



COMDTINST 5230.60B
21 JUNE 2011

COMMANDANT INSTRUCTION 5230.60B

Subj: COAST GUARD IMPLEMENTATION OF THE REHABILITATION ACT, SECTION 508

- Ref:
- (a) Rehabilitation Act of 1973, Sections 501 and 504, as amended.
 - (b) Rehabilitation Act, Section 508 (29 U.S.C.729d), as amended by the Workforce Investment Act of 1998 (P.L. 105-220).
 - (c) U.S. Access Board's Electronic and Information Technology (EIT) Accessibility Standards 36 CFR, Chapter XI, Part 1194.
 - (d) Workforce Investment Act of 1998.
 - (e) Federal Acquisition Regulation (48 CFR Parts 2, 7, 10, 11, 12, and 39 [FAC 97-27; FAR Case 1999-607], revised in the Federal Record on October 1, 2003.
 - (f) E-Government Act of 2002.
 - (g) The Homeland Security Act of 2002, P.L. 107-296 (November 25, 2002), Section 102.
 - (h) OMB Circular A-130, Management of Federal Information Resources (61 FR 6428, February 20, 1996).
 - (i) 40 U.S.C. 11101 (6), Clinger-Cohen Act of 1996.
 - (j) DHS Management Directive 4010.2: Section 508 Program Management Office and Electronic and Information Technology Accessibility.
 - (k) DHS Management Directive 0007.1: Information Technology Integration and Management.
 - (l) DHS Management Directive 3500: Operational Roles and Responsibilities of the Officer for Civil Rights and Civil Liberties and the Office of the Chief Counsel.
 - (m) Use and Management of Coast Guard Internet and Intranet Web Sites, Content, and Access, COMDTINST 5230.62 (series).
 - (n) 6 CFR 15, DHS Section 504 regulation, "Enforcement of Nondiscrimination on the Basis of Disability in Programs or Activities Conducted by the Department of Homeland Security."

DISTRIBUTION – SDL No. 159

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NON-STANDARD DISTRIBUTION:

1. **PURPOSE.** This Instruction establishes U.S. Coast Guard (USCG) policy, procedures, roles, and responsibilities for implementing the 1998 amendments to Section 508 of the Rehabilitation Act, per references (a)-(n). Section 508 requires Federal departments and agencies that develop, procure, maintain, or use electronic and information technology (EIT) to ensure that Federal employees and members of the public with disabilities have access to and use of information and data, comparable to that of Federal employees and members of the public without disabilities. Moreover, the USCG desires to meet the demands of citizen-centric electronic government, attract and retain the best talent, and maintain a productive workforce. To accomplish that goal we must create an environment that enables the abilities of persons with disabilities.

This Instruction mirrors DHS Management Directive 4010.2: Section 508 Program Management Office and Electronic and Information Technology Accessibility (Ref. (j)), dated October 26, 2005, as adapted to the USCG organization and operating environment.

2. **ACTION.** All Coast Guard unit commanders, commanding officers, officers-in-charge, deputy/assistant commandants, and chiefs of headquarters staff elements shall comply with the provisions of this Instruction. Internet release is authorized.
3. **DIRECTIVES AFFECTED.** Coast Guard Implementation of the Rehabilitation Act, Section 508, COMDTINST 5230.60A, is cancelled.
4. **DEFINITIONS.** Most commonly referred to Section 508 terms and definitions.
 - a. *Accessible* – The dictionary definition of accessible can lead to subjective interpretations. In order to provide an objective and enforceable measure of the term “accessible” in the context of this rule, accessible means “conforming to the provisions of the U.S. Access Board’s standards.”
 - b. *Agency* – An executive agency as defined in 5 U.S.C. Section 105.
 - c. *Alternative formats* - Alternative formats usable by people with disabilities may include, but are not limited to, Braille, ASCII text, large print, recorded audio and electronic formats that conform to the provisions of the EIT Accessibility Standards.
 - d. *Alternative methods* – Alternative means of providing information, including product documentation, to people with disabilities, which may include, but are not limited to, voice, fax, relay service, TTY, Internet posting, captioning, text-to-speech synthesis, and audio description.
 - e. *Back-office* – EIT located in spaces frequented only by service personnel for maintenance, repair or occasional monitoring of equipment (e.g., network switches and routers located in wiring closets).
 - f. *Disability* - A physical or mental impairment that constitutes or results in a substantial impediment to employment or substantially limits one or more major life activities.
 - g. *Electronic and information technology (EIT)* - The U.S. Access Board defined information technology (IT) consistent with the Clinger-Cohen Act of 1996 as “any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition,

storage, manipulation, movement, control, display, switching, interchange, transmission, or reception of data or information.” The Federal Acquisition Regulation (FAR 2.101) expanded IT to include “electronic.” EIT has the same meaning as IT, but also includes “any equipment or interconnected system or subsystem of equipment that is used in the creation, conversion or duplication of data or information.” EIT includes, but is not limited to, computers, software, telecommunications products (such as telephones), information kiosks and transaction machines, web sites, video productions and multimedia, and office equipment such as copiers and fax machines. The term does not include any equipment that contains embedded information technology that is used as an integral part of the product, but the principal function of which is not the acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For example, heating, ventilation, and air-conditioning equipment such as thermostats or temperature control devices, and medical equipment where information technology is integral to its operation, are not considered to be information technology.

