onsite survey in conjunction with this review.

c. The evaluation team will document its deliberations, including the calculation of the hydraulic line, the team's evaluation of operational considerations and views from other sources, if any. The approving authority will sign the boundary determination.

10-3. Implementation.

a. All projects identified in paragraph 10-2 above shall have a completed study included in the Operation Management Plan (OMP). The OMP shall address marking as well as the possible use of buoys, floats, physical barriers, audible warning devices, or other physical measures for preventing public access. The plan shall also address escape or measures for dealing with potential public entry into restricted areas' hazardous waters.

b. Physical barriers to pedestrian and boater access will be erected where practical.

c. The boundary and approaches to each restricted area shall be marked with signs in accordance with the Sign Standards Manual (EP 310-1-6a&b). Buoys, if used shall be in conformance with the Coast Guard regulations in 33 CFR 62.33 (U.S. Aids to Navigation System, Information and Regulatory Marks) or the Uniform State Waterway Marking System. The Project Sign Plan shall address the signing system used in conjunction with the restricted area. (See also EP 1130-2-520, Chapter 2.)

d. The public shall be informed of the boundaries of each restricted area. Charts and project brochures will be updated, as necessary to identify these areas. Additional public education programs are also recommended.

e. Enforcement assistance may be provided by local law enforcement agencies (if local law applies), Corps personnel (those with citation authority under 36 CFR 327), or the U.S. Coast Guard.

f. Signs, buoys, and other marks or physical measures shall be maintained in as good condition as practicable, given flow stages, weather conditions, and other factors affecting the hazard evaluation change substantially, the boundary determination and the Safety Appendix of the Operation Management Plan shall be reviewed and modified as necessary.

FOR THE COMMANDER:

28 APPENDIXES
See Table of Contents

OTIS WILLIAMS
Colonel, Corps of Engineers
Chief of Staff

APPENDIX A

REFERENCES

a. 33 USC 1, Regulations Governing Navigable Waters.

b. 33 USC 409, 411-415, Sections 15-20 of the River and Harbor Act of 1899, as amended.

c. 33 USC 555, Section II of the Rivers and Harbors Appropriation Act of 1922 (42 Stat. 1043) as amended and codified.

d. 33 USC 562, Section 5 of the Rivers and Harbors Act of 14 March 1915, Channel Depths and Dimensions Defined.

e. 33 USC 562a, (PL 90-483), Section 117 of the Rivers and Harbors Act of 13 August 1968.

f. 33 USC 603a, Section 3 of the Rivers and Harbors Act of 2 March 1945.

g. 33 USC 622, (PL 95-269), Rivers and Harbors, Improvements of 26 April 1978, (Corps of Engineers Minimum Dredge Fleet).

h. 33 USC 628, Expenditure for Dredging Within Harbor Lines.

i. 33 USC 2201, (PL 99-662), Water Resources Development Act of 17 November 1986, as amended.

j. PL 85-480, Publication Authority (72 Stat. 279).

k. PL 89-72, Federal Water Recreational Act of 1965.

l. PL 89-504, Section 407, Federal Salary and Fringe Benefits Act of 1966 (5 USC 5901-5903).

m. PL 94-587, 22 Oct 76, Section 145 as amended by PL 100-676, Section 35.

n. PL 98-63, Section 164, U.S. Army Corps of Engineers Civilian Uniform Allowance (5 USC 5901).

o. PL 100-656, Business Opportunity Development Reform Act of 1988.

p. PL 100-676, Water Resources Development Act of 1988.

q. PL 101-640, Water Resources Development Act of 1990.

r. PL 102-580, Water Resources Development Act of 1992.

s. 33 CFR 62, U.S. Aids to Navigation System.

t. 33 CFR 64 - Marking of Sunken Obstructions.

u. 33 CFR Part 207, Navigation Regulations.

v. 33 CFR 245 - Removal of Wrecks and Other Obstruction (rev. 1988).

w. 33 CFR Parts 335 -338, Disposal of Dredged Material.

x. Bureau of the Budget (now Office of Management and Budget) Circular A-30 (revised), 20 August 1966, Federal Employees Uniform Allowance Act.

y. FAR, Federal Acquisition Regulation.

z. DFARS, Defense Federal Acquisition Regulation Supplement.

aa. EFARS, Engineer Federal Acquisition Regulation Supplement.

ab. AR 11-7, Internal Review.

ac. ER 5-7-1, Project Management.

ad. ER 415-1-13, Design and Construction Evaluation.

ae. ER 1105-2-100, Guidance for Conducting Civil Works Planning Studies.

af. ER 1110-2-1302, Civil Works Cost Engineering.

ag. ER 1110-2-1404, Deep Draft Navigation Project Design.

ah. ER 1110-2-1457, Design of Small Boat Navigation.

ai. ER 1110-2-1458, Hydraulic Design of Shallow Draft Navigation Projects.

aj. ER 1110-2-1461, Design of Navigation Channels Using Ship-Simulation Techniques.

ak. ER 1110-2-4401, Clearances for Power and Communication Lines Over Reservoirs.

al. ER 1130-2-500, Partners in Support (Work Management Policies).

am. ER 1130-2-520, Navigation and Dredging Operations and Maintenance Policies.

an. ER 1165-2-120, Reimbursement for Advance Non-Federal Construction of Authorized Federal Harbor and Inland Harbor Improvements.

ao. ER 1165-2-124, Construction of Harbor and Inland Harbor Projects by Non-Federal Interests.

ap. ER 1165-2-131, Local Cooperation Agreements for New Start Construction Projects.

aq. ER 1165-2-400, Recreation Planning, Development, and Management Policies.

ar. ER 1180-1-6, Construction Quality Management.

as. EP 310-1-6, Graphics Standards Manual.

at. EP 310-1-6a, Sign Standards Manual, Vol 1.

au. EP 310-1-6b, Sign Standards Manual, Vol 2.

av. EP 1130-2-310, Dredging Inspectors Instruction Guide.

aw. EP 1165-2-1, Digest of Water Resources Policies and Authorities.

ax. EM 385-1-1, Safety and Health Requirements Manual.

ay. EM 1110-2-1003, Hydrographic Surveying.

az. EM 1110-2-1604, Hydraulic Design Navigation Locks.

ba. EM 1110-2-1605, Hydraulic Design of Navigation Dams.

bb. EM 1110-2-1606, Hydraulic Design Surges in Canals.

bc. EM 1110-2-1607, Tidal Hydraulics.

bd. EM 1110-2-1611, Layout and Design of Shallow-Draft Waterways.

be. EM 1110-2-1613, Hydraulic Design of Deep Draft Navigation Projects.

bf. EM 1110-2-1614, Design of Coastal Revetments, Seawalls, and Bulkheads.

bg. EM 1110-2-1615, Hydraulic Design of Small Boat Harbors.

bh. EM 1110-2-2904, Design of Breakwaters and Jetties.

bi. NOAA Chart No. l., Nautical Chart Symbols and Abbreviations.

bj. U.S. Coast Guard Light List (COMDTINST M16502 series).

APPENDIX B

ENG FORM 4020-R

REPORT OF CHANNEL CONDITIONS
(FOR CHANNELS 400 FEET WIDE OR GREATER)

PAGE ____ OF ____ PAGES

DATE

TO:

FROM:

RIVER / HARBOR NAME AND STATE

MINIMUM DEPTHS IN EACH 1/4 WIDTH OF CHANNEL ENTERING FROM SEAWARD

NAME OF CHANNEL	DATE OF SURVEY	AUTHORIZED PROJECT			LEFT OUTSIDE QUARTER (feet)	MID-CHANNEL		RIGHT OUTSIDE QUARTER (feet)
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)		LEFT INSIDE QUARTER (feet)	RIGHT INSIDE QUARTER (feet)	

REMARKS (Continue on reverse)

FOR ILLUSTRATION PURPOSES ONLY

(Local reproduction authorized - blank masters available from local FMO)

ENG FORM 4020-R, Nov 90 EDITION OF JUL 59 IS OBSOLETE. (Proponent. CECW-OM)

APPENDIX C

ENG FORM 4021-R

REPORT OF CHANNEL CONDITIONS 100 TO 400 FEET WIDE	PAGE OF PAGES DATE
TO:	FROM:
RIVER / HARBOR NAME AND STATE	MINIMUM DEPTHS IN CHANNEL ENTERING FROM SEAWARD

NAME OF CHANNEL	DATE OF SURVEY	AUTHORIZED PROJECT			LEFT OUTSIDE QUARTER (feet)	MIDDLE HALF (feet)	RIGHT OUTSIDE QUARTER (feet)
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)			

REMARKS (Continue on reverse)

FOR ILLUSTRATION PURPOSES ONLY

(Local reproduction authorized - blank masters available from local FMO)

ENG FORM 4021-R, Nov 90 EDITION OF JUL 59 IS OBSOLETE. (Proponent: CECW-OM)

APPENDIX D

MAILING ADDRESSES

National Ocean Service
Distribution Branch (N/CG33)
Riverdale, MD 20737-1199

Defense Mapping Agency
Navigation Information & Services
ST D44
4600 Sangamore Road
Bethesda, MD 20816

U.S. Coast Guard
USCG District 1 (oan)
408 Atlantic Avenue
Boston, MA 02110-3350
(617) 223-8338

USCG District 5 (oan)
431 Crawford Street
Portsmouth, VA 23704-5004
(804) 398-6367

USCG District 7 (oan)
909 S. E. First Avenue
Brickell Federal Bldg.
Miami, FL 33131-3050
(305) 536-5621

USCG District 8 (oan)
501 Magazine Street
New Orleans, LA 70130-3396
(504) 589-6234

USCG District 9 (oan)
1240 E. 9th Street
Cleveland, OH 44199-2060
(216) 522-3990

USCG District 11 (oan)
501 W. Ocean Boulevard
Long Beach, CA 90882-5399
(310) 980-4300 (x501)

USCG District 13 (oan)
915 2nd Avenue
Seattle, WA 98174-1067
(206) 220-7270

USCG District 14 (oan)
300 Ala Moana Boulevard
Honolulu, HI 96850-4982
(808) 541-2315

USCG District 17 (oan)
P.O. Box 25517
Juneau, AK 99802-5517
(907) 463-2245

APPENDIX E

SPECIAL REPORTS MATRIX

Information	Notify USCG	Notify NOS	Notify DMA	Issue NTNI	Notify NOO
1. Aids to Navigation discrepancy	x				
2. USACE work planned/in progress, including maintenance dredging and work on jetties and breakwaters	x			x	
3. Deliberate modifications to channel dimensions, including reductions in maintained depths, or changes in other significant project features	x	x		x	x
4. Section 10 permit work which may impact general navigation	x	x	x	x	x
5. Change in USACE-issued navigation regulations	x			x	
6. Special/temporary operating restrictions imposed by the USACE	x			x	
7. Information for correction of USACE charts	x			x	

Information	Notify USCG	Notify NOS	Notify DMA	Issue NTNI	Notify NOO
8. Advance notice of USACE chart revision publication of next edition)	x			x	
9. Hazardous shoals (less than project depth) or other hazards to navigation	x				
10. Emergency closures or other emergency operations affecting navigation	x				x
11. Changes or corrections to NOS-charted features		x	x	x	
12. Results of controlled hydro-graphic survey (coastal areas)	x	x	x		

Other reports may also be appropriate in other cases. The above list is for reference, and is not exhaustive.

APPENDIX F

SAMPLE NOTICE TO NAVIGATION INTERESTS

US Army Corps
of Engineers
Pittsburgh District

P.O. Box 61
Tulsa, OK 74121-0061
918-581-7351

Notice to Navigation Interests

Notice No. Date:

Waterway:

UPPER MISSISSIPPI RIVER
UMR Mile 483.0
LOCK NO. 15, ROCK ISLAND, ILLINOIS

The main chamber at Lock No. 15, Rock Island, Illinois will be closed to all river traffic for about 24 hours, beginning at 0700 on 24 August 1988. Closure is required to repair the #4 miter gate.

