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U.S. Army Corps of Engineers
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CEHR-E

Regulation
No. 690-1-500

1 June 2022

Civilian Personnel
POSITION MANAGEMENT AND CLASSIFICATION

1. Purpose. This regulation provides human resources (HR) policy guidance, procedures, and criteria for the position management and classification program in the U.S. Army Corps of Engineers (USACE).
2. Applicability. This regulation applies to all USACE elements responsible for the classification and management of civilian positions in the General Schedule (GS) and the Federal Wage System (FWS). This guidance does not apply to positions covered under the Defense Civilian Intelligence Personnel System (DCIPS), Engineer Research and Development Center (ERDC), Laboratory Demonstration Project (ERDC Lab Demo), and executive positions managed by the Department of Army Civilian Senior Leader Management Office.
3. Distribution Statement. Approved for public release; distribution is unlimited.



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Chief of Staff

*This regulation supersedes ER 690-1-500, dated 31 July 2002

SUMMARY of CHANGE

ER 690-1-500

United States Army Corps of Engineers (USACE)

Position Management and Classification

This administrative revision, dated 1 June 2022—

- o Appendix A has been updated from “Position Management Guidelines” to “References”
- o Appendix A reflects updated references
- o Appendix B has been updated from “Position Classification Guides” to “Delegation of Position Management and Classification Authority Guidelines”
- o Appendix C has been updated from “Delegation of Classification Authority” to “OPM Position Classification Standard”
- o Appendix D “Classification of Attorney Positions” has been added
- o Appendix E, “USACE Finance and Accounting Officer Standard Position Description” has been added
- o Appendix F, “USACE Floating Plant Classification and Wage Setting Process”, has been added

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1. Purpose. This regulation provides HR policy guidance, procedures, and criteria for the position management and classification program in USACE.
2. Applicability. This regulation applies to all USACE elements responsible for the classification and management of civilian positions in GS and the FWS. This guidance does not apply to positions covered under the DCIPS, ERDC, ERDC Lab Demo, and executive positions managed by the Department of Army Civilian Senior Leader Management Office.
3. Distribution. Approved for public release, distribution is unlimited.
4. References. References are located in Appendix A.
5. Policy. It is the policy of the Commander, USACE that:
 - a. Civilian positions are structured to facilitate the recruitment and retention of highly qualified individuals to effectively accomplish the mission in the most economical and efficient manner possible and make maximum use of employee skills. Consistent with this policy, managers and supervisors will assign duties in a manner that promotes maximum utilization of manpower resources with an effective and efficient organizational structure.
 - b. Formal position classification guidance and advice will be issued by the Director of HR, Headquarters, U.S. Army Corps of Engineers (HQUSACE), in coordination with appropriate management officials. Questions relating to job evaluation and grade structure will be referred to the servicing Civilian Personnel Advisory Center (CPAC) representatives and/or Human Resource Strategic Advisors (HRSA). The final classification of positions will be determined consistent with Office of Personnel Management (OPM) Position Classification Standards and guidance issued by the Department of Defense (DOD), the Department of the Army (HQDA), HQUSACE, and by those exercising delegated classification authority.
6. Responsibilities.
 - a. HQUSACE. The Commander, USACE, has delegated to the Director of HR staff responsibility for the command position management and classification program. The Director of HR advises HQUSACE, Divisions, Districts, Centers, Laboratories, and activities reporting directly to HQUSACE on the position management and classification program. This includes advice on position management and classification, ensuring consistency in classification, and conducting periodic evaluation of position management and classification program in coordination with the appropriate USACE career program manager(s), and participating in HQDA surveys of USACE activities.
 - b. Staff Principals, MSC Commanders, and Directors.
 - (1) Ensure that position management and classification programs in their headquarters and in

districts and laboratories under their jurisdiction are properly administered and that job evaluations are made in conformance with prescribed standards and procedures. This will include supporting evaluation of position management and classification programs in subordinate activities through command assistance visits or external HR resource evaluation teams.

(2) Ensures that performance elements for all managers and supervisors are written in such a manner that effectiveness in accomplishing position management responsibilities can be clearly evaluated and that managers, supervisors, and other individuals delegated classification authority comply with all provisions of this regulation as well as the provisions of position classification standards.

(3) Serves as the Position Management Officer (PMO) unless that individual chooses to delegate this responsibility. The authority may be re-delegated only to the military or civilian individual who is the next level of authority; this will normally be a deputy or the equivalent. The PMO will make final decisions on position management recommendations and organizational structures where significant disagreements exist. The authority of the PMO does not extend to determinations on the classification of positions unless the PMO is the commander or director or is delegated classification authority.

c. Managers and Supervisors. Managers and supervisors will ensure that Position Descriptions (PDs) accurately reflect mission assignments and ensure proper assignment of employees. PDs will be reviewed each time a position is vacated to ensure its accuracy. With the assistance of HR specialists at the CPAC, managers will maintain familiarity with classification standards covering the major functions under their supervision in order to classify the positions where they are delegated that authority and to understand and explain the basis for classification to subordinates.

d. Human Resources Strategic Advisors. As advisors, HRSAAs exercise staff oversight and provide advisory services and assistance on position management and classification matters in the Headquarters/Division/District. This includes participation in staff assistance visits; interpreting and advising on the application of position management and classification policies, regulations, and procedures; and facilitating resolution of controversial position management and classification issues. In addition, as an advisor, the HRSA assesses management decisions and advises on the personnel implications of the decisions to support successful mission accomplishment.

7. Position Classification.

a. Delegated Classification Authority (DCA).

(1) The use of position classification authority must be in accordance with controlling statutory and regulatory guidelines. Unless otherwise identified in this regulation, DCA is authorized to:

(a) MSC Commanders with the authority to re-delegate to District Commanders;

(b) USACE Staff Principals occupying Senior Executive Service (SES) General Officer (GO) positions (including national positions within their authority), with the authority to redelegate to Directors of Field Operating Activities (FOAs);

(c) Director of ERDC, with the authority to re-delegate to Commanders/Directors of Labs;

(d) USACE Deputy Commanding General (DCG), with the authority to redelegate to Commanders not covered above, and

(e) USACE Chief of Staff (COS) for all others.

(f) This authority may also be re-delegated to properly trained managers and supervisors under the direct supervision of the position with delegated authority.

(g) Delegation to contractors is NOT authorized.

(h) This authority may not be further delegated.

(1) DCA Exercised by Management. Delegation of classification authority to a lower level, as authorized, must be made in writing. Delegation letters must identify each supervisor by title and specify the classification statutory and regulatory responsibilities. Prior to delegation of DCA, supervisors must provide documentation of completed training or must complete training in position classification, and position management legal and regulatory responsibilities (basic position classification), prior to being delegated position classification authority. The respective CPAC will coordinate training and orientation on position management and classification. The authorizing official's designee will maintain local records of training and written delegations. Guidelines and instructions for delegating and exercising position classification authority are detailed in Appendix B.

(2) Classification Authority. Commanders, USACE Staff Principals occupying SES/GO positions, Director of ERDC, USACE DCG and USACE COS may retain classification authority or delegate classification authority to the servicing CPAC. Delegation to the CPAC must be in writing and a copy provided to the HRSA.

(3) Classification Override Authority. Guidelines and instructions for using the classification override authority are detailed in Appendix B. The authority to override the CPAC classification advisories is delegated to:

(a) MSC Commanders;

(b) USACE Staff Principals occupying SES/GO (including national positions within their authority);

(c) Director of ERDC;

(d) USACE DCG, and

(e) USACE COS for all others.

(f) This authority may not be further delegated.

b. Classification of Interdisciplinary Positions. It is the policy of USACE to use all available flexibilities to manage its workforce to achieve optimum utilization. A key USACE talent management strategy is the use of interdisciplinary positions to provide career ladders and afford the opportunity for employees to develop to their maximum potential. In keeping with this philosophy, consideration should be made of when it is most appropriate to use interdisciplinary positions. The scenarios below are presented as examples to facilitate evaluating how and when to use interdisciplinary position classification principles effectively. When professional or non-professional occupational requirements are clearly predominant, the position should be classified to the occupational series which best reflects the predominant work of the organization.

(1) When classifying managerial and supervisory positions over multi-disciplinary work teams, greater emphasis must be placed on delegated managerial and supervisory authority and responsibility, the variety and diversity of programs, projects and/or functions directed, and technical skill and knowledge. These positions require a high degree of managerial ability and sufficient technical knowledge to plan, assign, direct, and review work operations. Interdisciplinary classification may be appropriate to provide the greatest flexibility for managing the work of the organization and providing a clear path for career progression.

(2) When classifying positions in functional areas where multiple disciplines are engaged, commonality exists between the knowledge, skill, ability, education, experience and/or competencies, interdisciplinary position classification principles may be appropriate, e.g., as outlined in career maps in Army career program guidance.

(3) When the work can be performed by employees in more than one occupation based on principles outlined in OPM classification guidance for interdisciplinary positions.

(4) While these examples are not all-inclusive, these provide a framework to approach decision-making on the appropriate use of interdisciplinary classification principles. Both OPM and CHRA have published operational guidance on classifying interdisciplinary positions. Your servicing CPAC representative should be consulted for assistance with classifying interdisciplinary positions at the local level.

c. Classification of USACE Enterprise Organization Positions. HQUSACE Staff Principals occupying a General Officer or Senior Executive Service position are the classification authority for these positions. This authority may be re-delegated in writing to the servicing CPAC of the national organization.

d. Classification of Foreign National Positions. USACE does not have the authority to classify foreign national positions. As this authority and associated procedures vary by country, contact the

servicing CPAC for advice and assistance.

e. Classification of USACE FWS Unique Positions. There are three categories of FWS positions unique to USACE: Lock and Dam, hydroelectric power positions (Power Plant), and Floating Plant.

(1) Lock and Dam operation and maintenance positions.

(a) Position Classification and Grading. Regular FWS job grading standards are used to classify and evaluate these positions.

(b) Pay Plan. OPM established separate pay plan codes for lock and dam operation and maintenance positions: WY, WO, and WA.

(2) FWS Hydropower (Power Plant) positions.

(a) Wage Schedules. USACE operates Federal hydroelectric projects primarily for the purpose of navigation or flood control. The power generated by the hydroelectric plants operated by USACE (surplus to projects) is marketed by the regional power marketing agencies of the Department of Energy (DOE) to both public and private power systems. Salary determination and pay schedules for these positions are determined in accordance with Public Law 97-257 and Public Law 99-661 which state in pertinent part, the laws provide: Without regard to any other provision of law limiting the amounts payable to prevailing wage rate employees, United States Army Corps of Engineers employees paid from Corps of Engineers Special Power Rate Schedules shall be paid, beginning the effective date of each annual wage survey in the region after the date of enactment of this Act, wages as determined by the Department of Defense Wage Fixing Authority to be consistent with wages of the Department of Energy and the Department of the Interior employees performing similar work in the corresponding area. The wage surveys are based on like positions in the region for utilities with similar types of facilities and positions. The DoD Wage and Salary Division conducts wage surveys, establishes the comparable wage rates, and publishes wage schedules in accordance with these laws.

(b) Pay Plan. The pay plan code WB is used for Power Plant positions.

(c) Position Classification and Evaluation. Request for new or revised power plant positions are submitted through CEHR-E for approval by the DoD Wage and Salary Division.

(d) Power Plant positions are not classified since the wage rates are set by individual positions. While OPM FWS position classification standards are not used to establish grade levels and pay rates for these positions, they may be used to assist with describing the type and difficulty of work performed. The request for establishment or revision of these positions must include the rationale for establishing the position to include why existing positions are inadequate; a description of the duties

of the proposed position; and the rationale for the position title, series and level of difficulty.

(3) Floating Plant positions. Floating Plants include self-propelled and non-propelled floating equipment that are used in USACE to conduct construction, operations and Maintenance (revetment work, canal maintenance, or bank stabilization) activities in and along inland navigable waters and coastal waters. Employees working on such floating plant are paid from special USACE Floating Plant pay schedules and are evaluated by reference to standards approved by the Department of Army and published by USACE as described in Appendix V of the OPM FWS Operating Manual. Detailed classification guidance and background information on floating plant positions is found at Appendix.

f. Supplemental Position Classification Guidance. In addition to classification guidance for USACE unique positions, USACE supplemental position classification guides may be issued as appendices to this regulation. These guides will address USACE unique requirements or USACE wide initiatives which facilitate mission accomplishment in broad program/functional areas which are not adequately addressed in existing position classification standards, regulations or other classification guidance issued by OPM, DoD, or HQDA. Any supplemental guidance must clearly demonstrate the relationship to the USACE Campaign Plan and Strategic Human Capital Plan goals. The business case for proposed supplemental guidance must explain how this guidance supports workforce and succession planning, competency management, outreach recruitment initiatives, timely hiring, talent management, and workforce retention. These are critical factors to ensure USACE meets goals to shape the future workforce, align human capital with changing missions, and promote effective balance in terms of building the bench, leveraging existing talent, and achieving diversity.

g. Dual Vacancy Announcement Classification Guidance. Most USACE organizations require multi-disciplined teams to accomplish the mission. In these situations, positions may be classified and recruited to interdisciplinary professional occupational series or administrative series.

(1) Professional and Non-Professional Series - Separate vacancy announcements and PDs must be used to recruit for positions classified in both professional and non-professional series. The duties, knowledges required and specialized experience statement on the announcement must clearly distinguish the difference between the two announcements.

(2) Guidance in paragraph 7b should be followed when classifying interdisciplinary positions.