- h. *Exception* – The term exception, for this directive, refers to exceptions as those included in the U.S. Access Board EIT Accessibility Standards.
- i. *Extranet* – Any private network that uses the Internet protocol and the public telecommunications networks to securely connect to Department of Homeland Security (DHS) Intranet and associated systems.
- j. *Federal Acquisitions Regulation (FAR)* – The FAR is the primary regulation for use by Federal executive agencies for acquisition of supplies and services with appropriated funds. The document, published in 1984, consolidated the major procurement regulations of various departments and agencies. The intent was to standardize content and decrease the volume for consistency throughout Government.
- k. *Functional Performance Criteria* – Section 508 has both specific technical standards and functional performance criteria. The functional performance criteria are broader in scope and intended to ensure that accessibility is achieved by focusing on overcoming the limitations imposed upon the end-user with a disability.
- l. *Fundamental Alteration* – Alteration of EIT products or services to meet Section 508 EIT Accessibility Standards established by the U.S. Access Board causes the EIT products or services not to meet business needs.
- m. *Internet* – The publicly accessible Web presence of USCG. The top-level (home) page URL is www.uscg.mil.
- n. *Intranet* – The USCG Web presence only accessible via authorized access to USCG networks. Note that various non-USCG personnel may at times have access to the USCG Intranet.
- o. *Market Research* – A process used to collect, organize, maintain, analyze, and present data for the purpose of maximizing the capabilities, technology, and competitive force of the marketplace to meet an organization's needs for supplies or services. As it relates to Section 508, market

research is the mechanism for determining the availability of compliant EIT products and comparing products that meet the Government's requirements for accessibility.

- p. *Synchronized Media* – Audio or video displayed at the same time as other time-based content that is required for understanding of the complete presentation.
- q. *National Section 508 Coordinator* – The individual(s) assigned to each federal agency to manage and lead Section 508 programs and initiatives at his or her respective agency.
- r. *National Security System* – 36 C.F.R., 1194.3 (a) defines a National Security System as any telecommunications or information system operated by the U.S. government, the function, operation, or use of which involves:
 - (1) Intelligence activities,
 - (2) Cryptological activities related to national security,
 - (3) Command and control of military forces,
 - (4) Equipment that is an integral part of a weapon or weapons system, or
 - (5) Systems that are critical to the direct fulfillment of military or intelligence missions.
(Systems that are critical to the direct fulfillment of military or intelligence missions do not include a system that is to be used for routine administrative and business applications including payroll, finance, logistics, and personnel management applications).
- s. *Operable Controls* – A component of a product that requires physical contact for normal operation. Operable controls include, but are not limited to, mechanically operated controls, input and output trays, card slots, keyboards, or keypads.
- t. *Product* – Electronic and information technology (EIT).
- u. *Products Incidental to Contract* – Products acquired by a contractor incidental to a contract that are neither used nor accessed by Federal employees or members of the public (contracted employees in their professional capacity are not considered members of the public).
- v. *Requiring Official* – Government personnel delegated the responsibility for developing EIT requirements, identifying applicable technical provisions of the EIT Accessibility Standards, conducting market research, drafting specifications, and documenting non-availability and Undue Burden determinations.
- w. *Section 501* – Section of the Rehabilitation Act that prohibits discrimination on the basis of disability in Federal employment and requires Federal agencies to establish affirmative action plans for the hiring, placement, and advancement of people with disabilities in Federal employment. See Ref. (a).
- x. *Section 504* – Section of the Rehabilitation Act that prohibits discrimination based on disability in federally funded and federally conducted programs or activities in the United States, including

employment programs. This involves, but is not limited to, providing individual accommodation at the worksite using assistive technologies. See Ref. (a).