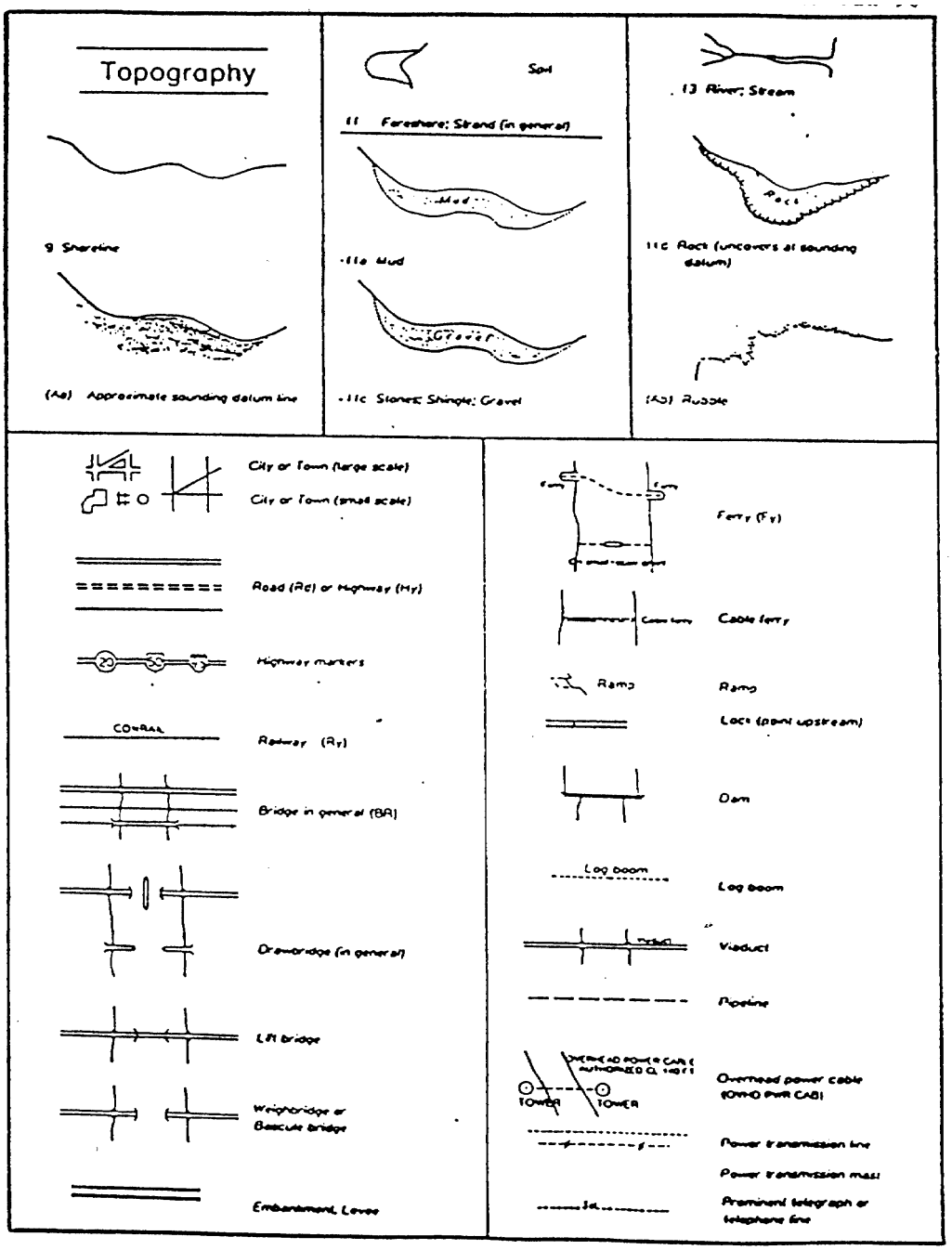
Towboat operators are requested NOT to tie up on either the upper or lower guidewalls of the main lock chamber during the closure period.

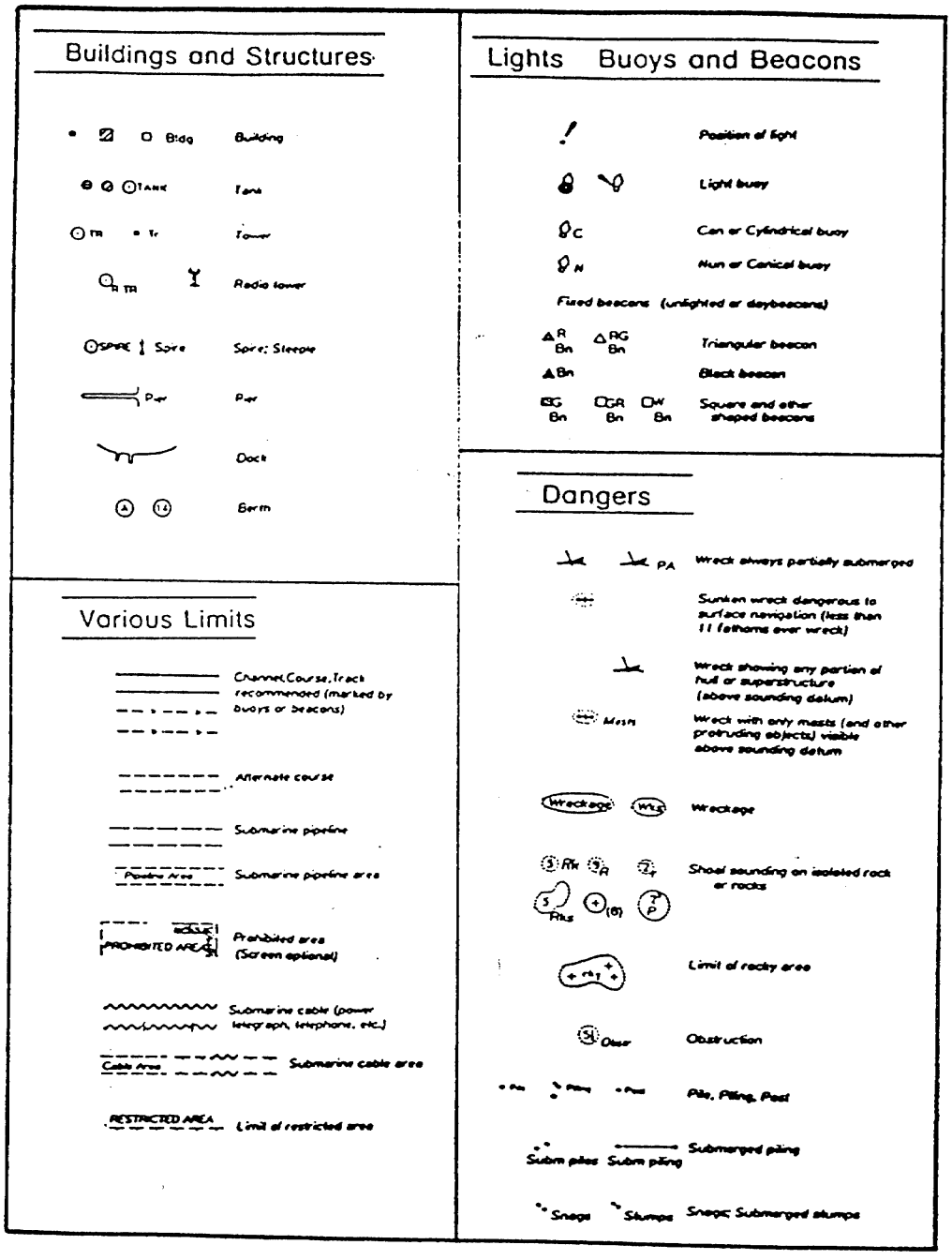
FOR THE DISTRICT ENGINEER:

A. SAMPLE
Chief, Operations Division

APPENDIX G

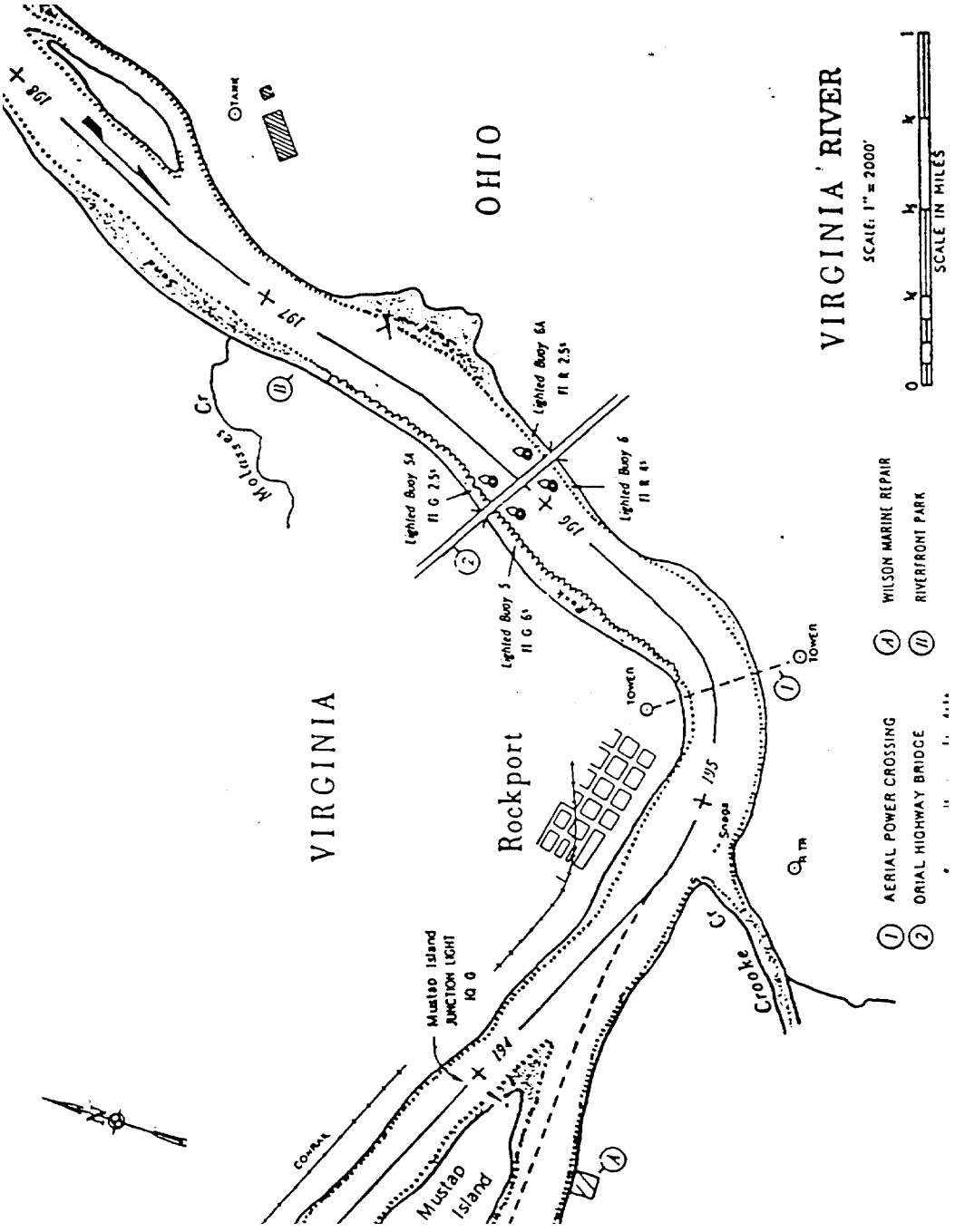
CHART SYMBOLS




Buildings and Structures
Bldg
Building
Tank
Tower
Radio tower
Spire
Spire; Steeple
Pier
Dock
Berm
Various Limits
Channel, Course, Track recommended (marked by buoys or beacons)
Alternate course
Submarine pipeline
Submarine pipeline area
Prohibited area (Screen optional)
Submarine cable (power telegraph, telephone, etc.)
Submarine cable area
RESTRICTED AREA
Limit of restricted area
Lights Buoys and Beacons
Position of light
Light buoy
Can or Cylindrical buoy
Nun or Conical buoy
Fixed beacons (unlighted or daybeacons)
Triangular beacon
Black beacon
Square and other shaped beacons
Dangers
Wreck always partially submerged
Sunken wreck dangerous to surface navigation (less than 11 fathoms over wreck)
Wreck showing any portion of hull or superstructure (above sounding datum)
Wreck with only masts (and other protruding objects) visible above sounding datum
Wreckage
Shoal sounding on isolated rock or rocks
Limit of rocky area
Obstruction
Pile, Piling, Post
Submerged piling
Snags; Submerged stumps