(3) Some positions, however, are a mix of duties and responsibilities covered by two or more administrative occupational series and classified by more than one standard or guide. Often the appropriate administrative series for these positions is a general series for the administrative occupational group covering the type of work performed. For positions whose duties fall in more than one administrative occupational group, the most appropriate series for the position depends on consideration of a number of factors. When the grade level of the work is the same

in each series, the series can be determined only after considering the paramount qualifications required, sources of recruitment and line of progression, the reason for establishing the position, and the background knowledge required. Where the duties of the position falls into one or more administrative series in the same job family, the appropriate classification may be the -01 series for that job family. For positions where the duties fall in one or more administrative series in different job families, consider the GS-301, GS-340 or similar administrative series if it will best meet the qualifications required, sources of recruitment, and background knowledge required.

8. Classification Appeals and Oral Complaints. Managers and employees must consult with the servicing CPAC representative to obtain advice and assistance. Managers are encouraged to seek resolution to issues regarding the assignment of work, accuracy of PDs and classification of the position at the lowest practical level. However, if a resolution cannot be achieved, managers must remember that it is an employee right to file an appeal or oral complaint and must ensure actions taken comply with regulatory and legal requirements governing these actions.

9. Classification Consistency Reviews. OPM, DoD, HQDA, and USACE may require position classification consistency reviews as a result of position classification appeal decisions issued. A consistency review of identical, similar or related positions for the appealed position, within the organization/department/agency, may be required if there is reason to believe the positions may be classified inconsistent with the appealed position. Specific guidance and instructions will be provided for conducting the consistency review by the organization which requires the review.

10. Fair Labor Standards Act (FLSA). Managers and supervisors have a critical responsibility for accurately documenting employee work assignments in the official PD of record to ensure accurate FLSA determinations. Contact servicing CPAC for additional assistance.

11. Position Management. The CPAC is the proponent for advice and assistance on position management. In accomplishing this function, that office is responsible for providing advice and assistance to management on the effective distribution of supervisory, professional, administrative, technical, clerical, and/or trades duties. Other aspects include advising on supervisory ratios, layering, duplication, and overlap.

Appendix A

References

1. Chapter V of Public Law 97-257, “Corps of Engineers Special Power Rate Schedules,” September 10, 1982
(<https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/512039p.pdf?ver=2019-04-24-141926-427>).
2. Section 1358 of Public Law 99-661, “The National Defense Authorization Act for Fiscal Year 1987,” November 14, 1986
(<https://www.govtrack.us/congress/bills/99/s2638/text/enr>).
3. Classification Under the General Schedule, 5 CFR 511
(<https://www.ecfr.gov/current/title-5/chapter-I/subchapter-B/part-511>).
4. Prevailing Rate Systems, 5 CFR 532
(<https://www.law.cornell.edu/cfr/text/5/part-532>).
5. Reduction in Force, Competitive Level, 5 CFR 351.403
(<https://www.ecfr.gov/current/title-5/chapter-I/subchapter-B/part-351>).
6. U.S. Office of Personnel Management, Introduction to the Position Classification Standards
(<https://www.opm.gov/policy-data-oversight/classification-qualifications/classifying-general-schedule-positions/positionclassificationintro.pdf>).
7. U.S. Office of Personnel Management Federal Wage System Operating Manual, Appendix V
(<https://www.opm.gov/policy-data-oversight/pay-leave/pay-systems/federal-wage-system/>).
8. U.S. Office of Personnel Management Position Classification Appeal and Digests of Significant Classification Decisions and Opinions
(<https://www.opm.gov/policy-data-oversight/classification-qualifications/appeal-decisions/digest/digests-of-significant-classification-decisions-and-opinions/>).
9. Department of Defense (DOD) Instruction 1400.25, Volume 511, and subject: DoD Civilian Personnel Management System: Classification Program.
(https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/140025/140025_vol511.pdf).
10. Department of Defense (DoD) Instruction 5120.39, DoD Wage Fixing Authority – Appropriated Fund and Nonappropriated Fund Compensation Programs
(<https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/512039p.pdf?ver=2019-04-24-141926-427>).
11. Department of Defense (DoD) Acquisition Workforce Personnel Demonstration Operating Guide, Version 3, dated March 8, 2019
(https://acqdemo.hci.mil/docs/AcqDemo_OpsGuideSep2019_final.pdf).

12. Army Regulation (AR) 570-4 (Manpower Management)
(https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/r570_4.pdf).
13. AR 690-300, Civilian Employment, dated 3 April 2019
(https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN4491-AR_690-300-000-WEB-1.pdf).
14. ASA (M&RA) Matrix of Delegated Civilian Human Resources Authorities
(<https://media.defense.gov/2018/May/31/2001925136/-1/-1/1/25.%20ENCLOSURE%20TO%20DELEGATION%20OF%20CHRAS%2002-2017.PDF>).
15. Memorandum, ASA (M&RA), subject: Delegation of Civilian Human Resources Authorities, dated 17 November 1997
16. Civilian Human Resources Agency Manager's Desk Guide to Position Management and Classification, dated March 2017
(<https://www.tradoc.army.mil/wp-content/uploads/2021/10/Managers-Guide-to-Position-Classification.pdf>).
17. U.S. Army Corps of Engineers, Matrix of USACE Delegated Civilian Human Resources Authorities
18. EP 1130-2-510, Hydroelectric Power Operations and Maintenance Policies
(https://www.publications.usace.army.mil/Portals/76/Publications/EngineerPamphlets/EP_1130-2-510.pdf).
19. Delegated Classification Authority and Delegated Classification Override Authority Policy Memorandum, dated 1 Feb 2021
(<https://usace.dps.mil/sites/KMPHR/CPD%20Repository/Forms/AllItems.aspx?csf=1&web=1&e=0gmwLj%2F&FolderCTID=0x0120008F4F95AC9CB482498A6282FA44F5DDBD&id=%2Fsites%2FKMP%2DHR%2FCPD%20Repository%2FClassification%2D%20Compensation%2FClassification%2FDCA%20Override&viewid=929113c2%2Daca1%2D4967%2Db4c3%2D664edeabef78>)
20. Memorandum, DAEN-PEC-P, Classification Guidance for Park Ranger Positions in the U.S. Army Corps of Engineers, 4 May 1987.

Appendix B

Delegation Of Position Management and Classification Authority Guidelines and Instructions

B-1. Introduction.

(4) Purpose. This document provides guidelines and instructions for the delegation and exercise of position classification authority within the U. S. Army Corps of Engineers (USACE).

b. Applicability. This guidance is applicable to all USACE elements having responsibility for the classification and management of civilian positions in the General Schedules (GS), Federal Wage System (FWS) and those covered under the Acquisition Workforce Personnel Demonstration Project. This guidance does not apply to positions covered under the Defense Civilian Intelligence Personnel System (DCIPS), Engineer Research and Development Center (ERDC) Laboratory Demonstration Project (ERDC Lab Demo), and executive positions managed by the Department of Army Civilian Senior Leader Management Office.

c. Exclusions. The Department of Defense Wage Setting Division retains the authority to establish, change, or delete positions paid from regional power rate schedules. Follow the guidelines contained in this regulation to establish or reclassify power rate schedule positions.

d. Lowest Practical Level. If Commanders/Activity Directors delegate classification authority, that authority will be delegated to the lowest organizational level where skills, experience, knowledge, and flexibility exist for supervisors to make significant decisions affecting expenditure of civilian personnel resources. This authority may also be delegated to properly trained managers and supervisors. Delegations must follow the chain-of-command and should be reviewed annually. Commanders/activity directors retain the discretion to subsequently withdraw authorities and re-delegate to higher levels than previously delegated, consistent with changing mission requirements and availability of funds. Authorities must be delegated in writing.

B-2. Authorities.

(5) Re-delegation of Authority. Should authorized officials choose not to retain or delegate position classification authority, the authority to classify civilian positions may be re-delegated to the appropriate Civilian Personnel Advisory Center (CPAC). This delegation must be in writing and a copy provide to the HRSA.

b. Training. Military and civilian supervisors, including directors and senior managers, must be trained and oriented on all position classification authorities and responsibilities prior to delegation of authority. Managers and supervisors will coordinate training with CPACs to be scheduled and conducted on a periodic basis to assure that all supervisors have the opportunity to attend. Supervisors will not be delegated position classification authority until they have completed appropriate training.

c. Withdrawal of Authority. When an internal or external review reveals serious deficiencies in position classification, all or any part of the authority may be withdrawn. During the period of withdrawal of authority, the higher headquarters will take such measures as are necessary to remedy the deficiencies noted. Re-delegation of authority will be made when the higher headquarters commander is satisfied that the responsible official of the activity has developed and implemented corrective measures for the proper exercise of job evaluation authority.

B-3. Responsibilities. HQ/Divisions/Districts/Field Operating Activities.

(6) If classification authority is delegated:

(7) Delegate and exercise position classification authority in accordance with the guidelines contained in this ER.

(2) Assure accountability is properly established for position classification.

(8) Take appropriate action to correct any abuse or misapplication of position classification.

(9) Assure obligations to recognize labor organizations, as required by 5 U.S.C. Chapter 71, are fully met.

b. The CPAC will:

(10) Provide continuing advice and guidance to the commander and supervisors consistent with OPM, DOD, HQDA, and HQUSACE requirements, regarding execution of the classification program.

(2) Provide advice and assistance on modifying supervisory performance standards/Officer Evaluation Report duty descriptions and performance objectives to reflect accountability for position classification authorities.

(11) Coordinate training and orientation for the commander and supervisors on position management and classification.

(12) Provide classification advisories to assist supervisors in the application of OPM position classification standards and job grading standards.

(13) Provide periodic feedback to the commander/activity director, or the

commander/activity director's designee, on trends in position classification. Feedback will include recommendations for corrective action, as required.

c. Managers/supervisors will:

(14) Correctly classify positions in accordance with appropriate position classification standards, and OPM, DoD, HQDA, and USACE guidance governing the application of position classification appeal decisions and *Digest* decisions, giving full consideration to CPAC classification advisories.

(2) Fulfill responsibilities to recognized labor organizations under 5 U.S.C. Chapter 71 and appropriate negotiated agreements.

(15) Explain to employees the reasons for the classification of their positions and advise them of their appeal rights if requested.

(16) Consult with HRSAs on controversial issues.

(17) Provide assistance to HRSAs when conducting Command reviews of the Classification Program.

B-4. Position Management and Classification.

(18) General.

(19) Delegation of position classification authority enhances the personnel management function and accountability of line supervisors by providing maximum control over the grades and position structure of their organizations consistent with classification policies and standards. In addition, this delegation increases supervisors' knowledge of the classification system and makes the system more responsive to the needs of management.

(2) A key principle of delegation of position classification authority is that the supervisor's authority does not exceed that of the commander/activity director. Classification standards govern and prior decisions by OPM, DOD, HQDA, and HQUSACE on substantially identical, similar or, related positions may not be overruled.

(20) Prior decisions by OPM are to be applied as provided below:

(a) OPM classification appeal certificates are issued under authority of 5 U.S.C. 5112. An appeal certificate is the Government's final administrative decision on the classification of the position, and

no further appeal can be made. The final OPM appeal decision is binding and controlling for the appealed position. Final OPM appeal decisions MAY NOT be overruled except as follows:

If the application of a newly issued OPM standard or guide would change the classification of the position; or

The job changes significantly. In the event a position changes, the agency must exercise original classification authority; that is, write a new PD which reflects new responsibilities, and classify accordingly.

(b) OPM issues *Digest of Significant Classification Decisions and Opinions (Digest)*. These decisions provide interpretive guidance for applying position classification standards and are for Federal-wide application. Position classification evaluations must clearly demonstrate how the evaluation criteria applied in the *Digest* decision is fully met for the position being evaluated. OPM appeal decisions can be found at <https://www.opm.gov/policy-data-oversight/classification-qualifications/appeal-decisions/digest/digests-of-significant-classification-decisions-and-opinions/>.

b. Accountability.

(1) The Staff Principal/Commander/Activity Director is ultimately responsible for the integrity of the position classification program and they are expected to ensure procedures are in place which will keep them aware of trends and special circumstances associated with classification decisions by subordinate supervisors, particularly those cases which may (1) be precedent setting in nature, (2) result in inconsistent grading when compared to substantially identical positions in the organization, or (3) disrupt sound alignment of grades. Precedent setting cases should be discussed with the commanders/director peers if there may be an impact on other commands. Failure to comply with legal and regulatory requirements may result in withdrawal of the commander/activity director's position classification authority.

(2) Performance objectives of civilian and military supervisors will reflect the accountability which is inherent in the delegation of position classification authority. For civilian supervisors, position classification authority will be included in the performance objectives. For military supervisors, classification authority will be included in the duty description in the Officer Efficiency Report (OER) and the OER Support Form. In rendering performance appraisals and OERs, raters will give full consideration to the performance of supervisors in exercising classification authority.

c. Requirements.

(1) Supervisors will complete appropriate training for position classification and position management comparable to the HQDA program of instruction for position management skills and principles (basic position classification), prior to being delegated position classification authority.

(2) Supervisors may not classify their own position. Classification of subordinate positions which will result in an upgrade of the supervisor's position must be approved by an appropriate official at a higher level in the chain of command.

(3) Classification authority will be delegated to a supervisor by name. The delegation letter should outline specific budget, classification, statutory and regulatory responsibilities. A sample letter is included in this Appendix.

(4) Position management guidelines contained in AR 570-4, Manpower Management will be followed when establishing positions.

(a) As a general rule, supervisory positions should not be established to direct fewer than 14 military or civilian employees. However, workload, span of control, and geographical dispersion should be considered in this ratio.