- y. *Self contained, closed products* – A category of EIT, as described in 36 CFR Part 1194 Section 25. Products that generally have embedded software and are commonly designed in such a fashion that a user cannot easily attach or install assistive technology. These products include, but are not limited to, information kiosks, information transaction machines, copiers, printers, calculators, and fax machines.
 - z. *Technical Standards* – A set of design standards developed and published by the U.S. Access Board as part of the EIT Accessibility Standards.
 - aa. *Telecommunications* – The transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.
 - bb. *Teletypewriter (TTY)* – A type of assistive technology. Machinery or equipment that employs interactive text based communications through the transmission of coded signals across the telephone network. TTYs may include, for example, devices known as TDDs (telecommunication display devices or telecommunication devices for deaf persons) or computers with special modems. TTYs are also called text telephones.
 - cc. *Undue Burden* – Undue burden means significant difficulty or expense. In determining whether an action would result in an undue burden, an agency shall consider all agency resources available to the program or component for which the product is being developed, procured, maintained, or used. By statute, the requirement to document an undue burden applies only to procurements.
 - dd. *United States Access Board (U.S. Access Board)* – An independent agency responsible for developing the standards referred to in Section 508. Created in 1973 to ensure access to federally funded facilities, the Board develops and maintains design criteria for the built environment, transit vehicles, telecommunications equipment, and for electronic and information technology.
 - ee. *Web Content Managers (or equivalent)* – As defined in COMDTINST 5230.62 (Ref. (m)), a Web Content Manager is the individual designated by the Unit Commander to review and approve web content for the command and for commands under its administrative control. The Web Content Manager may be a content creator, but may also be the point of contact for posting information on the Web. The Web Content Manager is not always just the technical “coder” or the “style” designer.
5. **BACKGROUND.** Section 508 implementation is critical to government EIT in this era of reliance on information technology. On August 7, 1998, the President signed into law the Workforce Investment Act, Ref. (d) that amended the Rehabilitation Act by expanding and strengthening Section 508. Section 508 now refers to enforceable technical standards and performance based requirements that focus on the functional capabilities covered by technologies to facilitate their use by persons with disabilities. This dual approach recognizes the dynamic and continually evolving nature of the technology involved as well as the need for clear and specific standards to facilitate

compliance. Certain provisions of the standards are designed to ensure compatibility with the assistive technology that people with disabilities commonly use for information and communication access, such as screen readers, Braille displays, and TTYs. Section 508 does not require Federal agencies to retrofit technologies existing before the release of the EIT Accessibility Standards (June 21, 2001); but complaints and lawsuits can be filed against agencies with EIT products that are procured and do not conform to the provisions of the standards. Federal employees and members of the public with disabilities also have rights under Section 501 and 504, Ref. (a), that require agencies to make information available to them by an alternative means. Sections 504 and 508 of the Rehabilitation Act are complementary. Whereas Section 504 focuses on individual accommodation, Section 508 emphasizes EIT infrastructure and standards.

6. **ENFORCEABLE SECTION 508 STANDARDS FOR EIT.** The published Section 508 EIT Accessibility Standards, Ref. (c), include technical provisions with 1) requirements specific to various types of technologies (Subpart B), 2) functional performance criteria of covered technologies (Subpart C), and 3) requirements for information, documentation, and support. The complete EIT standards provisions can be found in enclosures (1-8). Acquired products that meet the specific technical provisions set forth in Subpart B will also meet the broader functional performance criteria in Subpart C. If an agency's procurement needs are not fully addressed by Subpart B, then the agency must look to Subpart C for applicable functional performance requirements.

a. Subpart B:

- (1) Software Applications and Operating Systems (36 CFR Part 1194 Section 21);
- (2) Web-based Intranet and Internet Information and Applications (36 CFR Part 1194 Section 22);
- (3) Telecommunications Products (36 CFR Part 1194 Section 23);
- (4) Video and Multimedia Products (36 CFR Part 1194 Section 24);
- (5) Self Contained, Closed Products such as copiers, printers, calculators, fax machines and kiosks (36 CFR Part 1194 Section 25), and
- (6) Desktop and Portable Computers (36 CFR Part 1194 Section 26).

b. Subpart C:

- (1) Functional Performance Standards (36 CFR Part 1194 Subpart C Section 31), and
- (2) Information, Documentation and Support (36 CFR Part 1194 Subpart C Section 41).

7. **EXCEPTIONS.** Under certain circumstances, as listed below, Federal agencies may require EIT that does not conform to the provisions of the standards. Use the DHS Office of Accessible Systems and Technology (OAST) Exception forms to request approval for EIT that may not need to adhere to the Section 508 EIT Accessibility Standards.

a. EIT for a national security system ([DHS Form 4105](#));

b. EIT acquired by a contractor incidental to a contract ([DHS Form 4107](#));

- c. Procurement of EIT that would impose an undue burden ([DHS Form 4103](#));
 - d. Fundamental alteration to the EIT would result ([DHS Form 4108](#)), and
 - e. EIT located in back office spaces frequented only by service personnel for maintenance, repair or occasional monitoring of equipment ([DHS Form 4109](#)).
8. **POLICY & PROCEDURES.** The law established an administrative process under which individuals with disabilities, including employees and members of the public, can file a complaint alleging that a Federal agency has not complied with the provisions of the Section 508 EIT Accessibility Standards. This process uses the same administrative complaint procedures established under Section 504 of the Rehabilitation Act (which covers access to federally funded programs and services). It provides injunctive relief and attorney's fees to the prevailing party, but does not authorize complaints or lawsuits to retrofit technology procured before June 21, 2001 (when the EIT Accessibility Standards were first published) to meet the U.S. Access Board's standards. Even though Section 508 enforcement mechanisms apply only to procurement, the law does require access to technology developed, used, or maintained by a Federal agency.