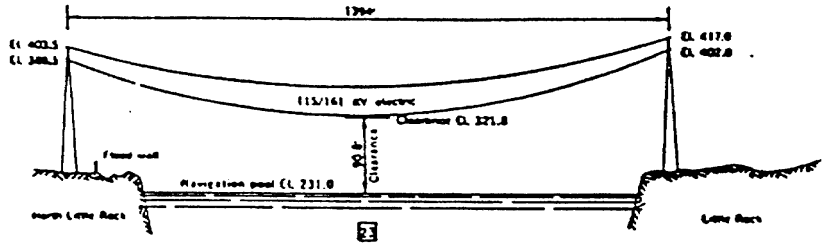
APPENDIX H

SAMPLE CHART DETAIL

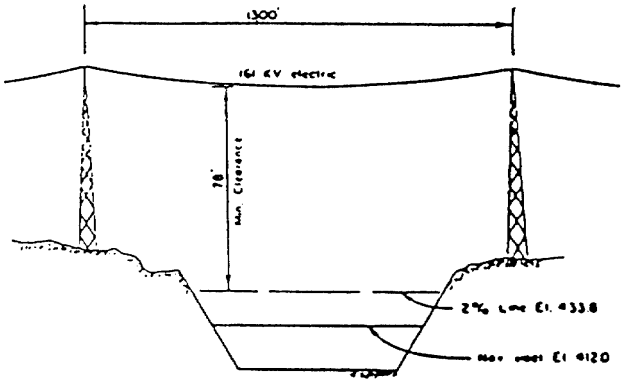


APPENDIX I

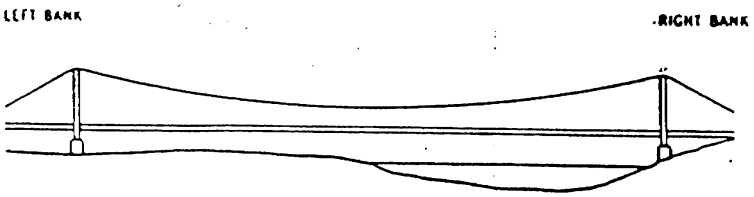
SAMPLE PROFILE DRAWINGS



MILE 119.2
LOOKING DOWNSTREAM
2% Flowline El. 241.4



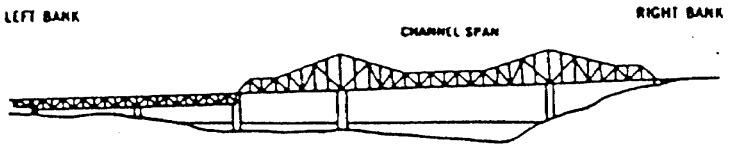
MILE 3340
LOOKING DOWNSTREAM
2% Flowline El. 424.0



(2) NORTHERN NATURAL GAS CO.
PIPELINE BRIDGE
Mile 590.7

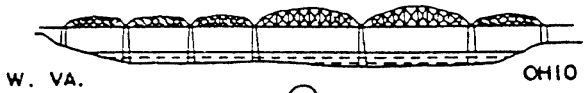
CHANNEL SPAN DATA

TYPE	SUSPENSION
HORIZ. CLEARANCE	700'
VERT. CLEARANCE (NORMAL NAVIGATION FLOW PLATTSMOUTH GAGE READING 5.0)	75'
VERT. CLEARANCE (FLOOD STAGE)	68'



④ PLATTSMOUTH HWY. BRIDGE
Mile 590.5
CHANNEL SPAN DATA

TYPE	FIXED
HORIZ. CLEARANCE	392'
VERT. CLEARANCE (NORMAL NAVIGATION FLOW PLATTSMOUTH GAGE READING 5.6)	63'
VERT. CLEARANCE (FLOOD STAGE)	53'

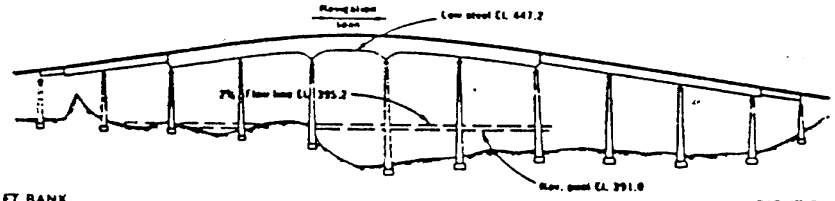


②

B. & O. R.R. BRIDGE

CHANNEL SPAN

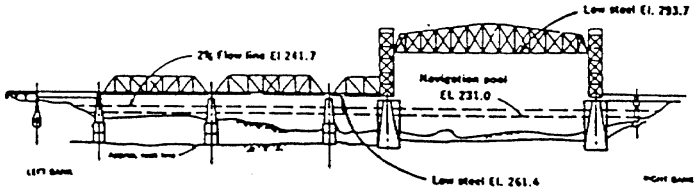
ELEVATION OF LOW STEEL	652.7'
VERTICAL CLEARANCE AT POOL STAGE	70.7'
VERTICAL CLEARANCE-1913 H.W.	31.7'
HORIZONTAL CLEARANCE	326.5'



① INTERSTATE HWY 540 BRIDGE

LOOKING DOWNSTREAM

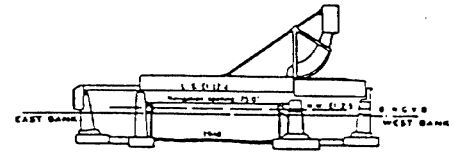
VERTICAL CLEARANCE ABOVE 2% FLOW LINE – 52 FT.
VERTICAL CLEARANCE ABOVE NAVIGATION POOL – 56.2 FT.
HORIZONTAL CLEARANCE NORMAL TO SAILING LINE – 300 FT.



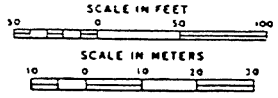
24

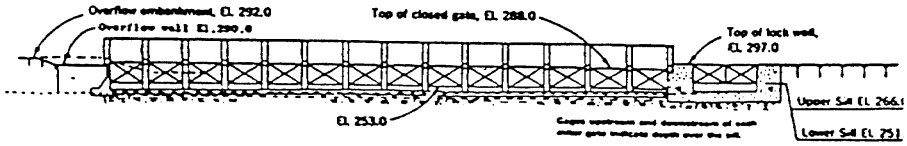
BARING CROSS
MISSOURI PACIFIC RAILROAD BRIDGE

VERTICAL CLEARANCE ABOVE 2% FLOW LINE – 52 FT. (OPEN)
VERTICAL CLEARANCE ABOVE NAVIGATION POOL – 62.7 FT. (OPEN)
VERTICAL CLEARANCE ABOVE NAVIGATION POOL – 30.4 FT. (CLOSED)
HORIZONTAL CLEARANCE NORMAL TO SAILING LINE – 311.7 FT.
Lift span normally in closed position



T&P—MP R.R. BRIDGE
HARVEY, LA.
HARVEY CANAL
INTRACOASTAL WATERWAY MILE 0.21





LOCK AND DAM NO. 9
LOOKING DOWNSTREAM

APPENDIX J

USCG DISTRICT OFFICES (AS OF 6/95)

State/ City/Time	Field Address	Name and Title	Telephone FTS/Comm
ATLANTIC 8:00 a.m. - 4:30 p.m.	Governor's Island New York, NY 10004-50098	VADM James M. Loy, Commander	8-664-7196 (212) 668-7196
PACIFIC 11:00 a.m. - 7:30 p.m.	Coast Guard Island Alameda, CA 94501-5100	VADM Richard D. Herr, Commander	8-796-3196 (415) 437-3196
DISTRICT 1 8:00 a.m. - 4:30 p.m.	408 Atlantic Ave. Boston, MA 02210-2209	RADM John L. Linnon, Commander	8-223-8480 Nights, Sat. Sun. Holidays 8-223-8555 (617) 223-8480
DISTRICT 5 8:00 a.m. - 4:30 p.m.	431 Crawford Street Portsmouth, VA 23704-5004	RADM William J. Ecker, Commander	8-827-9000 (804) 398-6000
DISTRICT 7 8:00 a.m. - 4:30 p.m.	1018 Federal Bldg., 51 SW 1st Avenue Miami, FL 33130-1608	RADM Roger T. Rufe, Jr., Commander	8-350-5654 (305) 536-5654
DISTRICT 8 8:00 a.m. - 4:30 p.m.	500 Camp Street New Orleans, LA 70130-3396	RADM Timothy Josiah, Commander	8-682-6298 (504) 589-6298
DISTRICT 9 7:30 a.m. - 4:00 p.m.	1240 E. 9th Street Cleveland, OH 44199-2060	RADM Gerald F. Woolever, Commander	8-942-3910 (216) 522-3910
DISTRICT 11 11:00 a.m. - 7:30 p.m.	400 Oceangate Blvd. Long Beach, CA 90882-5399	RADM Richard A. Appelbaum, Commander	8-984-5201 (213) 499-5201
DISTRICT 13 10:45 a.m. - 7:15 p.m.	915 2nd Avenue Seattle, WA 98174-1067	RADM John W. Lockwood, Commander	8-442-5078 (206) 442-5078
DISTRICT 14 1:00 p.m. - 9:30 p.m.	300 Ala Moana Boulevard Honolulu, HA 96850-4982	RADM Howard B. Gehring, Commander	(808) 541-2051
DISTRICT 17 1:00 a.m. - 7:30 p.m.	P.O. Box 3-5000 Juneau, AK 99802-1217	RADM Ernest R. Riutta, Commander	FTS thru Seattle 399-0150 (907) 463-2025

APPENDIX K

SAMPLE LETTER: NOTIFICATION OF CORPS REMOVAL

Dear sir:

In my letter to you of ___[date]___, I identified an obstruction to navigation in _____[waterway]____, and advised you as the vessel owner of your obligation under federal law to mark and remove the obstruction.

You have not taken action to commence the immediate removal the vessel. The vessel is therefore considered abandoned, and will be removed by the Corps of Engineers. Effective immediately, you may no longer make any claim upon this vessel, or undertake removal, or interfere in any way with federal removal. Abandonment does not, however, remove your liability for third party damages which may be caused by the obstruction or your liability for the cost of removal and disposal.

After completion of the removal, I will send to you a complete accounting of costs, for which you will be required to reimburse the U.S. Treasury.

/s/

APPENDIX L

SAMPLE LETTER: ACKNOWLEDGMENT OF ABANDONMENT

Dear sir:

I acknowledge receipt of your letter of _____[date]_____, in which you indicate your intent to abandon the sunken vessel in _____[waterway]_____.

Under federal law (Title 33, U.S. Coder Section 409). you as the vessel owner are responsible for marking and immediate removal of the wreck. You should be aware that abandonment does not affect this obligation.

This acknowledgment should in no way be construed as acceptance by the United States of an abandonment of such vessel, nor as waiver of any right to enforce liability for any damage caused by its sinking or cost of removal and disposal.

/s/

APPENDIX M

SAMPLE LETTER: OWNER DUTY TO MARK/REMOVE

Dear sir:

This office has received a report of an obstruction to navigation in ___[waterway]___ and my preliminary investigation indicates that you are the (owner/operator/lessee) of the vessel.

The Corps of Engineers and the Coast Guard have jointly determined that this obstruction presents a hazard to navigation requiring removal. Under federal law (Title 33, U.S. Code Section 409). the owner, operator or lessee is responsible for marking and immediate removal of the wreck. You should contact the Coast Guard directly for marking requirements, and contact my office within 7 days concerning your intentions and plans to effect removal.

Failure to commence immediate removal of the vessel and to pursue removal diligently may result in a court judgment against you, or a determination of abandonment, subjecting the vessel to removal and disposal by the Corps of Engineers at your expense.

Additionally, you may be liable for criminal charges and/or actions against any Coast Guard licenses you may carry, as a result of the sinking of this vessel.

It is imperative that you contact my office immediately on this matter.

/s/

APPENDIX N

SAMPLE LETTER: BILL FOR REIMBURSEMENT

Dear sir:

In my letter to you of (date] I advised you that sunken vessel in _____[waterway] _____ was considered abandoned, and that removal would be undertaken by the Corps of Engineers at your expense.

Removal of the obstruction to navigation was completed on [date]. The total cost of removal and disposal is $_____, as further detailed in the enclosed accounting of costs. Under federal law (Title 33, U.S. Code, Section 414/415), you are liable to the United States for these costs.

A check for the full amount of $_____ should be made payable to "U.S. Treasury", and mailed within 30 days to:

U.S. Army Corps of Engineers
_____
_____
_____

/s/

Encl.

APPENDIX O

DEFINITION OF TERMS

O-1. Purpose. This appendix provides clarification of terminology used in the Waterborne Commerce Statistics Program.

O-2. Definitions. For the purpose of this appendix the following terms unique to Waterborne Commerce are defined as:

a. Commerce - Domestic. Contiguous and non-contiguous states and territories constitute the geographical space upon which domestic commerce may be transported. This includes Hawaii, Alaska, the 48 contiguous states, Puerto Rico and the Virgin Islands, Guam, American Samoa, Wake Island, and the U.S. Trust Territories. Certain movements are excluded from domestic commerce:

(1) Coal and petroleum products loaded from shore facilities directly into bunkers of vessels for fuel.

(2) Insignificant amounts of Government materials (less than 100 tons) moved on Government-owned equipment in support of Corps projects.

b. Commerce - Foreign. Waterborne import and export traffic between the United States, Puerto Rico and the Virgin Islands, and any foreign country. These statistics do not include traffic between Guam, Wake Island and American Samoa, and any other foreign country.

(1) Foreign commerce data are furnished to the Corps of Engineers by the Bureau of the Census under a working arrangement sponsored by the Office of Management and Budget. The data are confined to vessel movements by water and are reconcilable with published reports of the Bureau of the Census, with the exception of LOOP Oil Terminal and Skagway Wharf reports, which are manually entered as imports/exports by the Corps of Engineers.