(b) The use of deputies will be limited to circumstances where the military or civilian head of an organization is frequently absent on official duties (and no other subordinate can serve in an acting capacity) or where the workload of the military or civilian head justifies the additional position.

(5) Review and reduce the number of deputy and assistant positions. Encourage empowerment of individual team members. Care should be exercised when establishing full time deputy positions. Generally, organizations of less than 40 employees do not warrant a full-time deputy unless special circumstances exist. For example, an organization with 25 - 30 employees might need a deputy if there were no lower-level supervisors.

d. Procedures.

(1) Supervisors are encouraged to consult informally with CPAC specialists to discuss organization and position structures and other position management, classification, and personnel issues prior to submission of requests for personnel action.

(2) Supervisors with delegated classification authority should follow procedures established locally or by the servicing CPAC when submitting requests for position classification actions. The CPAC will provide advisory position classification determinations which give the title, series, and grade for the position in situations where further consideration by commanders or managers is needed.

(3) Disagreements on the content of proposed PDs will be resolved within the management chain. Staff Principals/Commanders/activity directors retain final decision-making authority for actions which cannot be resolved between the CPAC and managers/supervisors. This authority may be re-delegated to one principal assistant with full line authority to discharge their functions on a

district/field activity wide basis.

(4) The CPAC will determine eligibility for environmental differential, hazard pay differential, and other premium pay and will determine Fair Labor Standards Act (FLSA) designation, assign competitive levels and maintain registers, and accomplish other administrative tasks associated with the processing of classification actions.

e. Withdrawal of Classification Authority.

(1) Classification authority may be withdrawn where serious program deficiencies are identified and remain uncorrected. A corrective plan of action must be approved by Divisions for districts, and HQUSACE for Divisions and field activities. If authority is withdrawn, the corrective plan of action must be implemented prior to having authority restored. The plan of action must require re-training of supervisors prior to restoration of classification authority. Restoration of authority will be granted upon receipt of findings which indicate deficiencies have been corrected. The servicing CPAC will be immediately notified if classification authority is withdrawn from a command or activity and when it is restored.

(2) Division/District/Field Operating Activities. Periodically, commanders should compare current data with baseline program data to develop trend lines for future program assessment of position management and classification. Trends and statistical data should be periodically updated. It is expected that trends will show a regular pattern of fluctuation due to the nature of the mission of the Corps. These normal fluctuations should not require further investigation. Marked or sharp increases and decreases warrant further study but are not absolute indicators of program deficiencies.

B-5. Classification Overrides.

a. Requirements.

(1) The use of classification override authority may only be used in the rarest of situations when there is compelling rationale based on sound classification principles and governing standards. Classification advisories must be seriously considered to ensure potential implications to the enterprise and employees are assessed.

(2) Prior to the approval of a classification override, approving officials must coordinate with the Human Resource Strategic Advisor (HRSA) and the CPAC. Approving officials must provide a comprehensive, written rationale when using the classification override authority. At a minimum, the supporting justification must include: 1) Explanation of the override directly related to the classification standard(s), including the background of position, unique position features, and any additional information which supports the override decision; 2) Interpretation of the position classification standard(s) for the position being evaluated; 3) Organization Charts; and 4) Mission and Organization Functional Statements. Complete copies of the approved override package will be sent through the servicing HRSA to HQ USACE, CEHR-E.

(3) The use of DCA and classification overrides is subject to higher level review. Classification program reviews occur periodically and may be conducted by HQUSACE, Department of Army, Department of Defense, and/or the Office of Personnel Management (OPM). Improper use of the classification override authority may have consequences, such as immediate changes to grades of incumbered positions and revocation of classification authority. Positions classified incorrectly create additional financial expenses for the Enterprise. If the classification standard provides clearly defined illustrations (e.g., with reporting levels and accountability of positions), then there is no flexibility to alter the position and no option to override the current classification. There is also no authority to deviate from the existing factors included in the OPM Classification Standards.

(4) CEHR-E is responsible for the oversight of position classification program. Classification overrides will be tracked and monitored on an ongoing basis. CEHR-E will partner with staff from the Civilian Human Resources Agency (CHRA) to address and resolve issues or concerns.

Sample Delegation Memorandum

OFFICE SYMBOL

DATE

MEMORANDUM FOR (Division or Office Chief, etc.)

SUBJECT: Delegation of Position Classification Authority

You are authorized to classify civilian positions under your supervisory control to the appropriate pay plan, title, series, and grade. This delegation carries with it the responsibility to assure that all such classifications made by you are in accordance with Title 5, U.S. Code, governing Office of Personnel Management (OPM) position classification standards, Department of the Army (DA) and HQUSACE classification guidance, and OPM, DA or higher echelon decisions resulting from appeals and advisories. This authority does not extend to your own position. In addition, classification of subordinate positions that would result in an increase to your own grade must be approved by the Commander/Activity Director, or if at that level the Division Commander.

Your performance evaluation will reflect your responsibility for executing position classification and budget authority.

This delegation of authorities is effective _____. This delegation will be terminated if you leave your position, if you fail to execute this authority properly, or as required by the annual funding situation, or other extenuating circumstances.

COMMANDER'S SIGNATURE BLOCK

GENERAL SCHEDULE

SUPERVISORY GUIDE

(GSSG)

SUPPLEMENTED BY THE:

DEPARTMENT OF DEFENSE (DOD)
SUPPLEMENTARY GUIDANCE FOR THE
GENERAL SCHEDULE SUPERVISORY GUIDE (GSSG)
24 June 1993

DEPARTMENT OF ARMY
IMPLEMENTING INSTRUCTIONS FOR
THE GENERAL SCHEDULE SUPERVISORY GUIDE (GSSG)
30 June 1993

HQUSACE IMPLEMENTING INSTRUCTIONS
THIRD REVISION
10 JULY 00

PURPOSE OF THE GUIDE (DOD)

This policy guidance supplements and is used in conjunction with the Office of Personnel Management's (OPM) General Schedule Supervisory Guide (GSSG), TS-123, dated April 1993. It provides uniform clarification for classifying supervisory and managerial work to facilitate consistent DoD-wide application.

Department of Army

The following is a series of questions and answers to issues frequently raised as they relate to the new General Schedule Supervisory Guide (GSSG) are incorporated throughout the text of this document. The answers represent Department of the Army interpretation of the GSSG. As further OPM explanations, advisory opinions and appeal decisions become available, these responses will be appropriately revised. Attached is a suggested GSSG job evaluation summary form for your consideration.

HQUSACE IMPLEMENTING INSTRUCTIONS THIRD REVISION

The following guidance represents Corps of Engineers interpretation of the GSSG as it pertains to HQUSACE and all subordinate elements. It is not intended to duplicate guidance provided by DOD and DA. This is a revision of the guidance published 9 December 1993, 10 August 1995, and 4 September 1998. This revision is based on the DOD CPMS memo dated 24 May 2000. Significant changes are highlighted.

GENERAL GUIDANCE:

With the emphasis placed on time percentages for determination of coverage by the GSSG and determination of base level, accuracy of time percentages for duty paragraphs is very important. Time percentages may make the difference in grade levels.

For positions where supervisory duties are grade controlling, a job description must either have an addendum describing the six GSSG factor level descriptions or a new job description be written in the factor format. With this information available in the job description, an evaluation summary form will be sufficient for evaluation documentation.

HQDA has determined that the Corps does not meet the “agency” criteria in the standard. Therefore, the Corps is considered a MACOM for purposes of applying this standard.

GUIDANCE ON JOB DESCRIPTION DEVELOPMENT

QUESTION #18: Will supervisory position descriptions need to be rewritten upon initial application of GSSG?

No. Army policy states that job descriptions will be in a format required by the grade controlling standard. OPM personnel have said that a specific format for positions evaluated by GSSG is not required. However, it is easier to evaluate a position if the description and the standard are compatible. A position subject to adjudication through the classification appeal process must include sufficient information for evaluation purposes.

QUESTION #19: If a supervisory position description is rewritten, what is the format for writing job descriptions that include both supervisory duties and nonsupervisory duties covered by an FES standard?

The grade controlling duties will dictate the format to be used. If the grade controlling duties are in FES format, the FES factors will be included in the position description. If the supervisory duties are grade controlling, the six GSSG factors will be listed in the position description.

QUESTION #21: Is an evaluation statement required when classifying a supervisory position?

The Department of the Army does not require that evaluation statements be written. However, the position description should include sufficient information for evaluation. An optional evaluation summary form is attached.

GENERAL SCHEDULE SUPERVISORY GUIDE

INTRODUCTION

This guide provides evaluation criteria for determining the General Schedule (GS or GM) grade level of supervisory positions in grades GS-5 through GS-15. It also contains criteria for evaluating managerial responsibilities that may accompany supervisory responsibilities in this range of grades. However, the guide is not appropriate for evaluating managerial positions that do not include the accomplishment of work through the supervision of others or that do not require technical competence related to the work directed.

This guide employs a factor-point evaluation method that assesses:

- Program Scope and Effect
- Organizational Setting
- Supervisory and Managerial Authority Exercised
- Personal Contacts
- Difficulty of Typical Work Directed
- Other Conditions

General classification concepts, principles, and policies, such as those in the Introduction to the Position Classification Standards, apply to the classification of supervisory positions.

This guide supersedes the Supervisory Grade Evaluation Guide (SGEG), issued in 1976, and the Draft Grade Evaluation Guide for White Collar Supervisors issued in 1991.

STATEMENT OF COVERAGE

Use this guide to grade GS/GM supervisory work and related managerial responsibilities that:

- require accomplishment of work through combined technical and administrative direction of others; and

QUESTION #3: What is intended by the technical direction of others?

The Introduction to the Position Classification Standards and Exclusion No. 6 of the

GSSG exclude positions that do not require technical competence over the work directed. The supervisor need not be as skilled in the work as all subordinates, but must have sufficient technical knowledge to plan, assign, direct, and review work operations of the unit. The need for the supervisor to possess specific technical knowledge is generally strongest at the first line where employees are supervised directly. Although need for some type of technical skill persists throughout successively higher echelons of supervision and management, the nature of technical knowledge required becomes necessarily more general and diffused due to the broader variety of work and occupations directed. Technical direction is much more intense at the first line than it is at higher echelons.

- constitute a major duty occupying at least 25 percent of the position's time; and
- meet at least the lowest level of Factor 3 in this guide, based on supervising Federal civilian employees, Federal military or uniformed service employees, volunteers, or other noncontractor personnel. (Work performed by contractors is considered in applying the grading criteria within each factor of this guide, provided the position first meets the coverage requirements above based on supervision of noncontractor personnel.)

This guide applies to the Office of the Secretary of Defense(OSD); the Military Departments (including their National Guard and Reserve Components); the Chairman, Joint Chiefs of Staff and Joint Staff; the Inspector General of the Department of Defense (IG, DoD); the Defense Agencies and DoD Field Activities; and the OSD Director of Administration and Management.

QUESTION #1: Is there a minimum number of employees the position must supervise to apply the GSSG?

No. The GSSG does not use numbers of employees as a threshold for application. However, the GSSG cannot be applied unless a position spends a minimum of 25% of its time supervising.

QUESTION #2: Do positions meet the basic coverage of the GSSG when less than 25% of the time is spent on supervisory tasks but performing a combination of supervisory and managerial tasks does meet the 25% requirement?

The intent of GSSG coverage is met if the managerial responsibilities (see Questions 6 and 7) exercised are directly related to the work supervised and, in combination with supervisory duties, are performed 25% of the time.

EXCLUSIONS

The following kinds of positions are excluded from the coverage of this Guide:

1. Positions with less than the minimum supervisory authority described at Level 3-2 of Factor 3 in this Guide. The work of such positions (e.g., leaders over one-grade interval clerical or technical work or two-grade interval administrative or professional work) is graded through reference to other guides or standards, such as the General Schedule Leader Grade-Evaluation Guide.
2. Supervisory positions that have, as their paramount requirement, experience in and knowledge of trades and crafts to perform their primary duties. Such positions are covered by the Federal Wage System (FWS), and are evaluated by application of the FWS Job Grading Standard for Supervisors.

NOTE: A supervisory position over FWS employees, including some at production, maintenance, and overhaul facilities, may be properly classified to a GS series if its primary supervisory duties do not require experience in, and knowledge of, trades and crafts.

3. Positions with project or program management responsibility (e.g., matrix management, financial management, or team leader duties) that do not directly supervise the work of a recognizable work force on a regular and recurring basis. Evaluate such positions through reference to appropriate standards for the occupation involved or guides such as the Equipment Development Grade Evaluation Guide. (Similar positions with continuing supervisory responsibilities that meet the minimum requirements for coverage by this guide may be graded using this guide provided due care is taken to avoid crediting direction of the same work to supervisors in different chains of command.)
4. Positions with oversight responsibilities over only the work of private sector contractors. Evaluate such positions using the appropriate nonsupervisory standards or guides for the occupations involved.
5. Positions in which supervisory work is carried out only in the absence of another employee or is temporary, short term, and nonrecurring.
6. Positions requiring management skills alone, that is, positions which do not require either technical supervision of employees in specific occupations or competence in a specialized subject matter or functional area.

QUESTION #6: Can the GSSG be used to classify managerial positions?

Yes, however, the position must also perform supervisory responsibilities and the combination of supervisory and managerial duties must occupy at least 25% of the position's time. Positions requiring management skills alone are excluded under Exclusion 6 in the GSSG.

SERIES DETERMINATION

Positions graded by this guide will continue to be classified in the most appropriate occupational series in accordance with instructions in OPM's Introduction to the Position Classification Standards, occupational definitions in the Handbook of Occupational Groups and Series, and amplifying material in published classification standards.