Moreover, other sections of the Rehabilitation Act require access to Federal programs (Section 504) and accommodation of Federal employees with disabilities (Section 501 and 504). Federal agencies will use the U.S. Access Board's EIT Accessibility Standards as a yardstick to measure compliance with these other sections of the law. Any USCG civilian employee or applicant for employment with a disability who believes that the USCG has not complied with Section 508 with respect to EIT procured on or after June 21, 2001, may initiate either a grievance pursuant to the collective bargaining agreement or an informal complaint with the local USCG civil rights representative within 45 days of the alleged instance of non-compliance. The USCG field civil rights staff will process the informal complaint in accordance with procedures provided under 29 C.F.R. Part 1614 as required by Section 508 (29 U.S.C. §794d(f)(2) and DHS regulations in 6 C.F.R. §15.70.

USCG customers with a disability who believe that the USCG has not complied with Section 508 with respect to EIT procured on or after June 21, 2001, may file either a grievance pursuant to the collective bargaining agreement or a complaint with the USCG Civil Rights Directorate, Commandant (CG-00H). Commandant (CG-00H) will process complaints which are filed by USCG customers within 180 days of the alleged instance of non-compliance in accordance with the "Enforcement" requirements of Section 508 (29 U.S.C. §794d), DHS regulations in 6 C.F.R. § 15.70, current and future general DHS-wide policies, and forthcoming USCG specific procedures.

a. Policy:

- (1) USCG Offices shall ensure that employees and customers with disabilities have access to and use of information and data that is comparable to the access available to people without disabilities unless an Undue Burden condition applies, in which event, the information and data will be provided by an alternative method or format.
- (2) When procuring or maintaining EIT, USCG Offices shall ensure that: functional requirements are identified; applicable functional performance criteria and technical standards of Section 508 are identified; solicitations include reference to the identified

Section 508 EIT Accessibility Standards; market research is performed to include consideration of Section 508 compliance; selection of the product or service that best meets both business and Section 508 requirements is selected, and documentation is produced to demonstrate compliance with Section 508 requirements.

- (3) When developing or maintaining EIT, USCG Offices shall ensure that: functional requirements are identified, applicable functional performance criteria and technical standards of Section 508 are selected, and documentation is produced to demonstrate compliance with Section 508 requirements.
- (4) USCG Offices shall ensure that when procuring, using, or maintaining EIT development and testing tools, those development platforms and testing tools have the capacity to produce EIT products that fully conform with applicable functional performance criteria and technical standards from the Section 508 EIT Accessibility Standards and that sufficient information is available to developers to utilize those accessibility functions and features.
- (5) USCG Offices shall ensure that up-to-date, appropriate, and accurate information related to Section 508 is included in all educational material.
- (6) USCG shall collect and provide information related to tracking of Section 508 implementation to appropriate Government oversight organizations, including DHS OAST, as required by the oversight organizations. Information shall also be provided to AFGE Council 120 upon request.
- (7) USCG Offices shall implement and adhere to the DHS review and authorization procedures for EIT purchase requests.
- (8) All purchase requests that claim National Security or Undue Burden exceptions shall be reviewed and certified by DHS OAST in addition to the USCG National Section 508 Coordinator. All other purchase requests claiming other exceptions to the EIT Accessibility Standards shall be reviewed and certified by the USCG National Section 508 Coordinator.
- (9) For all EIT projects that exceed five million dollars in lifecycle costs, a Section 508 EIT Accessibility Plan that includes applicable requirements and acceptance testing/quality assurance plans shall be included in the projects' standard planning package, pursuant to the project's applicable planning method, e.g., Major Systems Acquisition Manual (MSAM) or System Engineering Life Cycle (SELC).
- (10) When USCG Offices deploy or accept systems that do not fully conform to applicable Section 508 provisions, an accommodations plan shall be prepared to address the needs of employees or members of the public with disabilities. This plan shall be authorized/approved by the USCG Section 508 PMO.

b. Procedure:

- (1) When procuring EIT products or services that cost less than or equal to \$3000, i.e., a micro-purchase, requiring officials shall follow policies and procedures for purchase card holders in

accordance with the USCG Simplified Acquisition Procedures Manual, COMDTINST M4200.13H.