(2) The Republic of Panama is considered a foreign country. However, individual vessel movements with origin and destination at United States ports traveling via the Panama Canal are considered domestic traffic. Alaskan crude oil (origin at Valdez, AK) shipped via the Panama pipeline (west to east) and destined for gulf and east coast ports is also considered domestic commerce.

(3) Import and export shipments for use by the United Stares Armed Forces abroad are not reported to WCSC. Export shipments under the various foreign aid programs on Department of Defense operated vessels, either American flag commercial vessels under time, voyage, or space charter or vessels owned and operated by the Department of Defense, and various items (listed by the Census) which affect National security are not published in terms of the individual commodities shipped. Instead, a lump sum tonnage figure is complied and appears in these tables as exports under commodity 9900, "Unknown or NEC."

c. Monthly Reports. These reports shall be made on ENG Forms furnished upon request of the vessel operating companies to the WCSC. Data may also be furnished on an authorized automated equivalent to the ENG Forms.

d. Navigable Waters. Those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water mark, and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce. (See 33 CFR Part 329 for a more complete definition of this term.)

e. Person or Entity. An individual, corporation, partnership, or company.

f. Timely. Vessel and commodity movement data must be received by Corps of Engineers within 30 days after the close of the month in which the vessel movement or non-movement takes place.

g. Types of Traffic.

(1) Domestic.

(a) Coastwise - This traffic term refers to domestic traffic receiving a carriage over the ocean, or the Gulf of Mexico (e.g. New Orleans to Baltimore, New York to Puerto Rico, San Francisco to Hawaii, Alaska to Hawaii). Traffic between Great Lakes ports and seacoast ports, when having a carriage over the ocean, is also termed "coastwise."

(b) Lakewise - This traffic term refers to waterborne traffic between the United States ports on the Great Lakes System. The Great Lakes System is treated as a separate waterway system rather than as a part of the inland waterway system. In comparing historical data for the Great Lakes System, one should note that prior to calendar year 1990, marine products, sand and gravel being moved from a Great Lakes origin to a Great Lakes destination were classified as local traffic. From 1990 on, these activities are classified as lakewise traffic.

(c) Internal - This traffic term characterizes vessel movements (origin and destination) which take place solely on inland waterways. An inland waterway is one geographically located within the boundaries of the contiguous 48 states or within the boundaries of the State of Alaska. Internal traffic term is also applied to these vessel movements:

> Those which involve carriage on both inland waterways and the Great Lakes; those occurring between offshore installations and inland waterways; and those taking place on inland bays such as Chesapeake Bay, Paget Sound, and San Francisco Bay which are considered internal bodies of water rather than arms of the ocean.

(d) Intraport - This traffic type includes the movement of freight within the confines of a port whether the port has one or several arms or channels included in the port definition. This traffic type will not include car-ferries and general ferries moving within a port.

(e) Through - This applies to movements transiting a waterway, or stretch thereof, as defined in the project description of individual tables, and having origins and destinations outside the defined area.

(f) Intrawaterway - This traffic includes movements within the limits of a river, waterway, or canal. This traffic will not include car-ferries and general ferries moving within a waterway or Corps project.

(g) Intraterritory - The traffic term refers to traffic between ports in Puerto Rico and the Virgin Islands, U.S.A., which are considered a single unit.

(h) Ferry - This traffic term refers to passengers, vehicles, and cargo driven on and off a ferry vessel which on a regularly scheduled basis moves across a body of water between two points.

(2) Foreign Imports.

(a) Overseas - Inbound merchandise for direct consumption and entries into custom bonded storage and manufacturing warehouses which originated in foreign countries other than Canada.

(b) Canadian - Inbound merchandise for direct consumption and entries into custom bonded storage and manufacturing warehouses which originated in Canada.

(3) Foreign Exports.

(a) Overseas - Outbound domestic merchandise and re-export of origin merchandise for foreign countries other than Canada.

(b) Canadian - outbound domestic merchandise and re-export of foreign merchandise destined for Canada.

(4) Intransit merchandise - Intransit waterborne imports are cargo coming into the United States by water from a foreign country and then transported by land or water to another foreign country. Intransit waterborne exports are cargo coming by land or water into the United States from a foreign country and then transported by water to another foreign country.

h. Traffic Direction.

(1) Waterways.

(a) Upbound - For waterways with a current, "upbound" means against the current. For slack water this characterizes traffic that moves in a northerly or easterly direction.

(b) Downbound - For waterways with a current, "downbound" means in the direction of the current. For slack water this characterizes traffic that moves in a southerly or westwardly direction.

(c) Inbound - This characterizes traffic moving from one waterway into another where the destination is on the subject waterway.

(d) Outbound - This characterizes traffic moving from one waterway into another where the origin is on the subject waterway.

(2) Ports.

(a) Receipts - This characterizes traffic moving from one location to another where the destination is inside an area defined as a port.

(b) Shipments - This characterizes traffic moving from one location to another where the origin is inside an area defined as a port.

i. Vessel - Commercial. A vessel used in transporting by water, either merchandise or passengers for compensation or hire, or in the course of business of the owner, lessee, or operator of leased vessel.

j. Vessel - Leased or Chartered. A vessel that is leased or chartered when the owner relinquishes control of the vessel through a contractual agreement with a second party for a specified period of time and/or for a specified remuneration from the lessee. Commercial movements on an affreightment basis are not considered a lease or charter of a particular vessel.

k. Vessel - Drafts of. The drafts of vessels are reported in the Waterborne Commerce of the United States, Parts 1-4 in decrements of one foot. For this purpose, all drafts reported in feet and inches on Vessel Operations Reports (VORS) are raised to the next higher foot; for example, 9 feet 1-inch is raised to 10 feet.

APPENDIX P

CODING PROCEDURES

P-1. General Coding Procedures.

a. In general the encoding procedure requires a detailed knowledge of the ports and waterways of the U.S., both coastal and inland, including controlling depths of the statistical stretches of each waterway. Skill is required to classify commodities and apply conversion factors on unit weight provided by vessel operators.

b. The alphabetic information on the VORs is assigned code numbers: vessel, type, port, dock, commodity, district, elements drafts, operator, service, and alternates. The numeric dates, and net tons are not coded unless figures need to be rounded off.

c. Beginning with calendar year 1990 each data record is assigned a unique identification number (ID). The ID consists of several items of information which enables one to determine the date the VOR line item was coded, who coded the data line, and a sequence number that relates to the original source document.

e.g. ID = 01 - Jan - 92 C JLD 001001

01 - Jan - 92: This is the date the line was coded in ORACLE format

C:		Identifies the source of the coding
C	=	contractor
W	=	WCSC
0	=	Ohio River Division
F	=	Foreign (Census)
A	=	Automated Report
X	=	Other Sources
JLD:		Coded by Jane Lucille Doe
001001:		Sequence number that relates to original source document

d. The data are entered into a data base for edit, review, analysis, and further processing.

P-2. Codes.

a. Corps of Engineers District Codes. Each Corps district is assigned a WCSC code which is used in the processing of VORS. The statistics are compiled by Corps project and port areas and sequenced within the publications by Corps districts. The district code is also part of the unique operator code assigned by WCSC based upon the domicile of the vessel operating company.

These codes are defined below:

01	New England	21 Pittsburgh	35 Kansas City
03	New York	22 Buffalo	36 Seattle

05	Jacksonville 1/	23 Detroit	37 Portland
07	Philadelphia	24 Duluth	38 Alaska
08	San Juan	26 Chicago	39 San Francisco
09	Baltimore	27 St. Paul	40 Sacramento
11	Norfolk	28 Rock Island	41 Los Angeles
12	Wilmington	29 St. Louis	42 Pac Ocean Div
13	Charleston	30 Memphis	43 Omaha
14	Savannah	31 Vicksburg	44 Walla Walla
15	Jacksonville 2/	32 New Orleans	45 Tulsa
16	Mobile	33 Galveston	
17	Nashville	34 Little Rock	
18	Louisville		
20	Huntington		

1/Atlantic Region
2/Mississippi Valley Gulf Coast Region

b. Location and Dock Codes.

(1) In order to encode the narrative information presented on ENG Form 3925, 3925B or, an authorized automated equivalent, the WCSC has devised location and dock codes to represent locations and facilities where commodities are handled. The location code is a five digit code. The first two digits indicate major geographic areas of the United States. The remaining three digits indicate a serial number for a given location, waterway, or mile station.

e.g. 00001-14999	defines the Atlantic Region
15000-67999	defines the Mississippi Valley-Gulf Coast Region (MV-GC)
70000-79999	defines the Great Lakes Region
80000-99999	defines the Pacific Region

(2) The dock code consists of three digits, and designates the dock, wharf, or pier within the location.

c. Port/Waterway Codes.

The WCSC assigns a unique four digit code to each port or waterway for which statistics are compiled. The port/waterway (P/W) code may represent a single location code or a group of location codes which define a port area or a waterway. The P/W codes are assigned such that the first character of the code will identify the region of the country where said port or waterway is located.

e.g., OXXX, 1XXX and 5XXX indicate the Atlantic Region
2XXX and 6XXX indicate the Mississippi Valley-Gulf Coast Region
3XXX and 7XXX indicate the Great Lakes Region
4XXX and 8XXX indicate the Pacific Region

d. Commodity Codes.

(1) The commodity classification system used in the waterborne commerce statistics program is taken from the Standard Industrial Trade Classification (SITC), Revision 3, which conforms to the Harmonized Commodity Description and Coding System (HS). Using SITC, Rev. 3, allows direct comparisons with U.S. imports and exports as well as with commodity movements of other countries.

(2) Statistics for the commodity "Salt" code 27830 at ports and on waterways in the Great Lakes System, Mississippi River System, and Gulf Coast Harbors and Waterways tend to reveal the operations of individual shippers. Accordingly, statistics on salt will not be published in Parts 2 and 3 of Waterborne Commerce of the United States and for the domestic traffic in Part 5 of that publication. The tonnages of salt will be combined with the tonnage of Non-Metallic Minerals NEC, commodity code 4900.

P-3. Administrative Forms.

a. The Commercial Statistics Transfer Sheet, ENG Form 3925, used to facilitate data entry operations and is prepared from the vessel operation report using the codes assigned to the various elements.

(1) Vessel Code Index Card, ENG Form 3927.

(a) A vessel code index card or an authorized automated equivalent must be kept for every vessel for which reports are collected, with the exception of fishing craft and small (under 5 NRT) boom boats used in local logging operations.

(b) The vessel code index card (ENG Form 3927) carries a complete description of the vessel, the vessel code, the operator's name and code, etc. It also provides spaces to show the last location of the vessel on which reports have been received; the latter spaces are used for reporting control of coastwise and lakewise vessels.

(2) The Commercial Statistics Transfer Sheet, ENG Form 3929. This form is used to facilitate data entry operations and is prepared from the vessel operation report using the codes assigned to the various elements.

APPENDIX Q

COMPILATION OF NAVIGATION STATISTICS

Q-1. Annual Statistical Publications.

a. Waterborne Commerce of the United States (WCUS):

(1) The WCSC will prepare manuscript for and publish WCUS, Parts 1 through 5. To conserve printing space, non-projects and projects under 250,000 tons during the year are incorporated in a single table; and descriptions of projects (section included, project depth, controlling depth, etc.) are stated concisely. Projects that have reported "No Commerce" for a consecutive ten-year period up to and including the current year will be deleted from waterborne commerce statistics publications.

(2) Geographical area covered by each WCUS publication are as follows:

Part 1 -	Atlantic Coast
Part 2 -	Gulf Coast, Mississippi River System and Antilles
Part 3 -	Great Lakes
Part 4 -	Pacific Coast, Alaska, and Hawaii
Part 5 -	National Summaries

(3) The sales price of the WCSC publications is determined by averaging the cost of printing over an extended period of time.

(4) The District Commander, U.S. Army Engineer District, New Orleans, is designated Sales Agent for all waterborne commerce statistics publications.

(5) Promptly upon completion of printing of the regional publications and notification of receipt of sales copies, the WCSC will issue an appropriate press release announcing the availability of the publication, where copies of the publication may be obtained, and the sales price.

b. Waterborne Transportation Lines of the United States (WTLUS).

(1) General. The Waterborne Commerce Statistics Center will publish the WTLUS publications annually. These publications provide information on the vessel operators and their American flag vessels operating or available for operation in the transportation of freight and passengers. There are three WTLUS publications produced annually:

(a) National Summaries - Volume 1 provides a condensation of the detailed vessel data. Summarized vessel characteristics are represented in both tabular and graphic format.

(b) Vessel Company Summary - Volume 2 provides a summary of the vessel companies detailed in the WTLUS, Vessel Characteristics, Volume #. The names of the vessel companies are listed alphabetically with their business address and telephone number, the Engineer District

number, the TSOperator number (for usage in querying computer data), principal commodities carried, the points or localities and waterways between which or on which operated and the number of vessels reported by vessel type.