DEFINITIONS

The following definitions are included solely for the purpose of applying the criteria in this guide. For ease of use they are grouped into two sections: Organizational Definitions and Other Definitions.

ORGANIZATIONAL DEFINITIONS

AGENCY - An Executive or military department as specified by 5 U.S.C. 101, 102, and 5102, which has primary authority and responsibility for the administration of substantive national programs enacted by Congress; a comparable independent agency; or a large agency next below the Department of Defense with worldwide missions and field activities, multibillion dollar programs or resources to manage, and major mission(s) directly affecting the national security. The head of an agency is usually appointed by the President with the advice and consent of the Senate. For example, the Departments of Labor, Health and Human Services,

Agriculture, Army, Navy, Air Force, the General Services Administration, the National Aeronautics and Space Administration, the Office of Personnel Management, and the Defense Logistics Agency are Agencies for purposes of this guide.

In addition, where 5 or more of the following conditions apply, an activity next below departmental level may be considered as equivalent to this definition for purposes of applying this guide: (1) the activity comprises or manages more than half of a cabinet level department's resources; (2) the activity has an international mission, and/or numerous Nationwide and worldwide field offices; (3) the activity manages multibillion dollar funds accounts typically separate from normal, departmental budgets (e.g., Social Security trust

funds, IRS collections); (4) the activity deals directly with Congress on major budgetary, program, or legislative matters affecting large segments of the population or the Nation's businesses, or both; (5) the activity head is appointed by the President with the advice and consent of the Senate; (6) the activity exercises special statutory powers such as a Nationwide, quasi-judicial function affecting major industries or large segments of the population; (7) the activity manages directly delegated or statutorily assigned programs that have an impact which is Governmentwide or economywide and that receive frequent, intensive, congressional and media scrutiny.

QUESTION #4: Which commands in Army meet the optional definition for Agency?

Commands must request approval to use the optional "agency" definition. Each command would be required to present its case for agency status by meeting a minimum of 5 of the 7 conditions listed in the optional definition for agency. The request for agency status, along with supporting documentation, will come through command channels to DA to be forwarded to the Office of the Chief of Staff of the Army for approval.

Wherever agency is used in this guidance, the reference is to DA. For those commands identified by DA as an agency, specific guidance will be provided. All other commands will consider Army as the agency.

QUESTION #5: How is the serviced population for a position determined?

Only positions directly affected by the position under evaluation are counted. For example, counting serviced population for the Director of Personnel and Community Activities (DPCA) will include only those youth, military personnel, retirees, etc. actually receiving services. Potential customers to whom services are available but not provided are not included in the serviced population. Most service organizations generally maintain records for budget purposes that will show services provided and to whom.

BUREAU - An organizational unit next below the agency level (as defined above) which is normally headed by an official of Executive Level IV or V, or Senior Executive Service (SES) rank, or the equivalent. It is a component of a civilian agency directed by an appointed executive who reports to the Agency Director or the Director's immediate staff. Examples of bureaus include: the Bureau of Labor Statistics (Department of Labor) and the U. S. Forest Service (Department of Agriculture).

MAJOR MILITARY COMMAND - A military organization next below the Departments of Army, Air Force, or Navy and headed by a flag or general officer who reports directly to the agency headquarters. It is the bureau equivalent in a military department. Examples are: the Air Training Command (USAF), the Army Materiel Command (USA), and the Naval Sea Systems Command (USN).

MAJOR MILITARY COMMAND. To be considered a major military command, an organization must not only meet the basic criteria stated in the definition, but must also consist of a headquarters organization and formally established subordinate field activities. This organizational level does not apply to State National Guard organizations.

MULTI-MISSION MILITARY INSTALLATION - A large complex multi-mission military installation is one which is comparable to one of the two following situations:

(1) A large military installation (including a military base with only one or a few major missions) or group of activities with a total serviced or supported employee-equivalent population exceeding 4000 personnel, and with a variety of serviced technical functions. These personnel are directly affected by, but not supervised by, the position under evaluation. Federal civilian and military employees, estimated contractor personnel, volunteers, and similar personnel may be used to derive the population total; non-employed personnel such as dependents are significant only if directly impacted by the program segment and work directed.

(1) Large. Consider the terms "directly affects, directly impacts, and directly supports" as interchangeable when counting the total serviced or supported employee-equivalent population. The population (military and/or civilian) may be concentrated in one facility or located in a group of activities. "Supported employee-equivalent population" measures people who actually receive services, not the population potentially eligible for services. Support activities within the same organization/installation, or equivalent, often serve different sized populations; consequently, supervisors of those support activities may appropriately receive different credit for the employee-equivalent population they directly serve. When appropriate, the hours worked by National Guard Drill Status Guard Members on Annual Training (AT) or on man days may be counted as full-time equivalents to determine whether the serviced employee-equivalent population exceeds 4000.

(2) A complex, multi-mission installation or a group of several organizations (directly supported by the position under evaluation) that includes four or more of the following: a garrison; a medical center or large hospital and medical laboratory complex; multi-million dollar (annual) construction, civil works, or environmental cleanup projects; a test and evaluation center or research laboratory of moderate size; an equipment or product development center; a service school; a major command higher than that in which the servicing position is located or a comparable tenant activity of moderate size; a supply or maintenance depot; or equivalent activities. These activities are individually smaller than the large installation described in the preceding paragraph.

(2) Complex. To determine equivalent activities, count each diverse mission that imposes additional complexities upon the position providing services as one of the four conditions. If an installation has two diverse missions, count as two conditions toward the "complex" criteria on page 5 of the GSSG. Additional examples are provided below.

(a) Organization(s) served provide contract administration service for multi-million dollar contracts for development or production of major weapons systems, subsystems, and components.

(b) Organization(s) served include any of the following, or equivalent, types of activities: Army garrison, Air Force base, Naval station, or equivalent host activity that provides a variety of support services to the tenants of an installation; military service academy (e.g., Army War College, U. S. Military Academy, U. S. Air Force Academy, Navy Postgraduate School, Industrial College of the Armed Forces, U.S. Coast Guard Academy).

MAJOR ORGANIZATION - An organizational unit located next below bureau or major military command level and headed by an official of SES rank, GM-15, or GM-14, or the civilian or military equivalent. For example, a line, staff, or program office next below bureau level, the head of which reports directly to the Bureau Director; or a comparable office or directorate which is next below a major military command, the director of which reports directly to the commander or Director of the major command. At agency headquarters, major organizations include the offices of the heads of major staff functions at the agency level (e.g., Agency Personnel Directorate, Agency Budget Directorate, Agency Logistics Directorate, and Agency Directorate of Administrative Services), and major line organizations, the heads of which report directly to an Assistant Secretary or other office next below the Secretary of the Agency.

MAJOR ORGANIZATION. A field installation whose commander reports directly to a major military command, as defined on page 4 of the GSSG, also qualifies as a major organization.

ORGANIZATIONAL UNIT - This is a generic term for purposes of this guide and refers to any component, subdivision, or group of employees that is directed by a supervisory position.

OTHER DEFINITIONS

PROGRAM - The mission, functions, projects, activities, laws, rules, and regulations which an agency is authorized and funded by statute to administer and enforce. Exercise of delegated authority to carry out program functions and services constitutes the essential purpose for the establishment and continuing existence of an agency. The focus of a program may be on providing products and services to the public, State and local government, private industry, foreign countries, or Federal agencies. Most programs have an impact or effect which is external to the administering agency. In addition, comparable agency wide line or staff programs essential to the operation of an agency are considered programs in applying this guide; the impact of these programs may be limited to activities within one or a few

Federal agencies.

A program may be professional, scientific, technical, administrative, or fiscal in nature. Typically, programs involve broad objectives such as: national defense; law enforcement; public health, safety, and well-being; collection of revenue; regulation of trade; collection and dissemination of information; and the delivery of benefits or services. However, specialized or staff programs may be considerably narrower in scope (e.g., merit systems protection; nuclear safety; and agencywide personnel or budget programs). Programs are usually of such magnitude that they must be carried out through a combination of line and staff functions.

MAJOR MILITARY FUNCTION - The military equivalent of a civilian program, e.g., development of a major weapons system such as the Trident submarine, or an ongoing function such as defense intelligence, when such long range or continuing functions are otherwise comparable to a program, as defined above.

PROGRAM AND MAJOR MILITARY FUNCTION. "Program" and "major military function" as defined in the GSSG are interchangeable.

PROGRAM SEGMENT - This is a generic term for purposes of this guide and refers to any subdivision of a program or major military function.

DEPUTY - A position that serves as an alter ego to a manager of high rank or level and either fully shares with the manager the direction of all phases of the organization's program and work, or is assigned continuing responsibility for managing a major part of the manager's program when the total authority and responsibility for the organization is equally divided between the manager and the deputy. A deputy's direction is treated as if given by the chief.

This definition excludes some positions, informally referred to as "deputy" by agencies, which require expertise in management subjects but do not include responsibility for directing either the full organization or an equal half of the total organization. For example, the definition specifically excludes administrative, personal, or general staff assistants to managers, and positions at lower organizational or program segment levels that primarily involve performing supervisory duties.

FLAG OR GENERAL OFFICER - Any of the various ranks of Admiral or General, e.g., Brigadier General and Rear Admiral.

SUPERVISOR - A position or employee that accomplishes work through the direction of other people and meets at least the minimum requirements for coverage under this Guide. Those directed may be subordinate Federal civil service employees, whether fulltime, part-time, intermittent, or temporary; assigned military employees; non-Federal workers; unpaid volunteers; student trainees, or others. Supervisors exercise delegated authorities such as those described in this guide under Factor 3, Supervisory and Managerial Authority Exercised. A

first level supervisor personally directs subordinates without the use of other, subordinate supervisors. A second level supervisor directs work through one layer of subordinate supervisors. A "full assistant" shares fully with a higher level supervisor in all phases of work direction, contractor oversight, and delegated authority over the subordinate staff.

NOTE: In some circumstances, technical planning and oversight of work ultimately accomplished through contractors, by State and local government employees, or by similar personnel will be encompassed in a supervisor's position. Provision is made for considering this work in most factors in this guide. However, many of the supervisor's responsibilities over the work of Federal subordinates do not apply to oversight of contract work. When work for which the supervisor has technical oversight responsibilities is contracted out, or considered for contracting in lieu of accomplishment by subordinates, the supervisor's responsibilities may include: analyzing, justifying, comparing cost, and recommending whether work should be contracted; providing technical requirements and descriptions of the work to be accomplished; planning the work schedules, deadlines, and standards for acceptable work; arranging for subordinates to inspect quality or progress of work; coordinating and integrating contractor work schedules and processes with work of subordinates and others; deciding on the acceptance, rejection, or correction of work products or services, and similar matters which may affect payment to the contractor.

MANAGERIAL - The authority vested in some positions under the General Schedule which direct the work of an organizational unit, are held accountable for the success of specific line or staff functions, monitor and evaluate the progress of the organization toward meeting goals, and make adjustments in objectives, work plans, schedules, and commitment of resources. As described in 5 U.S.C. 5104, such positions may serve as head or assistant head of a major organization within a bureau; or direct a specialized program of marked difficulty, responsibility, and national significance.

QUESTION #7: Does the GSSG define managerial positions?

No, however, managerial positions typically perform the following:

- a. Determine program goals and develop work plans for the organization;**
- b. Determine resource needs, allocate resources, and account for their effective use;**
- c. Identify the need, and develop plans for organizational changes which have considerable impact; e.g., affecting basic structure, operating costs, or key positions;**
- d. Consider a broad spectrum of factors when making decisions, including public relations and policy, Congressional relations, labor-management relations, economic impact, and effect on other organizations;**
- e. Coordinate program efforts with other internal activities, or with the activities of other agencies;**

- f. Assess the impact on the organization's programs of substantive developments in programs and policies in other parts of the agency, in other government entities, and in the private sector;**
- g. Set policy for the organization managed in such areas as program priorities throughout the organization managed;**
- h. Make decisions on personnel policy matters affecting the key subordinate employees, employee grievances, workforce reductions, and adverse actions;**
- i. Delegate authority to subordinate supervisors to direct their work units and employees, and monitor the performance of their organizational units in accomplishing the assigned workload.**

TITLING INSTRUCTIONS

Determine the title for a position covered by this guide through reference to the classification standard, classification guide, and/or series guidance used to determine the occupational series of the position. In most instances these guidelines require use of the word "Supervisory" as a prefix to the appropriate occupational title. However, in some occupations, certain titles (e.g., "Budget Officer") denote supervision and the supervisory prefix is not used.

In the absence of specific titling criteria in a classification standard, apply the instructions on titling contained in the Introduction to the Position Classification Standards in conjunction with the Handbook of Occupational Groups and Series. Positions which meet the minimum requirements for coverage by this guide should be titled as supervisory even if nonsupervisory work in the position is grade controlling.

Although agencies may independently construct titles for informal or internal purposes, it is not permissible to use the words "Supervisory" or "Supervisor" in the official title of a position unless the position meets the minimum criteria for classification by this guide.

INSTRUCTIONS FOR APPLICATION

This guide uses a point-factor evaluation approach with six evaluation factors designed specifically for supervisory positions. Under each factor there are several factor level definitions which are assigned specific point values. The points for all levels are fixed and no interpolation or extrapolation of them is permitted. Work of positions at different organizational levels often will be properly credited at the same level of a factor.

Evaluate supervisory duties by comparing them with each factor. Credit the points designated for the highest factor level which is met according to the instructions specific to each factor and level. If two or more levels of a factor are met, credit the points for the highest level met. However, if one level of a factor is exceeded, but the next higher level is not met, credit the lower level involved.