- (2) When procuring, developing, using or maintaining EIT, the requiring official or purchase card user will ensure that all related procedures and coding standards shall comply with the Section 508 EIT Accessibility Standards listed below. Enclosures 1 through 8 were obtained from Subpart B of the “Electronic and Information Technology Accessibility Standards,” developed by the U.S. Access Board. These standards were first published in the Federal Register on December 21, 2000 (65 Fed. Reg. 80499) and codified in 36 CFR Part 1194. The entire document may be accessed at <http://www.access-board.gov>.

- (a) Section 1194.21: Software Applications and Operating Systems, Enclosure 1.
- (b) Section 1194.22: Web-based Intranet and Internet Information and Applications, Enclosure 2.
- (c) Section 1194.23: Telecommunications Products, Enclosure 3.
- (d) Section 1194.24: Video and Multimedia Products, Enclosure 4.
- (e) Section 1194.25: Self Contained, Closed Products, Enclosure 5.
- (f) Section 1194.26: Desktop and Portable Computers, Enclosure 6.
- (g) Section 1194.31: Functional Performance Criteria, Enclosure 7.
- (h) Section 1194.41: Information, Documentation and Support, Enclosure 8.

- (3) All Section 508 related complaints shall follow USCG Civil Rights Directorate Section 504 complaint procedures.

9. TRAINING, GUIDELINES AND RESOURCES. Contact the USCG Section 508 Program Management Office (PMO), Commandant (CG-69) for more assistance (Section.508@uscg.mil).
10. PERFORMANCE MEASUREMENT. The USCG Section 508 Coordinator will comply with the DHS Dashboard reporting requirements and Scorecard to assess data from the Section 508 compliance process, organizational assessment survey, and undue burden and national security exception claims.
11. SECTION 508 ROLES AND RESPONSIBILITIES. Coast Guard Offices and individuals responsible for implementing Section 508.
- a. The Assistant Commandant for C4&IT (CG-6) shall be responsible for all aspects of this Instruction and shall:
 - (1) Ensure respective USCG offices adhere to USCG EIT accessibility policies (described in this Instruction), standards, and guidance;

- (2) Establish a USCG National Section 508 Coordinator and ensure that he/she has the requisite training, expertise, and time to perform the tasks associated with this duty;
 - (3) Ensure that Section 508 compliance solutions conform to the appropriate IT security requirements commensurate with the sensitivity of the system and information contained, and
 - (4) Provide oversight and guidance to ensure all enterprise applications are in compliance with Section 508 requirements.
- b. The Director of Enterprise Strategy, Management & Doctrine Oversight, Commandant (CG-095) shall ensure that all non-IT organizations within USCG adhere to Section 508 EIT Accessibility Standards regarding office equipment not traditionally overseen by the USCG CIO (such as VHS and DVD players, copiers, fax machines, and other items) unless an exception applies.
- c. Commandant (CG-69) will report directly to the USCG CIO, Commandant (CG-6) and indirectly to the Director of DHS Office of Accessible Systems and Technology (OAST), and shall:
- (1) Provide USCG vision and direction for ensuring that EIT procured, developed, maintained, or used by USCG is accessible to employees and customers with disabilities;
 - (2) Establish USCG policies, procedures, and practices to ensure that EIT procured, developed, maintained, or used is accessible to USCG employees and customers with disabilities;
 - (3) Provide programmatic and technical assistance to USCG offices regarding implementation of Section 508;
 - (4) Ensure that USCG offices acquire and use appropriate and up-to-date Section 508 related educational materials;
 - (5) Support all levels of USCG, and personnel approving or posting web content by cooperatively developing, selecting, and conducting appropriate educational activities and resources;
 - (6) Provide technical assistance to USCG related to investigating Section 508-related complaints;
 - (7) Evaluate and report USCG's programmatic and technical compliance to the Assistant Commandant for C4&IT (CG-6) and to DHS OAST;
 - (8) Provide leadership for advocating EIT accessibility across Government;
 - (9) Participate in DHS OAST, interagency, industrial and professional organizations related to Section 508 activities;
 - (10) Advocate for the inclusion of Section 508 in the USCG budgets and strategic planning activities;