(c) Vessel characteristics - Volume 3 lists the vessel companies in alphabetical sequence and describes each vessel surveyed by indicating its name and number, Coast Guard number, net tonnage, VTCC code (vessel type, construction and characteristics, see Terminology), register and overall length and breadth, loaded and light draft, horsepower, carrying capacity in short tons or units of cargo and number of passengers, height of fixed superstructures, cargo handling equipment, operating headquarters, and year built or rebuilt.

Q-2. Computation of Ton-miles.

(1) Water carriage ton-miles were first compiled and published in calendar year 1962. The distances used are statute miles. Domestic ton-miles are calculated by multiplying the tons of commerce being moved by the number of miles actually moved on the water (e.g., 50 short tons moving 200 miles on a particular waterway would yield 10,000 ton-miles for that waterway). The ton-mile parameter measures the total performance of a waterway. Ton-miles are not computed for ports.

(2) For coastwise traffic this represents the safe navigation mileage between the point of origin and destination.

(3) For rivers and inland waterways the distances were computed from waterway survey maps and records of the Corps of Engineers.

(4) For the Great Lakes system the ton-miles are computed for movements of cargo west of the international boundary of St. Regis, Quebec, Canada, to head of the lakes at Duluth/Superior.

(5) For Canadian imports and exports, foreign ton-miles are computed as the tonnage times the distance between the U.S. and Canadian ports. For lakewise domestic movements, ton-miles equal the cargo tonnage times the distance between the U.S. Great Lakes ports.

(6) For overseas imports and exports, foreign ton-miles are computed by multiplying the cargo tonnage by the miles carried on U.S. waterways and channels.

APPENDIX R

REPORTING OFFENSES AND VIOLATIONS

R-1. Purpose. This appendix delineates explicitly that which constitutes an offense and violation of this reporting requirement.

R-2. Offenses and Violations of Reporting Requirement.

a. Failure to submit a required report.

b. Failure to provide a timely, accurate, and complete report.

c. Failure to submit monthly listings of idle vessels or vessels in transit.

d. Failure to submit a report required by the lock master or canal operator.

R-3. Penalties for Failure to Report. The following penalties for non-compliance can be assessed for offenses and violations.

a. Criminal Penalties. Every person or persons violating the provisions of this regulation shall, for each and every offense, be liable to a fine of not more than $5,000, or imprisonment not exceeding two months, to be enforced in any district court in the United States within whose territorial jurisdiction such offense may have been committed.

b. Civil Penalties. Any person or entity that fails to provide timely, accurate, and complete statements or reports required to be submitted by this regulation may, in addition to the criminal penalty, also be assessed a civil penalty of up to $2,500 per violation under 33 USC 555, as amended.

c. Denial of Passage. In addition to these fines, penalties, and imprisonments, the lockmaster or canal operator can refuse to allow vessel passage.

APPENDIX S

CLASS A DRESS UNIFORM

This appendix describes each approved uniform item and how it is to be worn. Descriptions are not intended to be used as a specification list by uniform suppliers.

S-1. Lock O&M Personnel Uniform Items.

a. Insignia.

(1) Nameplate. The nameplate will be fabricated and worn as described in Appendix W.

(2) Blazer Breast Pocket, Patch, Corps of Engineers. The USACE blazer breast pocket patch will be worn on the dress uniform as authorized by EP-310-1-6, and as described in Appendix W.

b. Dress Uniform.

(1) Headgear. As safety policies dictate, a USACE hard hat is appropriate headgear.

(2) Blazer. Navy blue, two button single breasted, one plain patch left breast pocket and two lower flap pockets. Women's blazer styled accordingly.

(3) Sweater. Navy blue, long sleeve (May be worn in place of blazer for office use).

(4) Shirt. Wash and wear, light blue, long and short sleeve shirt. Women's shirt styled appropriately. Two patch type pockets.

(5) Slacks, Dress. Grey.

(6) Skirt. Grey.

(7) Inclement Weather Gear

(a) Dress Topcoat. Black.

(b) Gloves. Black leather, lined or unlined.

(8) Footwear. Black, high gloss, shoe or boot style, with safety type toe if appropriate. Women may wear a smooth leather plain toed pump.

(9) Socks. Black, plain or ribbed, length optional.

(10) Hosiery. Neutral color, unpatterned.

(11) Necktie and Retainer. Navy blue and red stripe, four-in-hand. A pre-tied, clip-on type is permissible. The tie may be retained by a tie tac with the Corps emblem, at the option of the wearer.

(12) Women's Dress Tie. Blue with red and white pin, tab below.

(13) Belt. Black, plain leather, regular buckle.

c. Summary of Items. Table 1 lists required and optional dress uniform items outlined in this class.

TABLE 1

Uniform Items - Dress Uniform
Lock Operations & Maintenance Personnel

Item	Required/Optional	Contract
Blazer, Navy Blue	X	Y
Sweater, Navy Blue	O	Y
Shirt, Light Blue	X	Y
Dress Pants, Grey	X	Y
Skirt, Modified A-line, Grey	X	Y
Shoes or Boots, Black	X	N
Socks, Black	X	Y
Necktie / Women's Dress Tie	X	Y
Belt, Black	X	Y
Dress Topcoat, Black	O	Y
Gloves, Black	O	Y

X - Items required for complete uniform

O - Optional

S-2. Floating Plant Personnel Uniform Items.

a. Patch and Insignia.

(1) Nameplate. The nameplate will be fabricated and worn as described in Appendix W.

(2) Marine Shoulder Patch, Corps of Engineers. Shoulder patches will be procured and worn as described in Appendix W.

(3) Cap Insignia. Service and ball cap insignia will be fabricated and worn as described in Appendix W.

b. Dress Uniform.

(1) Headgear. Service cap with black brim as shown in Appendix W, photo #6, with insignia as illustrated in Appendix W, photo #7, centered above brim.

(2) Shirt. Wash and wear, khaki, shirts with Corps cloth marine shoulder patch. Women's shirt styled appropriately. Two patch type pockets.

(3) Dress Pants. Khaki, wash and wear.

(4) Footwear. Black, high gloss, shoe or boot style, safety toe.

(5) Socks. Black, plain or ribbed, length optional.

(6) Belt. Khaki, 1 ½" to 1 3/4" wide, with regular style buckle.

(7) Inclement Weather Gear.

(a) Parka. Navy blue. The Corps marine shoulder patch will be on the left sleeve.

(b) Gloves. Black leather, lined or unlined.

c. Summary of Items. Table 2 lists required and optional dress uniform items outlined in this regulation.

TABLE 2

Uniform Items - Dress Uniform
Floating Plant Personnel

	Required/Optional	Contract
Service Cap, Khaki	X	Y
Shirt, Khaki	X	Y
Dress Pants, Khaki	X	Y
Shoes or Boots, Black	X	N
Socks, Black	X	Y
Belt, Khaki	X	Y
Parka, Navy Blue	O	Y
Gloves, Black	O	Y

X - Items required for complete uniform

O - Optional

APPENDIX T

CLASS B DUTY UNIFORM

This appendix describes each approved uniform item and how it is to be worn. Descriptions are not intended to be used as a specification list by uniform suppliers.

T-1. Lock O&M, Lake Maintenance Personnel; Lake Maintenance Contract Inspectors Personnel Uniform Items.

a. Insignia.

(1) Cloth Name Tag. The cloth name tag will be fabricated and worn above the right breast pocket of the Duty Shirt, Insulated Duck Jacket, and Coveralls as described in Appendix W.

(2) Shoulder Patch, Corps of Engineers. The USACE cloth shoulder patch will be fabricated and worn on the left sleeve of the Duty Shirt, Windbreaker, Insulated Duck Jacket, Parka, and Coveralls, as described in Appendix W.

b. Duty Uniform.

(1) Headgear. Navy blue baseball style cap (solid or mesh style cap) with an embroidered gold USACE castle (see photo #3, Appendix W). The USACE castle shall be centered on the front of the cap and positioned exactly one inch above the brim. As safety policies dictate, a USACE hard hat is also appropriate headgear.

(2) Shirt, Duty. Grey, wash and wear, long and short sleeve.

(3) T-Shirt. Grey, wash and wear, short sleeved. USACE castle logo on left breast of the T-shirt. USACE castle shall be embossed in red on grey shirt background. (See illustration #4, Appendix W.)

(4) Knit Shirt. Grey, wash and wear, short sleeved, with matching grey left breast pocket. USACE signature patch shall be embossed with black letters. "US Army Corps of Engineers" printed below USACE signature patch (Castle) directly on left breast pocket of knit shirt. USACE castle shall be embossed in red on grey shirt background. (See illustration #4, Appendix W.)

(5) Navy Pants. Navy blue, wash and wear.

(6) Navy Jeans. Navy blue twill, wash and wear.

(7) Inclement Weather Items.

(a) Parka. Navy blue. The USACE shoulder patch will be on the left sleeve. Separate hood, optional.

(b) Windbreaker. Navy blue, nylon, water repellent, lined. The USACE shoulder patch will be printed on the left sleeve.

(c) Work Vest. Navy blue, quilted nylon shell.

(d) Sweatshirt. Navy blue with hood.

(8) Coveralls. Navy blue, insulated, or uninsulated. The USACE shoulder patch will be provided on the left sleeve. Cloth name tag shall be sewn on right breast pocket. Separate hood optional.

(9) Bib Overalls and Duck Jacket. Navy blue, insulated. The USACE shoulder patch will be provided on the left sleeve of the Duck Jacket. Cloth name tag shall be sewn on the right breast pocket. Separate hood is optional.

(10) Socks. Black, plain or ribbed, length optional.

(11) Work Belt. Black, plain leather, 1-1/2" to 1-3/4" wide, regular buckle.

c. Summary of Items. Tables 3 and 4 list required and optional work uniform items outlined in this Appendix.

TABLE 3

Uniform Items Duty Uniform
Lock Operations and Maintenance Personnel

	Required/Optional	Contract
Ball Cap, Navy Blue (solid or mesh)	X	Y
Duty Shirt, Grey, long or short sleeve	X	Y
T-Shirt, Grey	O	Y
Knit shirt,Grey	O	Y
Navy Pants	X	Y
Navy jeans	O	Y
Windbreaker	O	Y
Parka, Navy Blue	O	Y
Work Vest, Navy Blue	O	Y
Sweatshirt, Navy Blue	O	Y
Coveralls, Navy Blue, Insulated, L/S	O	Y
Coveralls, Navy Blue, Uninsulated, L/S	O	Y
Socks, Black	O	Y
Work belt, Black	X	Y

X - Items required for complete uniform
O - Optional

T-2. Floating Plant O&M Personnel Uniform Items.

a. Cloth Name Tag. The cloth name tag will be fabricated and worn above the right breast pocket of the Duty Shirt, Duck Jacket and Coveralls as described in Appendix W.

b. Marine Shoulder Patch, Corps of Engineers. The USACE cloth shoulder patch will be fabricated and worn on the left sleeve of the work uniform shirt, windbreaker, jacket, parka, and coveralls, as described in Appendix W.

c. Duty Uniform.

(1) Headgear. Navy blue baseball style cap (solid or mesh style cap) with an embroidered gold USACE castle (see photo #3, Appendix W) centered on the front of the cap, and positioned exactly one inch above the brim. As safety policies dictate, a USACE hard hat is also appropriate headgear.

(2) Shirt, Duty. Grey, wash and wear, long and short sleeve.

(3) Shirt, Work. Grey, 100% cotton, long sleeve.

(4) T-Shirt. Grey, wash and wear, short sleeved. USACE castle logo on left breast of T-shirt. USACE castle shall be embossed in red on grey shirt background. (See illustration #4, Appendix W.)

(5) Knit Shirt. Grey, wash and wear, short sleeved, with matching grey left breast pocket. USACE signature patch shall be embossed with black letters. "US Army Corps of Engineers" printed below USACE signature patch (Castle) directly on left breast pocket of left shirt. USACE castle shall be embossed in red on grey shirt background.

(6) Navy Pants. Navy blue, wash and wear.

(7) Navy Jeans. Navy blue, wash and wear.

(8) Denim Jeans. 100% cotton denim.

(9) Inclement Weather Items.

(a) Parka. Navy blue. The USACE shoulder patch will be on the left sleeve.

(b) Windbreaker. Navy blue, nylon, lined. The USACE shoulder patch will be provided on the left sleeve.

(c) Work Vest. Navy blue, quilted nylon shell.

(d) Sweatshirt. Navy blue with hood.

(10) Coveralls. Navy blue, insulated and uninsulated. The USACE shoulder patch will be provided on the left sleeve. Cloth name tag can be sewn on the right breast pocket. Separate hood optional.

(11) Bib Overalls and Duck Jacket. Navy blue, insulated. The USACE shoulder patch will be provided on the left sleeve of the Duck Jacket. Cloth name tag shall be sewn on the right breast pocket. Separate hood optional.