Add the total points accumulated under all factors. Use the point-to-grade conversion table at the end of this guide to convert the point total to a grade.

If the supervisory work does not fall at least one grade above the base level of work supervised (as determined by factor 5 in this guide), apply the adjustment provision following the grade conversion table.

(If the position includes major nonsupervisory duties, evaluate them using appropriate other standards and guides. If they evaluate to a different grade than the position's supervisory duties, the grade for the higher level duties will be the final grade of the position.)

QUESTION #20: Must the GSSG be used to evaluate positions covered by separate supervisory grading criteria, i.e., Fire Chief, GS-081?

Yes, and if the GSSG evaluation results in a higher grade, apply the GSSG.

Users are cautioned to read carefully all instructions and all levels for each factor before assigning a level; instructions differ for each factor. Individual positions may score low points on some factors and high points on others. As a final check, users should particularly examine the factor level definitions next above and below those initially credited to assure that the highest level that is met is credited.

Examples provided in this guide do not represent threshold criteria needed to credit a specific factor level. Both the DoD and GSSG examples are useful for clarification; however, they should not be used solely to assign any factor level. If a factor level falls short of the GSSG factor level descriptions, the lower point value must be assigned.

Although the GSSG requires no specific format for covered positions, users are not precluded from describing positions in a format that is compatible with that of the GSSG. Current core document system users also have an appropriate format available within the system. Regardless of the format, descriptions should contain sufficient information addressed by the six factors to effectively and properly evaluate the work.

DEPUTY AND "ASSISTANT CHIEF" SUPERVISORY POSITIONS

The evaluation criteria in this guide are not designed to be applied directly to deputy or "assistant chief" supervisory positions. The grade of a full deputy (as defined in the introduction to this guide) or full "assistant chief" supervisory position which shares fully in the duties, responsibilities, and authorities of the "chief" should normally be set one grade lower than the grade of the supervisory duties of the position to which it reports. Since the criteria in this guide are designed to evaluate only GS/GM grades 5 through 15, the grade of a

full deputy to an SES or Executive Level position or other position which exceeds grade 15 is determined by the application of policies and criteria beyond the scope and coverage of this guide. However a full deputy to such a position would normally not be graded below GS/GM-15. Assignment of SES rank to a position is subject to the requirements of the Executive Personnel Management System, and therefore outside the scope of this guide.

GRADE EVALUATION FACTORS

FACTOR 1 - PROGRAM SCOPE AND EFFECT

This factor assesses the general complexity, breadth, and impact of the program areas and work directed, including its organizational and geographic coverage. It also assesses the impact of the work both within and outside the immediate organization.

In applying this factor, consider all program areas, projects, and work assignments which the supervisor technically and administratively directs, including those accomplished through subordinate General Schedule employees, FWS employees, military personnel, contractors, volunteers, and others. To assign a factor level, the criteria dealing with both scope and effect, as defined below, must be met.

a. SCOPE. This addresses the general complexity and breadth of:

- the program (or program segment) directed;
- the work directed, the products produced, or the services delivered.

The geographic and organizational coverage of the program (or program segment) within the agency structure is included under Scope.

b. EFFECT. This addresses the impact of the work, the products, and/or the programs described under "Scope" on the mission and programs of the customer(s), the activity, other activities in or out of government, the agency, other agencies, the general public, or others.

Users are cautioned against the mechanical crediting of factor levels on the basis of organizational echelon. The correct level under Factor 1 must be based on an analysis of the complexity, breadth, and impact of the work directed, with the location of the position in the organizational structure being considered as one indicator of the scope and effect of the work.

Positions that report to the Commander and those that are two reporting levels below the Commander may support the same factor level; e.g., Division and Branch Chief (District), Director and Division Chief (MSC). While there are exceptions, positions that are three or more levels (Section at District, Branch at MSC) below the commander normally have a much smaller portion of the program and therefore should be credited

with a lower factor level. NOTE: This is a two-part factor; both scope and effect must be fully met in order to assign a level.

Factor Level 1-1 -- 175 points

a. SCOPE. Work directed is procedural, routine, and typically provides services or products to specific persons or small, local organizations.

b. EFFECT. Work directed facilitates the work of others in the immediate organizational unit, responds to specific requests or needs of individuals, or affects only localized functions.

Illustration:

- Directs messenger, guard, clerical, or laboratory support work below grade GS-5, or equivalent. Provides local services to an organizational unit, small field office, or comparable activity.

QUESTION #22: Are references to professional, administrative, technical or clerical work in the GSSG in of Labor accordance with Department PATCO occupational codes and determinations?

No, as OPM does not specify this to be the case. Professional, administrative, technical and clerical work are adequately defined on pages 11-13 in the OPM Introduction to the Position Classification Standards dated August 1991.

FACTOR LEVEL 1-2 and ABOVE. The absence of specific examples of professional/administrative/scientific/technical, line/mission, or staff/support work at a specific level, i.e., FL 1-2, does not preclude assignment of the level. The critical issue is whether or not both the scope and effect are fully met.

Factor Level 1-2 -- 350 points

a. SCOPE. The program segment or work directed is administrative, technical, complex clerical, or comparable in nature. The functions, activities, or services provided have limited geographic coverage and support most of the activities comprising a typical agency field office, an area office, a small to medium military installation, or comparable activities within agency program segments.

b. EFFECT. The services or products support and significantly affect installation level, area office level, or field office operations and objectives, or comparable program segments; or provide services to a moderate, local or limited population of clients or users comparable to a major portion of a small city or rural county.

Illustrations:

- Directs budget, management, staffing, supply, maintenance, protective, library, payroll, or similar services which support a small Army, Navy, or Air Force base with no extensive research, development, testing, or comparable missions, a typical national park, a hospital, or a nondefense agency field office of moderate size and limited complexity. The services provided directly or significantly impact other functions and activities throughout the organizations supported and/or a small population of visitors or users.
- In a field office providing services to the general public, furnishes a portion of such services, often on a case basis, to a small population of clients. The size of the population serviced by the field office is the equivalent of all citizens or businesses in a portion of a small city. Depending on the nature of the service provided, however, the serviced population may be concentrated in one city or spread over a wider geographic area.
- Directs operating program segment activities comparable to those above but found at higher organizational levels in the agency, for example, the section or branch level of a bureau.

FACTOR LEVEL 1-3. Within DoD, activities that are generally considered "support" at the installation level, e.g., budget, personnel, would not exceed FL 1-3.

District line positions at branch and division level normally will meet Level 1-3 in that the program segment performs technical, administrative, protective, investigative, or professional work and has a wide geographic coverage. Supervisory positions below the division must supervise a program segment that has direct and significant impact required for crediting Level 1-3 Effect. District staff support functions generally directly impact the district, but do not normally directly affect a wide range of Army activities, the activities of other agencies, or outside interests. They will therefore normally meet Level 1-2. The first two examples at Level 1-3 and Level 1-4 describe line/mission work. The last example at Level 1-3 and Level 1-4 describe staff support work. Since different criteria are used, it is possible that both line/mission work and staff support work will evaluate to the same level.

Based on many OPM and DOD appeal decisions on Corps positions, it does not appear that any of our districts with a CONUS mission will have line positions that exceed Level 1-3. Districts that do not have a mission that encompasses a major metropolitan area, an entire state, or a small region of several states will not exceed Level 1-2. Staff support positions at the district level will not exceed Level 1-2. MSC line positions generally do not have responsibility for development of major aspects of key Army programs nor do they include major, highly technical operations at the Government's largest, most complex industrial installations.

The criteria of “impacts large segments of the Nation’s population or segments of one or a few large industries” applies to only those positions that directly impact the population or industries; e.g., navigation. It does not include positions that indirectly impact; e.g., design. Although our MSCs encompass large geographic areas, division positions normally do not directly impact large numbers of people; however, they may impact segments of one or a few large industries.

The criteria of “receives frequent or continuing congressional or media attention” is to be interpreted as the program or program segment under the direct control of the position being evaluated receives this kind of attention. While some programs at the district level may receive this level of attention, MSC level programs will only receive this credit if the problems are not resolved at the local level. On the basis of the above discussion, these positions will not normally meet Level 1-4 Scope or Effect.

Staff support positions are impacted in various ways depending on the missions supported. Although the work processes for construction projects appear to be similar, staff support positions are impacted in various ways by the differences between military, civil, Hazardous, Toxic, and Radioactive Waste (HTRW) and Work for Others construction projects.

Different personnel policies and procedures are required due to the mix of civil and military funded employees. For example, FTE reductions, furloughs, hiring freezes, etc., may affect only civil or military funded employees. Not all staff support positions are affected in the same way by the same mission. Therefore, one should not assume that all staff support positions at a given district/division will be evaluated to the same level.

Staff support positions below headquarters level must meet the criteria for “large or complex, multimission installation” at Level 1-3. This criteria does not apply to line positions. The second situation defining a multimission military installation states: “a complex, multimission installation or a group of several organizations (directly supported by the position under evaluation) that includes four or more of the following: . . . multimillion dollar (annual) construction, civil works, or environmental cleanup projects; . . . or equivalent activities . . .” This definition does not include all Corps missions. The following paragraphs expand on the definition to include equivalent Corps missions.

1. Military Construction: Involves engineering, design, construction, improvement, and alteration of CONUS and OCONUS facilities for the Army, Air Force and Defense agencies. This includes Foreign Military Sales (FMS) construction funded by a friendly nation to provide facilities for the Armed Forces of that nation. Major FMS construction has occurred in Saudi Arabia, Israel, other countries of the Middle East and elsewhere. Facilities range from warehouses to highly sophisticated medical and training facilities, troop and family housing, community facilities, and state-of-the-art weapons delivery systems.

2. Civil Works Construction: Involves planning, programming, engineering, and design of the construction of water resource and environmentally oriented projects of national importance. Typical projects include (but are not limited to) navigation locks and dams, river and harbor channel deepening, flood control structures (e.g., dams and reservoirs, levees, floodwalls, removal of channel obstructions), nonstructural flood control measures (e.g., greenways, relocation of structures in floodplains), shore protection works, hydroelectric plants, recreation facilities, and environmental measures such as creation or restoration of wetlands and wildlife habitat. These projects provide benefits including access to low cost transportation; prevention of death, injury and property damage in flood events; electric power; municipal, industrial and agricultural water supply; recreational opportunities; water quality; and preservation of natural and cultural resources. Most Civil Works projects built today are cost-shared and constructed under Project Cooperation Agreements with non-Federal sponsors.

3. Work for Others: Involves planning, engineering, design, construction, improvement, and alteration of facilities or oversight of grant programs for other federal agencies; e.g., DOE, EPA, VOA, State Department, HUD, NASA, etc.

4. Environmental Cleanup/Restoration: The Defense Environmental Restoration Program (DERP) involves environmental remediation, and facilitation of state/territory participation in the restoration process, at active military installations and formerly used Defense sites. The base closure program involves environmental support to closing/realigning Army installations. Support for others activities include support to the Environmental Protection Agency, the Department of Energy, the Department of Agriculture, Federal Aviation Administration, Farmers Home Administration, Economic Development Agency and the Federal Emergency Management Agency in executing Hazardous, Toxic, and Radioactive Waste (HTRW) restoration activities. Restoration activities vary widely in complexity, from easily remediated environmental concerns to vast areas with major environmental degradation/damage (ordnance, improperly disposed hazardous substances, residual armament manufacturing damages, etc.).

5. Operations: Includes the operation and maintenance of a diverse range of activities at projects that include locks and dams, navigation, dredging of channels and harbors, flood control, hydropower, floating plant, and recreation resources and facilities. Includes the effective emergency response to natural and national disasters including flood, hurricane, earthquake, and war. Includes the regulatory program where the Corps issues permits for any work in, over, or under a navigable water of the United States or for the placement of dredged fill material into any water of the United States.

6. Host Nation Support: Involves planning, engineering, design, and construction of facilities for U.S. Forces funded by the Government of Japan, Republic of Korea, and other countries. Host Nation funded programs in Asia are most critical to sustaining U.S. interests in this volatile region of the world.

Corps of Engineers divisions/districts that are equivalent to a complex, multi-

mission installation (for purposes of crediting Scope under Level 1-3 for staff support positions) must include multimillion dollar (annual) projects in four or more of the following mission areas: 1) military construction, 2) civil construction, 3) operations, 4) environmental cleanup/restoration, 5) host nation support, 6) work for others, or 7) research laboratory of moderate size (does not include division labs).

Credit the money allocated for a project (usually designated by a project number or CWIS), but not the program dollars allocated for a program; e.g., Regulatory, Navigation, Dredging. There are some Corps projects where there are multiple units/individual construction sites that are to be planned and built over a period of years. In such cases, the annual project dollars do not need to be site specific. Do not credit the same project in two different mission areas; e.g., environmental cleanup/restoration and work for others. Do not credit more than one project in the same mission area. Assign credit only for diverse projects; same or similar projects at different locations would count as one project. In determining multimillion dollar annual cost, projects that extend over more than one year must be prorated to determine the annual cost. For example, a two-year \$4 million project may equate to a \$2 million annual project for credit of complex; however, a five-year \$5 million project may equate to \$1 million annual which would not be a multimillion dollar annual project.