- (11) All USCG National Security requests will be processed through the USCG National Section 508 Coordinator to request DHS OAST certification, and
 - (12) Provide direction on how to receive technical assistance and guidance to the USCG Civil Rights Directorate regarding reasonable accommodations.
- d. USCG National Section 508 Coordinator, Commandant (CG-69) shall:
- (1) Ensure compliance with USCG EIT accessibility policies and procedures;
 - (2) Participate as a member of the DHS Section 508 Advisory Council;
 - (3) Provide programmatic and technical assistance to respective USCG offices regarding the procurement, development, maintenance, and use of accessible EIT as required by Section 508;
 - (4) Evaluate and report programmatic and technical compliance within respective USCG offices to OAST and appropriate Government oversight agencies;
 - (5) Participate in USCG, interagency, and industrial and professional organizations related to Section 508 activities;
 - (6) Provide technical assistance and guidance to USCG personnel approving or posting Web content regarding accessible Web design;
 - (7) Supervise the review and approval of Web content for compliance with Section 508 EIT Accessibility Standards;
 - (8) Ensure all office policies and procedures related to EIT accessibility are in agreement with DHS EIT policies and procedures;
 - (9) Provide technical assistance to the USCG Civil Rights Directorate and parallel civil rights offices in USCG offices related to investigations of Section 508 related complaints;
 - (10) Review EIT purchase requests claiming an exception, except for those claiming an Undue Burden or National Security (these will be handled by OAST), and
 - (11) Comply with DHS Section 508 Dashboard reporting requirements.
- e. Commandant (CG-63) shall:
- (1) Provide oversight and guidance to ensure all internet, extranet, and intranet portals are in compliance with Section 508 requirements per Ref. (m), and
 - (2) Comply with the DHS Dashboard reporting requirements as they relate to website monitoring and compliance with Section 508 requirements.
- f. The USCG Civil Rights Directorate, Commandant (CG-00H) shall:

- (1) Ensure compliance with Section 508 complaint processes, reporting and tracking requirements within USCG offices. Section 508 complaints shall be processed through Commandant (CG-00H), in accordance with 6 CFR 15 and COMDINST M5350.4 (series);
 - (2) Evaluate the effectiveness of the Section 508 complaint process and provide reports to the USCG Section 508 PMO and appropriate Government oversight organizations;
 - (3) Advocate for compliance with Section 508 and its inclusion in the USCG budget and strategic planning activities, and
 - (4) Ensure that all USCG Equal Employment Opportunity officers/officials are knowledgeable about Section 508 requirements.
- g. The USCG Performance, Training & Education Branch (FC-51), sponsor of Advanced Distributed Learning (ADL) (FC-513) shall work with the USCG Section 508 PMO to ensure USCG produced training and multi-media products conform to applicable technical standards from the Section 508 EIT Accessibility Standards.
- h. The USCG Chief Acquisition Officer, Commandant (CG-9) shall:
- (1) Provide guidance across USCG offices related to acquisitions to ensure compliance with the Section 508 policies described in this document and in accordance with continuing guidance provided by Commandant (CG-69);
 - (2) Provide guidance to USCG procurement offices to ensure procurements of EIT comply with the Federal Acquisition Regulations (FAR) – Subpart 39.2 – Electronic and Information Technology;
 - (3) Provide guidance across USCG offices related to purchase card acquisitions to ensure compliance with the Section 508 policies described in this document and in accordance with continuing guidance provided by Commandant (CG-69), and
 - (4) Provide guidance to USCG financial offices to ensure procurements of EIT paid for using Government purchase cards comply with the Federal Acquisition Regulations (FAR) – Subpart 39.2 – Electronic and Information Technology.
- i. Requiring Officials (including purchase card users) shall:
- (1) Define functional requirements;
 - (2) Select applicable technical standards based upon the EIT Accessibility Standards;
 - (3) Perform market research;
 - (4) Determine if any Section 508 exceptions apply;
 - (5) Select the product or service that best meets the business needs and Section 508 requirements;

- (6) Document results of findings, and
 - (7) Ensure that purchase requests have all appropriate documentation and signatures and are forwarded to contracting officers.
- j. Contracting Officers shall:
- (1) Use the DHS Accessibility Requirements Tool (DART) to generate Section 508 compliance language and ensure the relevant Section 508 compliance language is included in all contractual actions;
 - (2) If an exception is identified, complete the appropriate DHS OAST exception authorization form and submit the form, along with the SOW, PWS, Task Order, etc., to the USCG National Section 508 Coordinator for processing. If the exception is National Security or Undue Burden, the USCG National Section 508 Coordinator will submit the form to DHS OAST for certification;
 - (3) Complete DHS Form 4106 for Market Research if the product is not fully compliant, and
 - (4) Ensure all Section 508 documentation provided with the purchase request is retained for tracking purposes.
- k. Personnel approving or posting web content shall ensure that Web content fully conforms to the Section 508 EIT Accessibility Standards before it is published to the Web. This includes applicable documents and links to Web applications and files.
- l. USCG Judge Advocate General and Chief Counsel, Commandant (CG-094) shall provide legal counsel to the USCG National Section 508 Coordinator related to Section 508 compliance.
12. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. Per the National Environmental Policy Act (NEPA) Implementing Procedures and Policy for Considering Environmental Impacts, COMDTINST M16475.1D, Figure 2-1, #33, the Coast Guard has determined that the development and issuance of the Maintenance Management Policy, COMDTINST 21000.0, is categorically excluded from further NEPA documentation, and a written Categorical Exclusion Determination (CED) is not required.
13. FORMS/REPORTS. The forms referenced in this Instruction are available in USCG Electronic Forms on the Standard Workstation or on the Internet: <http://www.uscg.mil/forms/>; CGPortal at <https://cgportal.uscg.mil/delivery/Satellite/uscg/References>; and Intranet at <http://cgweb.comdt.uscg.mil/CGForms>. For DHS Electronic Forms: <http://dhsconnect.dhs.gov/forms/Pages/default.aspx>.
14. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is not intended to nor does it impose legally-binding requirements on any party. It represents the Coast Guard's current thinking on this topic and may assist industry, mariners, the general public, and the Coast Guard, as well as other federal and state regulators, in applying statutory and regulatory requirements. To the extent it affects members of the public in their

