

Project Operations
NAVIGATION AND DREDGING OPERATIONS AND
MAINTENANCE GUIDANCE AND PROCEDURES

TABLE OF CONTENTS

	Paragraph	Page
CHAPTER 1 - Introduction		
Purpose	1-1	1-1
Applicability	1-2	1-1
References	1-3	1-1
Glossary	1-4	1-4
CHAPTER 2 - Aids to Navigation, Navigation Charts, and Related Data		
Purpose	2-1	2-1
Background	2-2	2-1
Guidance	2-3	2-1
Cooperation with Coast Guard	2-4	2-3
Navigation Aids of the Corps of Engineers	2-5	2-3
Special Reports	2-6	2-6
Information Pamphlets, Maps Brochures and Other Material	2-7	2-10
CHAPTER 3 - Protection of Public Health and Safety at Jetties, Groins, and Breakwaters		
Purpose	3-1	3-1
Applicability	3-2	3-1
Background	3-3	3-1
Guidance	3-4	3-1
Providing other Minimum Facilities for Public Health and Safety	3-5	3-1
Program Implementation	3-6	3-2
CHAPTER 4 - Removal of Wrecks and Other Obstructions		
Purpose	4-1	4-1
Applicability	4-2	4-1

	Paragraph	Page
Background	4-3	4-1
Guidance	4-4	4-2
Coordination with Coast Guard	4-5	4-4
Notification/Reports	4-6	4-6
Funding	4-7	4-6
Legal Actions	4-8	4-7
 CHAPTER 5 - Waterborne Commerce Statistics		
Purpose	5-1	5-1
Terminology	5-2	5-1
Background and Responsibilities	5-3	5-1
Enforcement of Reporting Policy	5-4	5-2
Data Collection and Reports	5-5	5-3
Violation Procedures	5-6	5-10
Release of Data	5-7	5-10
Release Statement	5-8	5-11
Data Retention	5-9	5-11
Approval Required to Add, Modify, or Delete Tables from the Waterborne Commerce of the United States	5-10	5-11
 CHAPTER 6 - Lock Performance Monitoring System		
Reserved.		6-1
 CHAPTER 7 - Uniforms for Lock and Floating Plant Operations and Maintenance Personnel		
Purpose	7-1	7-1
Guidance	7-2	7-1
Guidance - Uniform Procurement	7-3	7-2
Guidance - Appearance	7-4	7-2
 CHAPTER 8 - Dredging		
Purpose	8-1	8-1
Applicability	8-2	8-1
General	8-3	8-1
Definitions	8-4	8-1
Performance of Dredging	8-5	8-1
Dredging Contracts	8-6	8-2
Navigation Channel Conditions	8-7	8-4
Corps of Engineers Reserve Fleet	8-8	8-6
Corps of Engineers Minimum Dredge Fleet	8-9	8-6
Small Business Dredging Program	8-10	8-7
Inspection of Dredging Operations	8-11	8-7
Plant Operations Reports (Reports Control Symbol ENG CW-O-13)	8-12	8-8

	Paragraph	Page
CHAPTER 9 - Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter - Dredge Material Ocean Disposal		9-1
Reserved.		
CHAPTER 10 - Restricted Areas for Hazardous Waters at Dams and Other Civil Works Structures		
Purpose	10-1	10-1
Boundary Determination	10-2	10-1
Implementation	10-3	10-1
APPENDIX A - References		A-1
APPENDIX B - ENG Form 4020-R		B-1
APPENDIX C - ENG Form 4021-R		C-1
APPENDIX D - Mailing Addresses (NOS, DMA, USCG)		D-1
APPENDIX E - Special Reports Matrix		E-1
APPENDIX F - Notice to Navigation Interests		F-1
APPENDIX G - Chart Symbols		G-1
APPENDIX H - Sample Chart Detail		H-1
APPENDIX I - Sample Profile Drawings		I-1
APPENDIX J - USCG Districts		J-1
APPENDIX K - Sample Letter: Notification of Corps removal		K-1
APPENDIX L - Sample Letter: Acknowledgment of Abandonment		L-1
APPENDIX M - Sample Letter: Owner duty to mark or remove		M-1
APPENDIX N - Sample Letter: Bill for reimbursement		N-1
APPENDIX O - Definition of Terms		O-1
APPENDIX P - Coding Procedures		P-1
APPENDIX Q - Compilation of Navigation Statistics		Q-1
APPENDIX R - Reporting Offenses and Violations		R-1

EP 1130-2-520
29 Nov 96

	Paragraph	Page
APPENDIX S - Class A Dress (Full) Uniform		S-1
APPENDIX T - Class B Duty (Full) Uniform		T-1
APPENDIX U - Class C Work Uniform		U-1
APPENDIX V - Maternity Uniforms		V-1
APPENDIX W - Uniform Patches and Insignia		W-1
APPENDIX X - Uniform Allowances		X-1
APPENDIX Y - Dredging Diagrams		Y-1
APPENDIX Z - CERF Guidelines		Z-1
APPENDIX AA - Determination of the Hydraulic Line		AA-1
APPENDIX AB - Operational Considerations		AB-1

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

EP 1130-2-520
29 Nov 96

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)					Minimum depth in each-1/4 width of channel entering from seaward			
					Mid-channel			
Name of Channel	Date Survey	Project		Feet depth	Left outside quarter feet	Left inside quarter feet	Right inside quarter feet	Right outside quarter feet
		Feet width	Miles length					
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)					Minimum depths in channel entering from seaward		
Name of Channel	Date Survey	Project		Feet depth	Left outside quarter feet	Mid-channel for half project	Right outside quarter feet
		Feet width	Miles length				
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/Buoymenders
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.

EP 1130-2-520
29 Nov 96

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. O. 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 dredge 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:

<u>Dredge Name</u>	<u>Type</u>	<u>Owning District</u>
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	Sidcaster	Wilmington
MERRITT	Sidcaster	Wilmington
SCHWEIZER	Sidcaster	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.

EP 1130-2-520
29 Nov 96

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.

EP 1130-2-520
29 Nov 96

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:



OTIS WILLIAMS
Colonel, Corps of Engineers
Chief of Staff

28 APPENDIXES
See Table of Contents