When considering whether mission areas such as operations and environmental cleanup/restoration are as complex as a multimillion dollar construction project, the key is whether the project has an equivalent impact on the staff support position being evaluated. The phrase “multimillion dollar (annual) construction, civil works, or environmental cleanup projects” is an indicator of complexity. Dollar value alone does not indicate that a given mission is complex. Other key considerations of meeting Level 13 include whether the position being evaluated provides services that directly affect each of the four or more missions and whether the work performed directly involves or substantially impacts the provision of essential support operations to numerous, varied, and complex technical, professional, and administrative functions. For example, the Budget Branch in RMO would have little or no impact on a Civil Works construction or operations project, while the Finance and Accounting Branch would have considerable impact. Each of the components of a complex multimission installation requires a substantial number of employees in a fairly complex organizational structure under separate command and control, as do the examples provided by DOD and Army.

Factor Level 1-3 -- 550 points

a. SCOPE. Directs a program segment that performs technical, administrative, protective, investigative, or professional work. The program segment and work directed typically have coverage which encompasses a major metropolitan area, a State, or a small region of several States; or, when most of an area's taxpayers or businesses are covered, coverage comparable to a small city. Providing complex administrative or technical or professional services

directly affecting a large or complex multi-mission military installation also falls at this level.

b. EFFECT. Activities, functions, or services accomplished directly and significantly impact a wide range of agency activities, the work of other agencies, or the operations of outside interests (e.g., a segment of a regulated industry), or the general public. At the field activity level (involving large, complex, multi-mission organizations and/or very large serviced populations comparable to the examples below) the work directly involves or substantially impacts the provision of essential support operations to numerous, varied, and complex technical, professional, and administrative functions.

Illustrations:

- Directs design, oversight, and related services for the construction of complex facilities for one or more agencies at multiple sites. The facilities are essential to the field operations of one or more agencies throughout several States.
- In providing services directly to the general public, furnishes a significant portion of the agency's line program to a moderate-sized population of clients. The size of the population serviced by the position is the equivalent of a group of citizens and/or businesses in several rural counties, a small city, or a portion of a larger metropolitan area. Depending on total population serviced by the agency and the complexity and intensity of the service itself, however, the serviced population may be concentrated in one specific geographic area, or involve a significant portion of a multistate population, or be composed of a comparable group.
- Directs administrative services (personnel, supply management, budget, facilities management, or similar) which support and directly affect the operations of a bureau or a major military command headquarters; a large or complex multi-mission military installation; an organization of similar magnitude, or a group of organizations which, as a whole, are comparable.

QUESTION #8: What are some additional examples of work at FL 1-3?

1) Director of Maintenance for a centralized maintenance and repair facility for aircraft, tanks, etc. Centralized facilities receive work from other installations.

2) Training Director of centralized training offered at one site for a significant population of military and/or civilian personnel. Centralized training facilities provide training when there is no other place where this training is normally provided, i.e., Fort Leavenworth, KS (Command and General Staff College), Fort Sam Houston, TX (medical training).

3) Supervisory engineer at a Corps of Engineers district directing engineering services to a major metropolitan area, throughout a state, or a small region of several states impacting the operations of outside interests or the general public.

4) Supervisory Staffing Specialist directing personnel services affecting a moderately large (less than 4,000) complex, multi-mission installation (i.e., includes a garrison, large hospital, a higher command tenant and a training school). The personnel work directed involves the provision of essential support operations to numerous, varied and complex technical, professional, and administrative functions.

Factor Level 1-4 -- 775 points

a. SCOPE. Directs a segment of a professional, highly technical, or complex administrative program which involves the development of major aspects of key agency scientific, medical, legal, administrative, regulatory, policy development or comparable, highly technical programs; or that includes major, highly technical operations at the Government's largest, most complex industrial installations.

b. EFFECT. Impacts an agency's headquarters operations, several bureau-wide programs, or most of an agency's entire field establishment; or facilitates the agency's accomplishment of its primary mission or programs of national significance; or impacts large segments of the Nation's population or segments of one or a few large industries; or receives frequent or continuing congressional or media attention.

Illustrations:

- Directs mission-essential, major operating programs or program segments at:

- a large, complex, aerospace, undersea, or multi-mission research and development center;

- the production department of one of the largest Navy shipyards or the aircraft management directorate at an Air Logistics Center;

- major medical centers which include research programs or other medical programs of national interest and standing.

- The program segments directed affect segments of large industries, or receive frequent congressional or media attention, or are essential to major defense, space exploration, or public health programs.

- Directs a program segment which includes major aspects of a regulatory, social service, or major revenue producing program covering a major segment of the Nation or

numerous States. The program segments directed directly affect large segments of the Nation's population or businesses.

- Directs administrative activities (such as budget, management analysis, or personnel) conducted throughout, or covering the operations of, the agency's headquarters or most of its field establishment. The program segments directed materially shape or improve the structure, effectiveness, efficiency, or productivity of major portions of the agency's primary missions, multi-region programs, headquarters-wide operations, or projects of national interest.

QUESTION #9: What are some additional examples of work at FL 1-4?

1) Supervisory Research Scientist/Research Engineer at an Army laboratory (Waterways Experiment Station) or research center (Research Development and Engineering Center) where the professional program segment directed involves the development of major aspects of key agency scientific/medical policy development. There is impact to most of the agency's field establishment.

2) Supervisory Industrial Engineers/General Engineers at the Army's largest complex industrial installations (i.e., US Army Missile Command, US Army Tank and Automotive Command, US Armament Munitions and Chemical Command, US Army Industrial Operations Command) that directs highly technical operations which facilitate the agency's accomplishment of its primary mission.

3) Director of Engineering and Housing at III Corps where the work directed is comparable to directing a high level organization at a large industrial installation.

Factor Level 1-5 -- 900 points

SCOPE AND EFFECT combined. Directs a program for which both the scope and impact of the program or organization directed are one or more of the following: Nationwide; agencywide; industrywide; Governmentwide; directly involve the national interest or the agency's national mission; are subject to continual or intense congressional and media scrutiny or controversy; or have pervasive impact on the general public.

- OR -

Directs critical program segments, major scientific projects, or key high level organizations with comparable scope and impact.

Illustrations:

- Directs an agencywide regulatory effort affecting the Nation's general public or one or more large industries. The position heads a major organization one or two levels below the bureau level tasked with developing, issuing, and implementing policies, regulations, and other guidance which have agencywide usage, or affect major activities of large industries, or affect the general public.
- Directs the development of the most critical and complex subsystem(s) in a major aerospace or weapons system development program. The work (whether accomplished at or below headquarters and bureau levels or locations) has significant direct impact one or a few major industries, the agency's national mission, or the national defense.

QUESTION #10: What is an additional example of work at FL 1-5?

1) A supervisory engineer at a Program Executive Office (PEO) who directs the development of critical subsystems that directly involve the national interest or the agency's national mission.

2) MACOM Corps of Engineers chief of regulatory functions who directs a program governing wetland and navigable waters development which affects the construction and navigation industries as well as the general public. The program work directed receives extensive Congressional and media scrutiny and controversy.

FACTOR 2 - ORGANIZATIONAL SETTING

This factor considers the organizational situation of the supervisory position in relation to higher levels of management.

For purposes of determining reporting levels under this factor:

- A position reporting to a deputy or full assistant chief position is credited as reporting to the chief. For example, a position reporting to the deputy of an SES position should be credited as if reporting directly to the SES level position. (However, an assistant chief position which does not share fully in the authorities and responsibilities of the chief constitutes a separate, intervening, reporting level under this guide. A supervisory position reporting to such a position would be treated as if reporting to a position one level below the chief.)

QUESTION #11: Can deputy or Chief of Staff positions be credited as separate reporting levels in Factor 2?

Yes. When the deputy position or the Chief of Staff do not fully share in the duties, responsibilities, and authorities of the chief, they are credited as separate reporting levels. They can only be credited as one level when they share equally in duties, responsibilities, and authorities.

QUESTION #12: If a deputy commander or Chief of Staff position is a separate reporting level as explained in Answer 11, can the position be graded at one grade lower than the "chief" without directly applying the GSSG criteria? For example, the Deputy is first level approval authority and the Chief is the second level approval authority for performance evaluations of subordinate supervisors.

No. If the Deputy and Chief are separate levels for performance evaluation, each must be fully evaluated by the GSSG. The full deputy procedures to set the deputy's grade one grade lower than the chief's would not apply.

Determinations on whether or not a Deputy position is a separate reporting level for this factor should not be based solely on whether the Deputy rates and the Chief approves/senior rates performance evaluations. Although this is an important indicator, the position in question must meet one of the two situations in the GSSG definition of deputy. A comprehensive evaluation must be made of whether the deputy is delegated complete authority to decide on and carry out the full range of responsibilities for the total program (all divisions) directed by the District Engineer; e.g., exercise authority to decide/act on all actions versus recommend/refer most actions to the District Engineer for final decision.

- The appropriate full performance level or rank of the position reported to is used when that position is occupied by officials of lower or different rank, e.g., for career development, budgetary, or similar purposes.
- A single factor level definition may cover positions at more than one organizational level in an agency or activity.
- If the position reports to two positions, select the factor level associated with the position which has responsibility for performance appraisal.
- SES equivalents include military officers at, equivalent to, or above the ranks of Rear Admiral and Brigadier General and also include commanding officers of the very largest military installations, regardless of rank.

Factor Level 2-1 -- 100 points

The position is accountable to a position that is two or more levels below the first (i.e., lowest in the chain of command) SES, flag or general officer, equivalent or higher level position in the direct supervisory chain.

Factor Level 2-2 -- 250 points

The position is accountable to a position that is one reporting level below the first SES, flag or general officer, or equivalent or higher level position in the direct supervisory chain.

Factor Level 2-3 -- 350 points

The position is accountable to a position that is SES level, flag or general officer military rank, or equivalent or higher level; or to a position which directs a substantial GS/GM-15 or equivalent level workload; or to a position which directs work through GS/GM-15 or equivalent level subordinate supervisors, officers, contractors, or others.

FACTOR LEVEL 2-3. Also assign FL 2-3 when the position under evaluation reports to: a position with the authorized military rank of 0-7 or higher; a position with the authorized military rank of 0-6 who also directs either a substantial nonsupervisory GS-15, or equivalent workload or at least several subordinate supervisory GS-15 positions.

In the National Guard, the Adjutant General in each state is equivalent to SES. For ANG or ARNG technician positions, to determine the reporting level, use the civilian grade of the Commander position instead of the military rank of the incumbent even when the incumbent is an Active Guard Reserve member.

Positions that report to and are rated by either the District Commander or a full Deputy Commander at districts where the Commander supervises several GS-15 positions will meet Level 2-3, whether the District Commander is a Colonel (O-6) or Lieutenant Colonel (O-5). For districts that have more than one military deputy a determination will have to be made as to which, if any, position is the full deputy as defined in the GSSG. Positions reporting to supervisors that are rated by a position that is less than the full deputy (e.g., DDE/PM, Executive Assistant, junior military deputy) will be evaluated at Level 2-2 if the Commander supervises several GS-15 positions. OPM does not consider only 1 or 2 GS-15s (excluding Chief Counsel) to be a substantial GS-15 or equivalent workload. Exclude GS-15 positions that do not supervise work under the direct management control of the position under consideration.

FACTOR 3 - SUPERVISORY AND MANAGERIAL AUTHORITY EXERCISED

This factor covers the delegated supervisory and managerial authorities which are exercised on a recurring basis. To be credited with a level under this factor, a position must meet the authorities and responsibilities to the extent described for the specific level. Levels under this factor apply equally to the direction of specialized program management organizations, line functions, staff functions, and operating and support activities. Where authority is duplicated or not significantly differentiated among several organizational levels, a factor level may apply to positions at more than one organizational level.

This factor measures the supervisory and managerial authorities exercised for the work in which the incumbent is directly responsible; i.e., the operations of the organization supervised for which a supervisory/subordinate relationship exists.

Factor Level 3-2 -- 450 points

Positions at this level meet a or b or c below:

a. Plan and schedule ongoing production-oriented work on a quarterly and annual basis, or direct assignments of similar duration. Adjust staffing levels or work procedures within their organizational unit(s) to accommodate resource allocation decisions made at higher echelons. Justify the purchase of new equipment. Improve work methods and procedures used to produce work products. Oversee the development of technical data, estimates, statistics, suggestions, and other information useful to higher level managers in determining which goals and objectives to emphasize. Decide the methodologies to use in achieving work goals and objectives, and in determining other management strategies.

b. Where work is contracted out, perform a wide range of technical input and oversight tasks comparable to all or nearly all of the following: **"Nearly all" is interpreted to mean four of the five tasks listed for Factor Level 3-2b.**

1. Analyze benefits and costs of accomplishing work in-house versus contracting; recommend whether to contract;
2. Provide technical requirements and descriptions of the work to be accomplished;
3. Plan and establish the work schedules, deadlines, and standards for acceptable work; coordinate and integrate contractor work schedules and processes with work of subordinates or others;
4. Track progress and quality of performance; arrange for subordinates to conduct any required inspections;

5. Decide on the acceptability, rejection, or correction of work products or services, and similar matters which may affect payment to the contractor.
- c. Carry out at least three of the first four, and a total of six or more of the following 10 authorities and responsibilities:
1. Plan work to be accomplished by subordinates, set and adjust short-term priorities, and prepare schedules for completion of work;
 2. Assign work to subordinates based on priorities, selective consideration of the difficulty and requirements of assignments, and the capabilities of employees;
 3. Evaluate work performance of subordinates;
 4. Give advice, counsel, or instruction to employees on both work and administrative matters;
 5. Interview candidates for positions in the unit; recommend appointment, promotion, or reassignment to such positions;
 6. Hear and resolve complaints from employees, referring group grievances and more serious unresolved complaints to a higher level supervisor or manager;
 7. Effect minor disciplinary measures, such as warnings and reprimands, recommending other action in more serious cases;
 8. Identify developmental and training needs of employees, providing or arranging for needed development and training;
 9. Find ways to improve production or increase the quality of the work directed;
 10. Develop performance standards.