interaction with the Coast Guard, they may suggest an alternative approach for complying with these requirements if the approach satisfies the requirements of the applicable statutes and regulations and may discuss that alternative approach with Coast Guard personnel.

R. E. DAY /s/
Assistant Commandant for Command, Control,
Communications, Computers and Information Technology

- Encl:
- (1) Software Applications and Operating Systems
 - (2) Web-based Intranet and Internet Information and Applications
 - (3) Telecommunications Products
 - (4) Video and Multimedia Products
 - (5) Self Contained, Closed Products
 - (6) Desktop and Portable Computers
 - (7) General Functional Performance Standards
 - (8) Information, Documentation and Support

36 CFR Part 1194.21 Software Applications and Operating Systems

- (a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.
- (b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.
- (c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that assistive technology can track focus and focus changes.
- (d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to assistive technology. When an image represents a program element, the information conveyed by the image must also be available in text.
- (e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.
- (f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.
- (g) Applications shall not override user selected contrast and color selections and other individual display attributes.
- (h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.
- (i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.
- (j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.
- (k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.
- (l) When electronic forms are used, the form shall allow people using assistive technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.

36 CFR Part 1194.22 Web-based intranet and internet information and applications

- (a) A text equivalent for every non-text element shall be provided (e.g., via “alt”, “longdesc”, or in element content).
- (b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.
- (c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.
- (d) Documents shall be organized so they are readable without requiring an associated style sheet.
- (e) Redundant text links shall be provided for each active region of a server-side image map.
- (f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.
- (g) Row and column headers shall be identified for data tables.
- (h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.
- (i) Frames shall be titled with text that facilitates frame identification and navigation.
- (j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.
- (k) A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.
- (l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by assistive technology.
- (m) When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21(a) through (l).
- (n) When electronic forms are designed to be completed on-line, the form shall allow people using assistive technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.
- (o) A method shall be provided that permits users to skip repetitive navigation links.

Enclosure (2) to COMDTINST 5230.60B

(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.

36 CFR Part 1194.23 Telecommunications Products

- (a) Telecommunications products or systems which provide a function allowing voice communication and which do not themselves provide a TTY functionality shall provide a standard non-acoustic connection point for TTYs. Microphones shall be capable of being turned on and off to allow the user to intermix speech with TTY use.
- (b) Telecommunications products which include voice communication functionality shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols.
- (c) Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs.
- (d) Voice mail, messaging, auto-attendant, and interactive voice response telecommunications systems that require a response from a user within a time interval, shall give an alert when the time interval is about to run out, and shall provide sufficient time for the user to indicate more time is required.
- (e) Where provided, caller identification and similar telecommunications functions shall also be available for users of TTYs, and for users who cannot see displays.
- (f) For transmitted voice signals, telecommunications products shall provide a gain adjustable up to a minimum of 20 dB. For incremental volume control, at least one intermediate step of 12 dB of gain shall be provided.
- (g) If the telecommunications product allows a user to adjust the receive volume, a function shall be provided to automatically reset the volume to the default level after every use.
- (h) Where a telecommunications product delivers output by an audio transducer which is normally held up to the ear, a means for effective magnetic wireless coupling to hearing technologies shall be provided.
- (i) Interference to hearing technologies (including hearing aids, cochlear implants, and assistive listening devices) shall be reduced to the lowest possible level that allows a user of hearing technologies to utilize the telecommunications product.
- (j) Products that transmit or conduct information or communication, shall pass through cross-manufacturer, non-proprietary, industry-standard codes, translation protocols, formats or other information necessary to provide the information or communication in a usable format. Technologies which use encoding, signal compression, format transformation, or similar techniques shall not remove information needed for access or shall restore it upon delivery.
- (k) Products which have mechanically operated controls or keys, shall comply with the following:
 - (1) Controls and keys shall be tactilely discernible without activating the controls or keys.

Enclosure (3) to COMDTINST 5230.60B

(2) Controls and keys shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls and keys shall be 5 lbs. (22.2 N) maximum.

(3) If key repeat is supported, the delay before repeat shall be adjustable to at least 2 seconds. Key repeat rate shall be adjustable to 2 seconds per character.

(4) The status of all locking or toggle controls or keys shall be visually discernible, and discernible either through touch or sound.