(12) Socks. Black, plain or ribbed, length optional.

(13) Work Belt. Black, plain leather, 1-1/2" to 1-3/4" wide, regular buckle.

c. Summary of Items. Table 4 lists required and optional duty uniform items outlined in this Appendix.

TABLE 4

Uniform Items for Duty Uniform Floating Plant Personnel

	Required/Optional	Contract
Ball Cap, Navy Blue (solid or mesh)	X	Y
Duty Shirt, Grey, long or short sleeve	X	Y
Work Shirt, long sleeve, 100% cotton	O	Y
T-Shirt, Grey	O	Y
Knit Shirt, Grey	O	Y
Navy Pants	X	Y
Navy Jeans	O	Y
Denim Jeans	O	Y
Windbreaker, Navy Blue	O	Y
Parka, Navy Blue	O	Y
Work Vest, Navy Blue	O	Y
Sweatshirt, Navy Blue	O	Y
Coveralls, Navy Blue, Insulated, L/S	O	Y
Coveralls, Navy Blue, Uninsulated, L/S	O	Y
Bib Overalls and Duck Jacket, Navy Blue	O	Y
Socks, Black	O	Y
Work Belt, Black	X	Y

APPENDIX U

CLASS C WORK UNIFORM

This appendix describes each approved uniform item and how it is to be worn. Descriptions are not intended to be used as a specification list by uniform suppliers.

U-1. Lock O&M, Lake Maintenance Personnel and Lake Maintenance Contract Inspectors Personnel Uniform Items.

a. Insignia.

(1) Cloth Name Tag. The cloth name tag will be fabricated and worn above the right breast pocket of the Duty Shirt, Work Shirt, Work Jacket, and Coveralls as described in Appendix W.

(2) Shoulder Patch, Corps of Engineers. The USACE cloth shoulder patch will be fabricated and worn on the left sleeve of the Duty Shirt, Work Shirt, Windbreaker, Insulated Duck Jacket, Parka, and Coveralls, as described in Appendix W.

b. Work Uniform.

(1) Headgear. Navy blue baseball style cap with an embroidered gold USACE castle (solid or mesh style cap) centered on the front of the cap exactly one inch above the brim. A hard hat is also appropriate headgear.

(2) Shirt, Duty. Grey, wash and wear, long and short sleeve.

(3) T-Shirt. Grey with USACE castle logo on left breast of T-shirt. USACE castle shall be embossed in red on grey shirt background. (See illustration #4, Appendix W).

(4) Knit Shirt. Grey, wash and wear, short sleeved, with matching grey left breast pocket. USACE signature patch shall be embossed with black letters. "US Army Corps of Engineers" printed below USACE signature patch (Castle) directly on left breast pocket of knit shirt. USACE castle shall be embossed in red on grey shirt background. (See illustration #4, Appendix W).

(5) Navy Pants. Navy blue, wash and wear.

(6) Navy Jeans. Navy blue, wash and wear.

(7) Denim Jeans. 100% cotton denim.

(8) Inclement Weather Items.

(a) Parka. Navy blue. The USACE shoulder path will be provided on the left sleeve.

(b) Windbreaker. Navy blue, nylon, lined. The USACE shoulder patch will be provided on the left sleeve.

(c) Work Vest. Navy blue, quilted nylon shell.

(d) Sweatshirt. Navy blue with hood.

(9) Coveralls. Navy blue, insulated or uninsulated. The USACE shoulder patch will be provided on the left sleeve. Cloth name tag shall be sewn on right breast pocket. Separate hood optional.

(10) Bib Overalls and Duck Jacket. Navy blue, insulated. The USACE shoulder patch will be provided on the left sleeve of the Duck Jacket. Cloth name tag shall be sewn on the right breast pocket. Separate hood is optional.

(11) Socks. Black, plain or ribbed, length optional.

(12) Work belt. Black, plain leather, 1-1/2" to 1-3/4" wide, regular buckle.

c. Summary of Items. Table 5 lists required and optional work uniform items outlined in this Appendix.

TABLE 5
Uniform Items Work Uniform
Lock Operations and Maintenance Personnel

	Required/Optional	Contract
Ball Cap, Navy Blue (solid or mesh)	X	Y
Duty Shirt, Grey, long or short sleeve	X	Y
Work Shirt, long sleeve, 100% cotton	O	Y
T-Shirt, Grey	O	Y
Knit Shirt, Grey	O	Y
Navy Pants	X	Y
Navy Jeans	O	Y
Denim Jeans	O	Y
Windbreaker	O	Y
Parka, Navy Blue	O	Y
Work Vest, Navy Blue	O	Y
Sweatshirt, Navy Blue	O	Y
Coveralls, Navy Blue, Uninsulated, L/S	X	Y
Coveralls, Navy Blue, Insulated, long sleeved	O	Y
Socks, Black	O	Y
Work Belt, Black	X	Y

X - Items required for complete uniform

O - Optional

APPENDIX V

MATERNITY UNIFORM ITEMS

(CLASS A DRESS AND CLASS B DUTY)

This appendix describes each approved uniform item and how it is to be worn. Descriptions are not intended to be used as a specification list by uniform suppliers.

V-1. Lock O&M Personnel

a. Maternity Dress Pants. Grey.

b. Maternity Dress Skirt. Grey.

c. Maternity Dress Shirt. Light blue, long or short sleeved.

d. Summary of Items. Table 6 lists optional uniform items outlined in this Section.

TABLE 6

Items for Class A Maternity Dress Uniform
Lock Operations & Maintenance Personnel

	Optional
Maternity Dress Pants, Grey	O
Maternity Dress Skirt, Grey	O
Maternity Dress Shirt, Light blue	O

O - Optional, dependent upon need

V-2. Floating Plant Maternity Class A Dress Uniform.

a. Maternity Dress Pants. Khaki.

b. Maternity Dress Shirt. Khaki, long or short sleeved.

c. Summary of Items. Table 7 lists optional uniform items outlined in this Section.

TABLE 7

Items for Class A Maternity Dress Uniform
Floating Plant Operations & Maintenance Personnel

	Optional
Maternity Dress Pants, Khaki.	O
Maternity Dress Shirt, Khaki.	O

O - Optional, dependent upon need

V-3. Lock Operations and Maintenance Personnel and Floating Plant Personnel Class T3 Maternity Duty Uniforms.

a. Maternity Duty Pants. Navy blue.

b. Maternity Duty Shirt. Grey.

c. Summary of Items. Table 8 lists optional uniform items outlined in this Section.

TABLE 8

Items for Class B Maternity Duty Uniform
Lock Operations & Maintenance Personnel and Floating Plant Personnel

	Optional
Maternity Duty Pants	O
Maternity Duty Shirt	O

O - Optional, dependent upon need

APPENDIX W

UNIFORM PATCHES AND INSIGNIA

This appendix describes each approved uniform patch and insignia, and how it is to be worn. Descriptions are not intended to be used as a specification list by uniform suppliers.

W-1. Insignia.

a. Nameplate. The gold-colored metal nameplate will be approximately 3/4" X 3" containing the first name or initial, last name, and position of the employee in block letters in upper case style. On the bottom, it will be centered above the left breast pocket with the bottom of the nameplate flush with the top of the pocket seam.

b. Blazer Breast Pocket Patch, Corps of Engineers. The USACE blazer breast pocket patch will be worn on the dress uniform as authorized by EP-310-1-6. The patch will be securely sewn in the center of the blazer breast pocket. (See illustration #1)

c. Cloth Name Tag. Navy blue background with white lettering, identifying the person's last name in block letters. Width of emblem shall be one inch high and four inches long, with block print lettering 3/8" high. It will be securely sewn directly above the right breast pocket of the specified items.

d. Shoulder Patch, Corps of Engineers. The USACE cloth shoulder patch will be worn on the left sleeve of the work shirt, duck jacket, coveralls, and parka. (See photo #2) The patch will be securely sewn in the center of the sleeve with the top edge "1 below the shoulder seam so that the base of the patch is parallel with the ground when the arm is relaxed at the wearer's side. As an option, a United States Flag patch may be sewn at a corresponding location on the right sleeve of any item requiring the USACE shoulder patch. The flag patch should be of a similar size to the USACE shoulder patch. Illustration #4 is that of the official Corps Castle patch.

e. Marine Shoulder Patch, Corps of Engineers. The Corps cloth marine shoulder patch, (Corps castle with superimposed eagle and anchor) as shown in photo #5, will only be worn by Corps master pilots,, and vessel operators on the left sleeve of shirts, jackets, coveralls and parka. All patches will be securely sewn in the center of the sleeve with the top edge 1" below the shoulder seam so that the base of the patch is parallel with the ground when the arm is relaxed at the side.

f. Ball Cap Insignia. See illustrations #3 and #8 for examples of the insignia for use on ball caps, where permitted.

g. Service Cap Insignia. The cap insignia shown in photo #7, will be secured through the eyelet provided on front of the Class A service cap (shown as illustration #6). The cap insignia will consist of a silver Engineer castle with a gold anchor supporting on its stock, a silver eagle, wings displayed. The anchor represents the maritime functions of Floating Plant Personnel and the eagle represents Federal service. The insignias and patches will be items of issue and recovered at such time that a person is no longer authorized to wear the uniform. However, such items will not be accounted for in the regular property account.

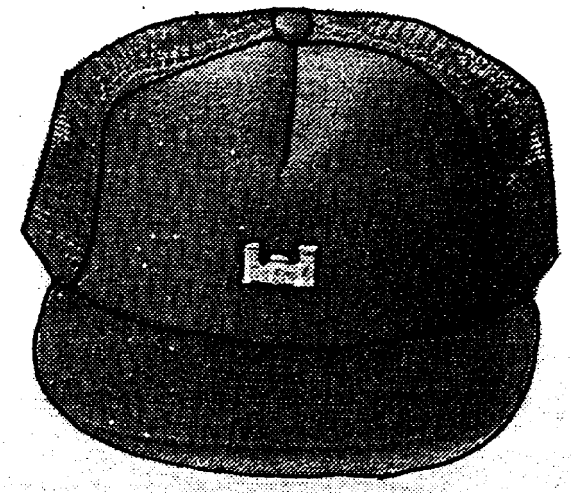
h. Procurement of Patches and Insignia. Central procurement of shoulder patch and insignia are the responsibility of the District Commander, Philadelphia District. Requisitions will be submitted and invoices rendered to the Philadelphia District, Wanamaker Building, 100 Penn Square East, Philadelphia, PA 19107-3390, in accordance with EFARS.

W-2. Lock Operations and Maintenance Personnel and Floating Plant Personnel Uniform Patches and Insignia Items.

Blazer Breast Pocket Patch (#1)

Corps Cloth Shoulder Patch (#2)

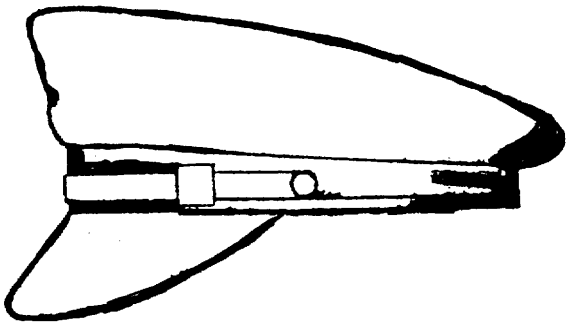
Blue Ball Cap & Pin (#3)



Navy
Corps Logo Patch (#4)

Cloth Marine Shoulder Patch (#5)

Floating Plant Class A Uniform Service Cap (#6)



Class A Uniform Service Cap Insignia (#7)

Ball Cap Insignia (#8)

APPENDIX X

UNIFORM ALLOWANCES

X-1. Allowances. Table 9 lists the initial and replacement allowances for permanent [full-time and While Actually Employed (WEA)] and temporary personnel for all uniform classes.

TABLE 9
UNIFORM ALLOWANCES

EMPLOYEE STATUS	CLASS A			CLASS B			CLASS C		
	INIT*	REP*	SUB*	INIT	REP	SUB	INIT	REP	SUB
Permanent Part-Time or WAE (working at least 18 pay periods per year)	400	300	250	400	300	250	400	300	250
Permanent Part-Time or Seasonal (working more than 18 pay periods per year)	400	300	250	400	300	250	400	300	250
Permanent Part-Time or Seasonal (working less than 18 pay periods per year)	400	250	250	400	250	250	400	250	250
Temporary (12 months or longer)	400	250	250	400	250	250	400	250	250
Temporary (more than 4 months but less than 12 months)**	250	N/A	N/A	250	N/A	N/A	250	N/A	N/A

All replacement costs are current estimates.

* INIT = 1st Year, REP = 2nd Year, and SUB = Subsequent Years

** As soon as it is known that an employee's temporary appointment is extended to 12 months or longer, the initial allowance amount should be increased an additional $150.

Temporary employees working less than four (4) months, stay-in-school employees, and summer aids are not entitled to a uniform allowance.