Factor Level 3-3 -- 775 points

To meet this level, positions must meet paragraph a or b below:

FACTOR LEVEL 3-3a. In assessing Factor Level 3-3a, careful consideration of the GSSG definition of managerial in the context of the level description is required. This level

clearly envisions the performance of delegated managerial duties for an organization that has subordinate OR lower echelon units over which the supervisor has the authority to set (not simply advise on), assure (direct and evaluate) and determine (not simply recommend) the critical aspects (i.e., long-range plans, goals and objectives, budgetary and staffing needs and solutions, etc.) of the program segment(s) or function(s) for which the supervisor is held accountable. It is implicit that positions at this level have significant authority with full responsibility and accountability. To summarize, this level is predicated on the managerial responsibilities exercised by the supervisor having a direct and marked effect on subordinate organizations.

Positions at MSCs and HQUSACE cannot be credited with Level 3-3a and Level 3-4a on the basis of providing program guidance and oversight to district operating programs. These positions typically exercise Level 3-2 or Level 3-3b supervisory and managerial authorities over a staff primarily performing program policy development work. Because the district operating programs are not under the MSC/HQUSACE supervisor's direct supervision, these "subordinate organizational units" do not reflect the exercise of direct managerial authority found at Level 3-3a and Level 3-4a.

While divisions and branches at Districts and directorates and divisions at MSCs are standardized structures controlled by HQUSACE, some supervisors and managers reporting to the Commander do exercise final authority for organizational design at section level and below and may meet Level 3-4b if they meet both Levels 3-3a and 3-3b. This would be true even if formal clearance is required for these actions. Credit cannot be given for reorganizations directed by HQUSACE. NOTE: Supervisors and managers must exercise delegated managerial authorities described at Level 3-3a and 3-3b before crediting Level 3-4b. Seldom, if ever, will a position at the district level meet Level 3-3a because, at that level, the position would have to be closely involved with high level program officials or comparable staff personnel in the development of overall program goals and objectives at the agency (Army or, in some cases, HQUSACE) level.

a. Exercise delegated managerial authority to set a series of annual, multiyear, or similar types of long-range work plans and schedules for in-service or contracted work. Assure implementation (by lower and subordinate organizational units or others) of the goals and objectives for the program segment(s) or function(s) they oversee. Determine goals and objectives that need additional emphasis; determine the best approach or solution for resolving budget shortages; and plan for long range staffing needs, including such matters as whether to contract out work. These positions are closely involved with high level program officials (or comparable agency level staff personnel) in the development of overall goals and objectives for assigned staff function(s), program(s), or program segment(s). For example, they direct development of data; provision of expertise and insights; securing of legal opinions; preparation of position papers or legislative proposals; and execution of comparable activities which support development of goals and objectives related to high levels of program management and

development or formulation.

FACTOR LEVEL 3-3b. Typically, this level applies to second-level supervisors; however, situations are possible where it applies to first-level. For example, organizations with sufficient subordinate staff and workload to warrant more than one of the following: teams under matrix management, committees, self-directed teams, task forces, etc., approximate a second-level supervisory situation by placing similar demands on the supervisor. "Nearly all" in this factor is interpreted to mean eight of the ten FL 3-2c conditions.

b. Exercise all or nearly all of the delegated supervisory authorities and responsibilities described at Level 3-2c of this factor and, in addition, at least 8 of the following:

1. Using any of the following to direct, coordinate, or oversee work: supervisors, leaders, team chiefs, group coordinators, committee chairs, or comparable personnel; and/or providing similar oversight of contractors;
2. Exercising significant responsibilities in dealing with officials of other units or organizations, or in advising management officials of higher rank;
3. Assuring reasonable equity (among units, groups, teams, projects, etc.) of performance standards and rating techniques developed by subordinates or assuring comparable equity in the assessment by subordinates of the adequacy of contractor capabilities or of contractor completed work;
4. Direction of a program or major program segment with significant resources (e.g., one at a multimillion dollar level of annual resources);
5. Making decisions on work problems presented by subordinate supervisors, team leaders, or similar personnel, or by contractors;
6. Evaluating subordinate supervisors or leaders and serving as the reviewing official on evaluations of nonsupervisory employees rated by subordinate supervisors;
7. Making or approving selections for subordinate nonsupervisory positions;
8. Recommending selections for subordinate supervisory positions and for work leader, group leader, or project director positions responsible for coordinating the work of others, and similar positions;
9. Hearing and resolving group grievances or serious employee complaints;

10. Reviewing and approving serious disciplinary actions (e.g., suspensions) involving nonsupervisory subordinates;
11. Making decisions on nonroutine, costly, or controversial training needs and training requests related to employees of the unit;
12. Determining whether contractor performed work meets standards of adequacy necessary for authorization of payment;
13. Approving expenses comparable to within-grade increases, extensive overtime, and employee travel;
14. Recommending awards or bonuses for nonsupervisory personnel and changes in position classification, subject to approval by higher level officials, supervisors, or others;
15. Finding and implementing ways to eliminate or reduce significant bottlenecks and barriers to production, promote team building, or improve business practices.

Factor Level 3-4 -- 900 points

In addition to delegated managerial and supervisory authorities included at lower levels of this factor, positions at this level meet the criteria in paragraph a or b below:

(1) FACTOR LEVEL 3-4a. This level would typically be assigned to positions no lower than the first reporting level below an installation commander.

a. Exercise delegated authority to oversee the overall planning, direction, and timely execution of a program, several program segments (each of which is managed through separate subordinate organizational units), or comparable staff functions, including development, assignment, and higher level clearance of goals and objectives for supervisors or managers of subordinate organizational units or lower organizational levels. Approve multiyear and longer range work plans developed by the supervisors or managers of subordinate organizational units and subsequently manage the overall work to enhance achievement of the goals and objectives. Oversee the revision of long range plans, goals and objectives for the work directed. Manage the development of policy changes in response to changes in levels of appropriations or other legislated changes. Manage organizational changes throughout the organization directed, or major change to the structure and content of the program or program segments directed. Exercise discretionary authority to approve the allocation and distribution of funds in the organization's budget.

(2) FACTOR LEVEL 3-4b. Before considering FL 3-4b, OPM intends that all of the delegated authorities in both FL 3-3a and 3-3b must be met. The criteria of the standard are satisfied if supervisors possess the authority to approve most significant organization design proposals recommended by subordinate supervisors. Supervisors need not be delegated final approval authority for all proposals that emanate from lower organizational levels. In fact, supervisors are often delegated authority to approve organizational changes affecting lower strata of their own units even though they may only recommend changes affecting higher levels. For example, in some organizations, authority to approve restructuring at division or higher levels is reserved for agency headquarters, while approval authority for organization changes at branch, section, and lower levels is delegated to installation managers.

QUESTION #13: What positions at the installation level would typically meet FL 3-4b?

Typically the final authorities for personnel actions and organization design described at FL 3-4b will not be lower than directorate level or one level below the Commander.

b. Exercise final authority for the full range of personnel actions and organization design proposals recommended by subordinate supervisors. This level may be credited even if formal clearance is required for a few actions, such as removals and incentive awards above set dollar levels.

FACTOR 4 -- PERSONAL CONTACTS

This is a two part factor which assesses the nature and the purpose of personal contacts related to supervisory and managerial responsibilities. The nature of the contacts, credited under Subfactor 4A, and the purpose of those contacts, credited under Subfactor 4B, must be based on the same contacts.

To be credited under 4A, the contacts must contribute to the successful performance of the work, be a recurring requirement, have a demonstrable impact on the difficulty and responsibility of the position, and require direct contact. The formality of the contacts and the amount of preparation required are also considered under Subfactor 4A. However, care must be taken to ensure that the same contacts are used to determine the correct level for Subfactor 4B. These contacts must be regular, recurring and frequent.

The same contacts should not be credited for both supervisory and nonsupervisory duties. When contacts are not clearly distinguishable between supervisory and nonsupervisory duties, assign the contacts to the supervisory duties.

Personal contacts for nonsupervisory, technical work performed, collateral duties, or similar activities are not evaluated under this criteria. These contacts should be evaluated under the appropriate nonsupervisory standard if they meet the criteria for a

major duty.

SUBFACTOR 4A - NATURE OF CONTACTS

This subfactor covers the organizational relationships, authority or influence level, setting, and difficulty of preparation associated with making personal contacts involved in supervisory and managerial work. To be credited, the level of contacts must contribute to the successful performance of the work, be a recurring requirement, have a demonstrable impact on the difficulty and responsibility of the position, and require direct contact.

Subfactor Level 4A-1 -- 25 points

Contacts are with subordinates within the organizational unit(s) supervised, with peers who supervise comparable units within the larger organization, with union shop stewards, and/or with the staff of administrative and other support activities when the persons contacted are within the same organization as the supervisor. Contacts are typically informal and occur in person at the work place of those contacted, in routine meetings, or by telephone.

Subfactor Level 4A-2 -- 50 points

Frequent contacts comparable to any of those below meet this level. Contacts are with:

- members of the business community or the general public;
- higher ranking managers, supervisors, and staff of program, administrative, and other work units and activities throughout the field activity, installation, command (below major command level) or major organization level of the agency;
- representatives of local public interest groups;
- case workers in congressional district offices;
- technical or operating level employees of State and local governments;
- reporters for local and other limited media outlets reaching a small, general population.

Contacts may be informal, occur in conferences and meetings, or take place through telephone, televised, radio, or similar contact, and sometimes require nonroutine or special preparation.

Subfactor Level 4A-3 -- 75 points

Frequent contacts comparable to any of those below meet this level. Contacts are with:

- high ranking military or civilian managers, supervisors, and technical staff at bureau and major organization levels of the agency; with agency headquarters administrative support staff; or with comparable personnel in other Federal agencies;
- key staff of public interest groups (usually in formal briefings) with significant political influence or media coverage;
- journalists representing influential city or county newspapers or comparable radio or television coverage;
- congressional committee and subcommittee staff assistants below staff director or chief counsel levels;
- contracting officials and high level technical staff of large industrial firms;
- local officers of regional or national trade associations, public action groups, or professional organizations; and/or State and local government managers doing business with the agency.

Contacts include those which take place in meetings and conferences and unplanned contacts for which the employee is designated as a contact point by higher management. They often require extensive preparation of briefing materials or up-to-date technical familiarity with complex subject matter.

Subfactor Level 4A-4 -- 100 points

Frequent contacts comparable to any of those below meet this level. Contacts are with:

- influential individuals or organized groups from outside the employing agency, such as executive level contracting and other officials of major defense contractors or national officers of employee organizations;
- regional or national officers or comparable representatives of trade associations, public action groups, or professional organizations of national stature;
- key staff of congressional committees, and principal assistants to senators and representatives. For example: majority and minority staff directors, chief counsels, and directors of field operations;
- elected or appointed representatives of State and local governments;
- journalists of major metropolitan, regional, or national newspapers, magazines, television, or radio media;

- SES, flag or general officer, or Executive Level heads of bureaus and higher level organizations in other Federal agencies;
- Contacts may take place in meetings, conferences, briefings, speeches, presentations, or oversight hearings and may require extemporaneous response to unexpected or hostile questioning. Preparation typically includes briefing packages or similar presentation materials, requires extensive analytical input by the employee and subordinates, and/or involves the assistance of a support staff.

SUBFACTOR 4B - PURPOSE OF CONTACTS

This subfactor covers the purpose of the personal contacts credited in Subfactor 4b, including the advisory, representational, negotiating, and commitment making responsibilities related to supervision and management.

QUESTION #14: What contacts are considered in determining the level to credit in Factor 4B, Purpose of Contacts?

Credit only the contacts used to determine the level in Factor 4A, Nature of Contacts.

Subfactor Level 4B-1 -- 30 points

The purpose of contacts is to discuss work efforts for providing or receiving services; to exchange factual information about work operations and personnel management matters; and to provide training, advice, and guidance to subordinates.

Subfactor Level 4B-2 -- 75 points

The purpose of contacts is to ensure that information provided to outside parties is accurate and consistent; to plan and coordinate the work directed with that of others outside the subordinate organization; and/or to resolve differences of opinion among managers, supervisors, employees, contractors or others.

Subfactor Level 4B-3 -- 100 points

The purpose of contacts is to justify, defend, or negotiate in representing the project, program segment(s), or organizational unit(s) directed, in obtaining or committing resources, and in gaining compliance with established policies, regulations, or contracts. Contacts at this level usually involve active participation in conferences, meetings, hearings, or presentations involving problems or issues of considerable consequence or importance to the program or program segment(s) managed.

Subfactor Level 4B-4 -- 125 points

The purpose is to influence, motivate, or persuade persons or groups to accept opinions or take actions related to advancing the fundamental goals and objectives of the program or segments directed, or involving the commitment or distribution of major resources, when intense opposition or resistance is encountered due to significant organizational or philosophical conflict, competing objectives, major resource limitations or reductions, or comparable issues.

At this level, the persons contacted are sufficiently fearful, skeptical, or uncooperative that highly developed communication, negotiation, conflict resolution, leadership, and similar skills must be used to obtain the desired results.

FACTOR 5 - DIFFICULTY OF TYPICAL WORK DIRECTED

This factor measures the difficulty and complexity of the basic work most typical of the organization(s) directed, as well as other line, staff, or contracted work for which the supervisor has technical or oversight responsibility, either directly or through subordinate supervisors, team leaders, or others.