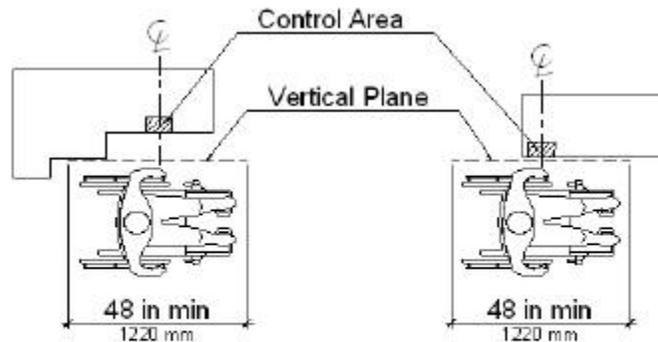
36 CFR Part 1194.24 Video and Multimedia Products

- (a) All analog television displays 13 inches and larger, and computer equipment that includes analog television receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals. As soon as practicable, but not later than July 1, 2002, widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and stand-alone DTV tuners, whether or not they are marketed with display screens, and computer equipment that includes DTV receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.
- (b) Television tuners, including tuner cards for use in computers, shall be equipped with secondary audio program playback circuitry.
- (c) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content, shall be open or closed captioned.
- (d) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.
- (e) Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent.

36 CFR Part 1194.25 Self Contained, Closed Products

- (a) Self contained products shall be usable by people with disabilities without requiring an end-user to attach assistive technology to the product. Personal headsets for private listening are not assistive technology.
- (b) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.
- (c) Where a product utilizes touchscreens or contact-sensitive controls, an input method shall be provided that complies with §1194.23 (k) (1) through (4).
- (d) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.
- (e) When products provide auditory output, the audio signal shall be provided at a standard signal level through an industry standard connector that will allow for private listening. The product must provide the ability to interrupt, pause, and restart the audio at anytime.
- (f) When products deliver voice output in a public area, incremental volume control shall be provided with output amplification up to a level of at least 65 dB. Where the ambient noise level of the environment is above 45 dB, a volume gain of at least 20 dB above the ambient level shall be user selectable. A function shall be provided to automatically reset the volume to the default level after every use.
- (g) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.
- (h) When a product permits a user to adjust color and contrast settings, a range of color selections capable of producing a variety of contrast levels shall be provided.
- (i) Products shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.
- (j) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following:

(1) The position of any operable control shall be determined with respect to a vertical plane, which is 48 inches in length, centered on the operable control, and at the maximum protrusion of the product within the 48 inch length (see Figure 1 of this part).



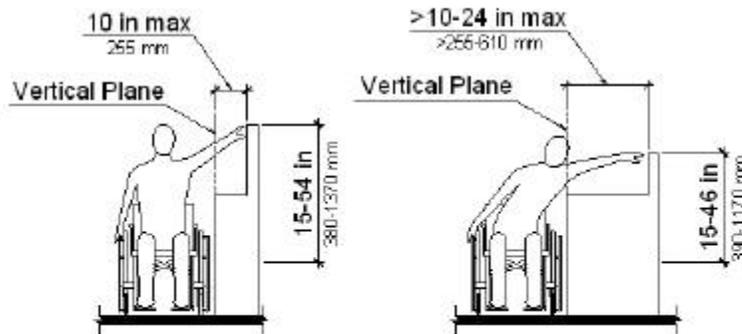
Vertical Plane Relative to the Operable Control

Figure 1

(2) Where any operable control is 10 inches or less behind the reference plane, the height shall be 54 inches maximum and 15 inches minimum above the floor.

(3) Where any operable control is more than 10 inches and not more than 24 inches behind the reference plane, the height shall be 46 inches maximum and 15 inches minimum above the floor.

(4) Operable controls shall not be more than 24 inches behind the reference plane (see Figure 2 of this part).



Height of Operable Control Relative to the Vertical Plane

Figure 2

36 CFR Part 1194.26 Desktop and Portable Computers

- (a) All mechanically operated controls and keys shall comply with §1194.23 (k) (1) through(4).
- (b) If a product utilizes touchscreens or touch-operated controls, an input method shall be provided that complies with §1194.23 (k) (1) through (4).
- (c) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.
- (d) Where provided, at least one of each type of expansion slots, ports and connectors shall comply with publicly available industry standards.

36 CFR Part 1194.31 Functional Performance Criteria

- (a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for assistive technology used by people who are blind or visually impaired shall be provided.
- (b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for assistive technology used by people who are visually impaired shall be provided.
- (c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for assistive technology used by people who are deaf or hard of hearing shall be provided.
- (d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.
- (e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for assistive technology used by people with disabilities shall be provided.
- (f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.

36 CFR Part 1194.41 Information, Documentation and Support

- (a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge.
- (b) End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.
- (c) Support services for products shall accommodate the communication needs of end-users with disabilities.