X-2. Items Not Covered by the Uniform Allowance.

a. The following items are not covered by the uniform allowance; however, they can be provided by the government. The cost of these items will not count against initial or replacement allowance limits.

(1) Black, dress safety shoes or boots for Class A and B uniforms (suitable for both office and all-weather field applications).

(2) Safety, all weather work boots for Class B and C uniforms.

(3) Patches and insignia that are required to be worn as part of the uniform.

(4) High-visibility orange vests (snap-on, tie-on, etc.).

(5) Coast Guard approved life jacket coat with zipper, and/or life vests, high visibility, color orange.

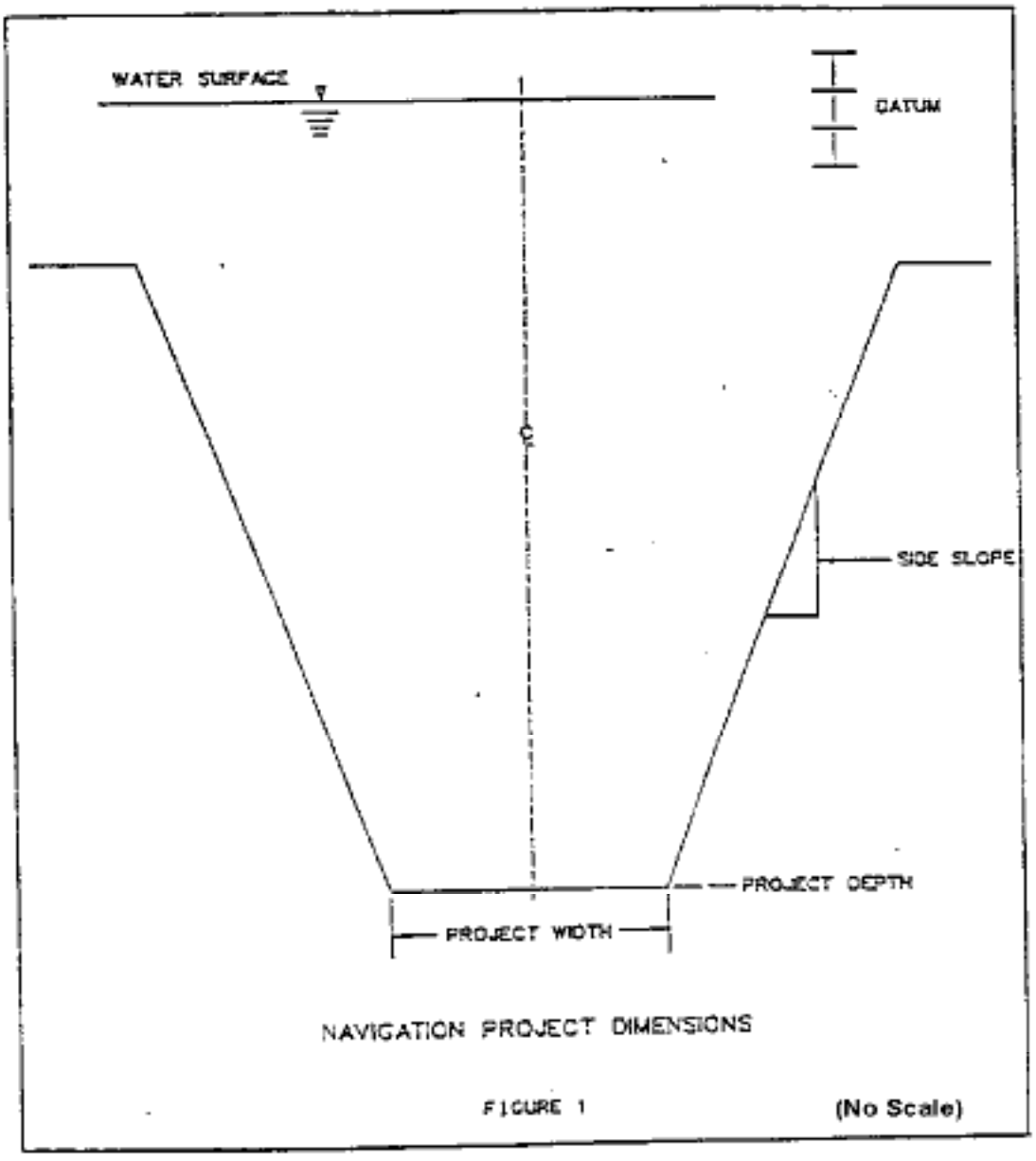
(6) Hard hats.

(7) Name Plates.

(8) Other safety items required by safety regulations for protection of the individual from physical harm in performance of their normal job duties.

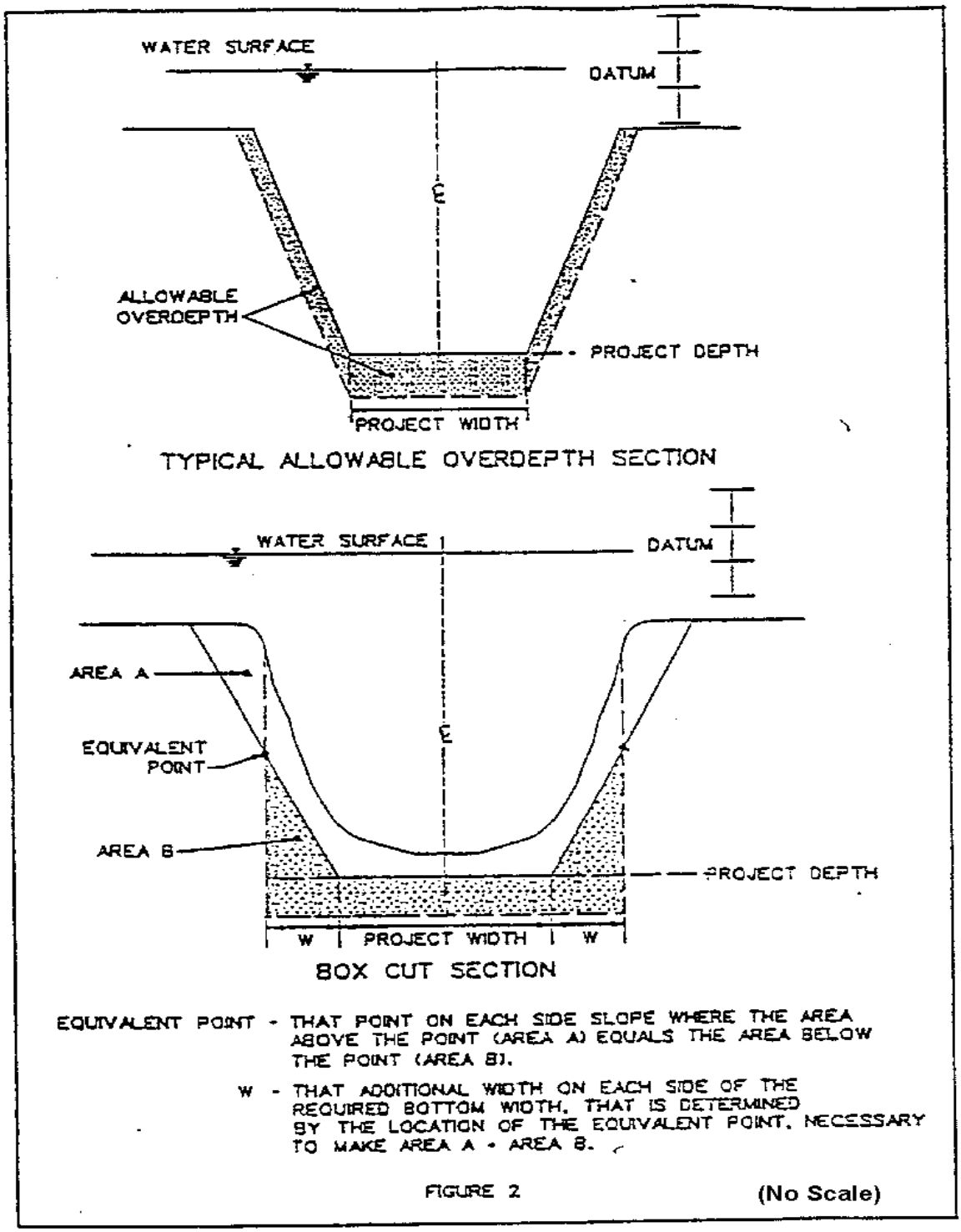
b. Apparel and other items not listed in Appendixes S, T, U, V, or W, are not furnished or covered by uniform allowances and cannot be provided by the Government.

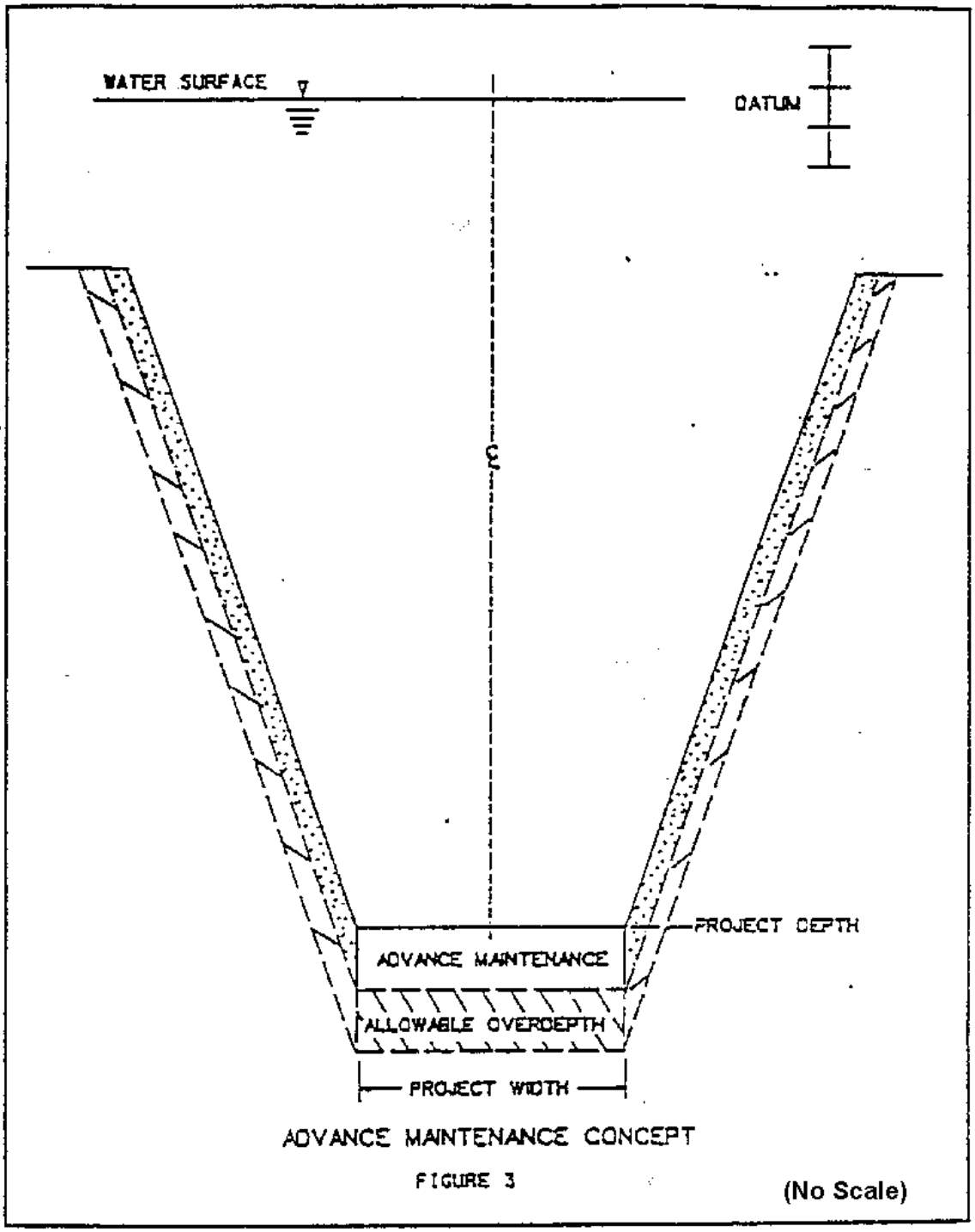
APPENDIX Y
Dredging Diagrams



NAVIGATION PROJECT DIMENSIONS

FIGURE 1 (No Scale)


WATER SURFACE
DATUM
ALLOWABLE OVERDEPTH
PROJECT DEPTH
PROJECT WIDTH
TYPICAL ALLOWABLE OVERDEPTH SECTION
WATER SURFACE
DATUM
AREA A
EQUIVALENT POINT
AREA B
PROJECT DEPTH
W
PROJECT WIDTH
W
BOX CUT SECTION
EQUIVALENT POINT - THAT POINT ON EACH SIDE SLOPE WHERE THE AREA ABOVE THE POINT (AREA A) EQUALS THE AREA BELOW THE POINT (AREA B).
W - THAT ADDITIONAL WIDTH ON EACH SIDE OF THE REQUIRED BOTTOM WIDTH, THAT IS DETERMINED BY THE LOCATION OF THE EQUIVALENT POINT, NECESSARY TO MAKE AREA A = AREA B.
FIGURE 2
(No Scale)



ADVANCE MAINTENANCE CONCEPT

FIGURE 3

(No Scale)

APPENDIX Z

CERF GUIDELINES

Z-1. Functions of CERF. The CERF shall supplement the existing hopper dredge resources of MSC and district commanders by providing a mechanism and organizational structure to aid in the acquisition of hopper dredge resources to meet national defense or emergency dredging requirements.

Z-2. Background.

a. The Corps will continue to be responsible for all dredging requirements for national defense or emergencies.

b. It is the general policy to respond to national defense or emergency requirements by using Corps hopper dredges.

(1) When Corps dredges are not available and it is not feasible or practical to use routine contractual procedures for hopper dredges, then MSC/district commanders will seek HQUSACE authority to activate CERF.

(2) Authority to activate CERF shall only be granted by Director of Civil Works for CONUS and Commander, USACE for OCONUS when justification supports this action.

c. The Corps will continue to use routine contractual procedures for routine hopper dredging.

d. The Corps will continue to provide the leadership for keeping all navigational channels cleared for shipping.

e. The procedures described below are prescribed to assist in the implementation of this program.

(1) First, dredges from the Corps minimum federal fleet will be deployed to respond to emergency and defense requirements.

(2) Then, if Corps dredges are not available in the number needed, routine contractual procedures will be utilized to obtain the services of hopper dredges from industry.

(3) If the above two steps do not result in the volume and type of hopper dredges needed to respond to emergency and defense requirements, the CERF will be activated.

(4) A request for activating the CERF by ordering MSC and district commanders with a description of the emergency or defense requirements will be presented to HQUSACE, CECW-OD.

(a) If the requirement is in CONUS, as described in the definitions below, the CERF will be activated by the Director of Civil Works.

(b) If the requirement for a hopper dredge is in OCONUS, as described in the definitions below, the CERF will be activated by Commander, USACE.

Z-3. Required Contract Provision. The provision, CERF implementation, shall be included in every dredging solicitation and contract except the BOA for CERF.

Z-4. Basic Ordering Agreement. The Basic Ordering Agreement (BOA) is an agreement between the contractor and the government to furnish the services required at a fixed daily rate. An order placed under the BOA becomes a contract providing for two items of payment:

a. Mobilization and demobilization at the BOA cost per nautical mile of mobilization.

b. Hopper dredging by the named dredge at the agreed upon cost per day of dredging.

c. The BOA Contracting Officer is responsible for establishing the BOA and distributing copies to other Corps Contracting Officers, who are listed in the BOA (Authorized Ordering FOA), and HQUSACE. The Contracting Officer placing the order is designated as the Ordering Contracting Officer.

Z-5. Request for CERF Activation. The request for activation of the CERF will come from an FOA through the MSC Office to HQUSACE, CECW-OD (CONUS). In the case of OCONUS dredging requirements, the request will go through the Director of Civil Works to Commander, USACE. The request will contain as a minimum the following information:

a. Requesting MSC and/or District.

b. Location of dredging.

c. Availability of funds.

d. Priority of work.

e. Justification for emergency request.

f. Special job requirements (sidecasting, pump ashore, etc.).

g. Estimated size of job (cubic yards, time of rental, or other suitable measurement of the scope of work).

h. Estimated site conditions.

(1) Type of material.

(2) Disposal requirements.

(3) Other site information or requirements which might affect the production of the hopper dredge on this job.

Z-6. Responsibilities.

a. CERF Request. A request will be initiated by a MSC/ District Commander as described in paragraph Z-5 above. In the use of defense emergencies, the request may be initiated by a DOD element through HQUSACE and the responsible actions for contracting would be assigned to an appropriate District/MSC.

b. Routing of Requests.

(1) Requests by District will be routed concurrently to its commanding MSC and HQUSACE, CECW-OD

(2) CECW-OD will begin preparation of the decision document upon receipt of the request, but will await MSC concurrence before submitting the decision document to the Director of Civil Works and Commander, USACE. The following will be considered in preparation of the decision document:

(a) Availability. The government will survey participating CERF contractors to verify the location of participating dredges. The dredge must be operational and ready for work. CERF dredges working under existing contracts to the Corps are committed to respond to CERF activation. When a contractor is under contract to someone other than the U. S. Army Corps of Engineers and the contractor volunteers for the active CERF fleet, the Federal Government is not responsible for contract termination costs.

(b) Time. This factor includes the time required for the dredge to travel to the job site and be ready for work, plus the time required to perform the required dredging.

(c) National Dredging Program Impact. The selection of a particular dredge will be evaluated by the overall effect on the National Dredging Program.

(d) Cost. The firm-fixed daily and mileage rates contained in each participating CERF BOA will be utilized to determine the cost to the government.

(e) Exemption. Dredges activated by placement of an order against a CERF BOA are exempt from successive activation for a period of 90-calendar days from completion of a CONUS assignment and 180-calendar days from completion of an OCONUS assignment unless voluntarily consented to in writing by a participating CERF contractor.

(f) Dredge capability. Information and/or capabilities of the dredge that may impact on the ability to perform.

(g) Specific site factor. Site factors that impact upon the ability of the dredge to perform the work.

(3) The decision document will be submitted to the Director of Civil Works for CONUS emergency dredging. The decision document will be submitted through the Director of Civil Works to Commander, USACE for OCONUS emergency dredging.

c. Approval of Request. Approval of the request can be made only by Commander, USACE for OCONUS and the Director of Civil Works for CONUS or persons authorized to act in their absence.

d. Termination/Extension of Existing Contract. The Contracting Officer named in an existing contract is responsible for actions required to terminate or extend that contract. The Contracting Officer will take appropriate action to extend or terminate the existing contract when notified by Commander, USACE or the Director of Civil Works or their authorized representative of the decision to activate the CERF dredge currently working on an existing maintenance or construction dredging contract.

e. Implementing the BOA. The Ordering Contracting Officer of the District requesting the work will be responsible for executing the order against the BOA once notified by the appropriate official that the decision to activate the CERF has been made. The BOA contains the instructions for placing orders against the BOA.

Z-7. Limitations of the BOA. The BOA is limited to civil works funding and is not an appropriate document for a military fund citation. Military funds may be available to the Corps of Engineers Revolving Fund as an appropriate reimbursement mechanism.

Z-8. Procedures for Becoming a CERF Member. A contractor who wishes to become a CERF member shall write to U. S. Army Corps of Engineers, ATTN: CECW-OD, 20 Massachusetts Avenue, NW, Washington, DC 20314-1000. CECW-OD will notify the appropriate procurement office who is responsible for the BOA.

Z-9. Procedures for Notification of Availability. An idle contractor's hopper dredge or one employed on non-Corps work may be removed from the active CERF Fleet by providing written notice of unavailability to HQUSACE, CECW-OD at least five days prior to the requested action.

APPENDIX AA

DETERMINATION OF THE HYDRAULIC LINE

AA-1. Flow Criteria. The flows which are named below will be used in the determination of the hydraulic line for the identification and marking of hazardous waters adjacent to Civil Works structures.

a. Navigation Locks and Dams. The discharge corresponding to ordinary highwater, a recognized flow throughout the Corps of Engineers to define limits of Federal jurisdiction, will be used. Should the ordinary highwater discharge exceed the maximum navigation discharge at a project, the latter will be used. (In any case, the worst case scenario must be used.)

b. Flood Control and Storage Dams. The annually-released bankfull flow, (alternately known as the non-damaging discharge), will be used. However, the customary flow of the project will be used, if less than bankfull.

c. Local Flood Reduction Projects, Hydroelectric Plants, Training Structures, Intakes and Pumping Stations. The one-year discharge (i.e., the maximum flow which has a 100% chance of occurring each year), will be used.

AA-2. Upstream of Structures.

a. Navigation, Flood Control/Storage, and Local Flood Reduction Projects. The hydraulic line will be determined where the drawdown commences upstream of the dam, chute, drop structure, or diversion - for prescribe flow in paragraph 1 above. Said location will delineate the beginning of the accelerating velocity of approach and the change in water-surface slope due to the presence of the dam or structure.

(1) Frequently, this location has been seen to occur at a distance upstream equal to about three times the head on the crest of the dam for fixed crests dams with straight approaches, and a variable amount for gated dams that can be computed or observed depending on the schedule of gate openings. However, each project must be analyzed on its own merits to locate the hydraulic line.

(2) Where channel curvature or constrictions exist, the hydraulic line will be located to include these effects, where pertinent.

(3) For lock intake areas, the hydraulic line will be set upstream at a distance at least equal to twice the water passage opening.

b. Hydroelectric Plants, Intakes, Training Structures, and Pumping Stations.

(1) For pump stations, submerged inlets, and hydroelectric plants, the hydraulic line will be set at a distance equal to twice the width of the structure intake.

(2) For training structures such as dikes and spurs, the hydraulic line will be set at least an amount upstream equal to two times the greatest dimension of the structure.

AA-3. Downstream of Structures.

a. Navigation Projects, Flood Control/Storage Dams, and Local Flood Reduction Projects. The hydraulic line will be determined at a location beyond which all the flow filaments move in a downstream direction and for the prescribed flow criteria in paragraph 1 above. This location, depending on the individual design considerations, may fall within or beyond the terminus of the project structure. Data from site-specific model studies should be used where test conditions are still applicable; otherwise, this location will be determined based on hydraulic jump or other appropriate calculations. For lock discharge areas, the hydraulic line will be set beyond boil and eddy limits which are strong enough to capsize a vessel and/or draw an object to the source.

b. Hydroelectric Plants, Training Structures, Outlets, and Pumping Stations. The hydraulic line will be set:

(1) beyond boil and eddy limits (defined above in paragraph AA-3a.) as determined by on-site observation for pump stations, submerged outlets, and hydroelectric projects; and

(2) at least two lengths downstream of the largest dimension of dikes and spurs for training structures.

AA-4. Individual Considerations. Where multiple-type structures coexist, the hydraulic line for each component shall be computed using the criteria in this appendix. The hydraulic line farthest from the facility will be considered the hydraulic line for that facility.

APPENDIX AB

OPERATIONAL CONSIDERATIONS

The considerations which follow will be used in the determination of the buffer area between the hydraulic line and the final boundary of the restricted area marking hazardous waters adjacent to Civil Works structures:

1. What type of user is in and around the area (anticipated and existing)?

2. What types of accidents, near accidents, or incidents have occurred?

3. Should any type of environmental condition be considered such as air temperature, water temperature, winds etc.?

4. What are the consequences of a small vessel or person entering this area?

5. Are the currents such that a small vessel or person is likely to be drawn into the hazardous area?

6. Is the restricted area marked far enough upstream and downstream to reduce the hazard should a small vessel lose power?

7. Are navigation channels placed so that the traffic is directed away from the structure's hazardous area?

8. Is the structure well marked and visible from beyond the restricted area?

9. Does the change in seasons have significant effects on intake or discharge requirements (power, flooding, etc.)?

10. Can a buoy system be installed which will act as a continuous barrier and provide a well defined restricted area?

11. Is such a barrier practical? (Consider seasonal changes, size of structure, costs, and consequences of having or not having such a barrier.)

12. Can a buoy system be installed which will act as a line of sight (not continuous) and will provide a well defined restricted area?

13. Is there a need for a barrier to keep vessels from entering the restricted area?

14. Are signs on the structure large enough, and placed in such a manner as to be read from outside the restricted area or from a distance that will allow for evasive action?

15. Should signs and buoys be lighted?

16. Are buoys in accordance with the uniform state waterway system?

17. Do signs comply with EP 310-1-6a&b, Sign Standards Manual?

18. Is the area noted on navigation charts?

19. Are obstructions marked appropriately?

20. If a vessel or person becomes trapped against the structure, is there a means of egress in the vicinity?

21. What is the shoreline like? Would this help or hinder rescue operations?

22. Are signs, buoys, and the structure visible outside the restricted area at night?

23. Does a hazardous condition exist or occur which the visiting public may not recognize?

24. Is there a need to indicate water is passing through the structure?

25. Are warning devices present which indicate the status of all facets of the structure? Is there a need for this type of system?

26. Is any portion of the structure remote controlled? If so, are adequate safety devices in place that ensure the public is warned prior to changes in flow (increases or decreases)?

27. Are all hazardous areas visually surveyed prior to making any type of change in flow requirements?

28. Should a buoy line be installed so as to be supportive of other agencies' rules and regulations?

29. Can the discharge be modified to reduce the area of hazardous waters downstream?