Technical or oversight responsibility of the basic work of the organization normally requires recurring use of substantive technical skills/knowledge appropriate to direction of the work supervised. The supervisor need not be as skilled in the work as all subordinates, but must have sufficient technical knowledge to plan, assign, direct, and review work operations of the unit. The first-line supervisor generally should possess more specific technical knowledge since the employees are directly supervised. Second-line and successively higher echelons of supervisors/managers continue to require technical skills, but the nature becomes more general and diffused due to the broader variety of work directed.

When the basic nonsupervisory work is two-grade interval in nature, exclude clerical work as it does not entail making substantive decisions. This work is generally classified at the GS-05 level and below. Include technical/assistant work at the GS-06 level and above because it involves the performance of substantive work directly related to the mission of the organization directed. For example, exclude personnel clerk positions but include personnel assistant positions when determining the base level for a personnel officer. Some personnel clerk positions would be included, however, when determining the base level for a Chief of Technical Services Branch, since the personnel clerical work is the basic work of that Branch.

First Level Supervisors

Determine the highest grade which:

- best characterizes the nature of the basic (mission oriented) nonsupervisory work performed or overseen by the organization directed; and
- constitutes 25 percent or more of the workload (not positions or employees) of the organization.

QUESTION #15: How should "workload" be interpreted in this Guide?

Workload is synonymous with workhours. A full-time employee is equivalent to 2,087 annual workhours or 40 weekly workhours.

QUESTION #16: Is a detailed workload computation required for each supervisory position reviewed?

No. Where the complexity of work is readily identifiable, i.e., no mixed-grade positions, and majority of time spent performing highest graded duties, apply sound classification judgment in determining the workload of the organization.

This means that 25 percent or more of the nonsupervisory duty hours of subordinates and others (based on estimates derived from position descriptions, supervisors, staffing studies, or contract documents) is expended on work at or above the base level credited, or, where extensive contract work is overseen, that 25 percent or more of the dollars spent on human services is for work at or above that level.

Include the workload of General Schedule subordinates, Federal Wage System employees, assigned military, volunteers, student trainees or non-Federal workers, such as contractor employees, State and local workers, or similar personnel.)

In determining the highest level of work which constitutes at least 25 percent of workload or duty time, credit trainee, developmental, or other work engineered to grades below normal full performance levels, at full performance levels. Exclude from consideration:

- the work of lower level positions that primarily support or facilitate the basic work of the unit;
- any subordinate work that is graded based on criteria in this guide (i.e., supervisory duties) or the Work Leader Grade-Evaluation Guide;
- work that is graded based on an extraordinary degree of independence from supervision, or personal research accomplishments, or adjust the grades of

such work - for purposes of applying this guide - to those appropriate for performance under "normal" supervision;

- work for which the supervisor or a subordinate does not have the responsibilities defined under Factor 3.

FWS, military, contractor, or volunteer work that is similar to that described in this paragraph should also be credited, adjusted or excluded from consideration as above.

The GSSG relies heavily upon percentages of time for determining the difficulty and complexity of the basic work directed. Although estimates may be used, percentages of time spent on major duties should be captured in position descriptions and core documents, when possible, to make the most accurate determination.

The degree of documentation required depends upon the organizational setting. In cases where an individual position contains a percentage of higher graded work, but less than enough to control the grade of the position, such higher graded work may be counted toward meeting the overall 25% of the basic work directed.

In the preceding example, only a portion of the work of the position is counted, excluding the remaining work; therefore, when calculating the total for the unit, the divisor should be adjusted accordingly.

Section A provides an optional method of determining the basic work typical of the organization directed. This option may be useful where subordinate positions are of "mixed" grade levels.

Second (and Higher) Level Supervisors

First, use the method described above for first level supervisors. For many second level supervisors, the base level arrived at by that method will be the correct one.

In some cases, however, a heavy supervisory or managerial workload related to work above that base level may be present. For these positions:

Determine the highest grade of nonsupervisory work directed which requires at least 50 percent of the duty time of the supervisory position under evaluation. The resulting grade may be used as the base level for second (and higher) level supervisors over large workloads -- if sound alignment with other supervisory positions in the organization and agency results.

QUESTION #17: Is the organizational structure and requirement to supervise 50% of the time as outlined as an option for determining workload for second and higher level supervisors typical in Army?

The organization structure intended and the requirement to spend 50% of the time performing supervisory duties are atypical in Army but may be feasible for supervisors of large organizations such as the DEH, DOL, or Chief of Construction/Operations at Corps district.

In the assessment of the level of any work performed by non-General Schedule employees, the pertinent classification standards should be consulted to derive an appropriate GS equivalent. In assessing supervisory positions which have mostly FWS employees making up their workforce, see the information in this guide under Exclusions.

After determining the highest qualifying level of the basic nonsupervisory work directed, using a method consistent with the instructions above, assign the proper Factor Level and credit the appropriate points using the following chart:

IF HIGHEST LEVEL OF BASE WORK IS:	THEN FACTOR LEVEL IS:	AND POINTS TO BE CREDITED ARE:
GS-1 or 2, or equivalent	5-1	75
GS-3 or 4, or equivalent	5-2	205
GS-5 or 6, or equivalent	5-3	340
GS-7 or 8, or equivalent	5-4	505
GS-9 or 10, or equivalent	5-5	650
GS-11 or equivalent	5-6	800
GS-12 or equivalent	5-7	930
GS-13 or higher, or equivalent	5-8	1030

QUESTION #23: Is there an official WG to GS equivalency chart?

No. To assess work performed by non-General Schedule (GS) employees, pertinent GS classification standards must be consulted. However, the following chart may be used as an indicator (NOT AN AUTOMATIC CONVERSION) of the equivalent full performance level for Federal Wage System positions. It does not apply to other pay schedules (e.g., WD, XP, etc.) for which you must also select an appropriate GS standard.

CAUTION: The Office of Personnel Management will not recognize this chart as a basis for evaluation in adjudicating an OPM appeal decision. Therefore, documentation other than the suggested equivalency chart must be cited in appeal decisions.

FWS Equivalency Guide

GS-1/2; WG-1/2 = FL 5-1 = 75 Points

GS-3/4; WG-3/4 = FL 5-2 = 205 Points

GS-5/6; WG-5/6 = FL 5-3 = 340 Points

GS-7/8; WG-7/8 = FL 5-4 = 505 Points

GS-9/10; WG-9/11 = FL 5-5 = 650 Points

GS-11; WG-12+ = FL 5-6 = 800 Points

GS-12; N/A = FL 5-7 = 930 Points

GS-13+; N/A = FL 5-8 = 1030 Points

FACTOR 6 - OTHER CONDITIONS

Begin evaluation of Factor 6 with the same basic work level selected for factor 5; do not begin with a basic work level lower than factor 5. Although factor 6 evaluation normally produces the same basic work level as factor 5; there may be situations where it does not. Merely matching the grade levels will not justify a factor level selection. The full coordinative aspects of a level, in combination with the difficulty of work supervised, must also be met in order to be credited.

This factor applies to the coordination and integration of the work done by subordinates within the organization supervised, not coordination with other organizational elements. Positions must meet the level of coordination and integration described, not just the grade level. Although you will first start with the grade level, it will not be unusual to drop one or two levels to find the appropriate description of the coordination and integration required.

This factor measures the extent to which various conditions contribute to the difficulty/complexity of carrying out supervisory duties, authorities, and responsibilities. Conditions affecting work for which the supervisor is responsible (whether performed by Federal employees, assigned military, contractors, volunteers, or others) may be considered if they increase the difficulty of carrying out assigned supervisory or managerial duties and authorities.

To Apply This Factor

Step 1 Read each Factor Level Definition and select the highest level which the position fully meets.

Step 2 If the level selected is either 6-1, 6-2, or 6-3, refer to the Special Situations section to be found after the Factor Level Definitions. Read each of the eight situations and determine how many are met by the position. If the position meets 3 or more of the situations (i.e., meets 3 or more of the numbered paragraphs), then add a single level to the level selected in Step 1. For example, if the highest factor level that the position meets is 6-3, and the position also meets three separate numbered paragraphs under Special Situations, credit the position with level 6-4 for Factor 6.

If the level selected under Step 1 is either 6-4, 6-5, or 6-6, do not consult the Special Situations section, and do not add any levels to the level selected in Step 1. The level selected in Step 1 will be the level credited to the position for Factor 6.

For FLs 6-4b, 6-5c, and 6-6b, the phrase "who each" means that "all" of the subordinate supervisors direct workloads at the referenced grade level. However, if the factor 5 basic work level could be obtained in each subordinate unit by judicious redirection of the workload among other supervisors to yield the factor 5 work level, then credit for the factor 5 basic work level is warranted. This is not to be construed as a mandate that such a redirection must occur.

Factor Level 6-1 -- 310 points

a. The work supervised or overseen involves clerical, technician, or other work comparable in difficulty to the GS-6 level, or lower. This could vary from basic supervision over a stable workforce performing work operations that are routine, to a level of supervision which requires coordination within the unit to ensure that timeliness, form, procedure, accuracy, quality and quantity standards are met in individual cases.

Factor Level 6-2 -- 575 points

a. The work supervised or overseen involves technician and/or support work comparable in difficulty to GS-7 or GS-8, or work at the GS-4, 5 or 6 level where the supervisor has full and final technical authority over the work, which requires coordination and integration of work efforts, either within the unit or with other units, in order to produce a completed work product or service. (Full and final technical authority means that the supervisor is responsible for all technical determinations arising from the work, without technical advice or assistance on even the more difficult and unusual problems, and without further review except from an administrative or program evaluation standpoint. Credit for this should be limited to situations involving an extraordinary degree of finality in technical decisionmaking.)

The required coordination at this level ensures: consistency of product, service, interpretation, or advice; conformance with the output of other units, with formal standards or agency policy. Supervisors typically coordinate with supervisors of other units to deal with requirements and problems affecting others outside the organization.

OR

b. The position directs subordinate supervisors of work comparable to GS-6 or lower, where coordinating the work of the subordinate units requires a continuing effort to assure quality and service standards, limited to matters of timeliness, form, procedure, accuracy, and quantity.

Factor Level 6-3 -- 975 points

a. Supervision and oversight at this level requires coordination, integration, or consolidation of administrative, technical, or complex technician or other support work comparable to GS-9 or 10, or work at the GS-7 or 8 level where the supervisor has full and final technical authority over the work. (Full and final technical authority means that the supervisor is responsible for all technical determinations arising from the work, without technical advice or assistance on even the more difficult and unusual problems, and without further review except from an administrative or program evaluation standpoint. Credit for this should be limited to situations

involving an extraordinary degree of finality in technical decision making.) Directing the work at this level (cases, reports, studies, regulations, advice to clients, etc.) requires consolidation or coordination similar to that described at Factor Level 6-2a, but over a higher level of work.

This level may also be met when the work directed is analytical, interpretive, judgmental, evaluative, or creative. Such work places significant demands on the supervisor to resolve conflicts and maintain compatibility of interpretation, judgment, logic, and policy application, because the basic facts, information, and circumstances often vary substantially; guidelines are incomplete or do not readily yield identical results; or differences in judgments, recommendations, interpretations, or decisions can have consequences or impact on the work of other subordinates. Such work also may be accomplished by a team, each member of which contributes a portion of the analyses, facts, information, proposed actions, or recommendations, which are then integrated by the supervisor.

OR

b. The position directs subordinate supervisors over positions in grades GS-7 or 8 or the equivalent which requires consolidation or coordination similar to that described at Factor Level 6-2a within or among subordinate units or with outside units.

Factor Level 6-4 -- 1120 Points

a. Supervision at this level requires substantial coordination and integration of a number of major work assignments, projects, or program segments of professional, scientific, technical, or administrative work comparable in difficulty to the GS-11 level. For example, such coordination may involve work comparable to one of the following:

- identifying and integrating internal and external program issues affecting the immediate organization, such as those involving technical, financial, organizational, and administrative factors;
- integrating the work of a team or group where each member contributes a portion of the analyses, facts, information, proposed actions, or recommendations; and/or ensuring compatibility and consistency of interpretation, judgment, logic, and application of policy;
- recommending resources to devote to particular projects or to allocate among program segments;
- leadership in developing, implementing, evaluating, and improving processes and procedures to monitor the effectiveness, efficiency, and productivity of the program segment and/or organization directed;

- reviewing and approving the substance of reports, decisions, case documents, contracts, or other action documents to assure that they accurately reflect the policies and position of the organization and the views of the agency.

OR

b. The position directs subordinate supervisors and/or contractors who each direct substantial workloads comparable to the GS-9 or 10 level. Such base work requires coordination similar to that described at Factor Level 6-3a., above, for first line supervisors.

Factor Level 6-5 -- 1225 points

a. Supervision and oversight at this level requires significant and extensive coordination and integration of a number of important projects or program segments of professional, scientific, technical, managerial, or administrative work comparable in difficulty to the GS-12 level. Supervision at this level involves major recommendations which have a direct and substantial effect on the organization and projects managed. For instance, makes major recommendations in at least three of the areas listed below or in other, comparable areas:

- significant internal and external program and policy issues affecting the overall organization, such as those involving political, social, technological, and economic conditions, as well as those factors cited in the first item of Factor Level 6-4a;
- restructuring, reorienting, recasting immediate and long range goals, objectives, plans, and schedules to meet substantial changes in legislation, program authority, and/or funding;
- determinations of projects or program segments to be initiated, dropped, or curtailed;
- changes in organizational structure, including the particular changes to be effected;
- the optimum mix of reduced operating costs and assurance of program effectiveness, including introduction of labor saving devices, automated processes, methods improvements, and similar;
- the resources to devote to particular programs (especially when staff-years and a significant portion of an organization's budget are involved);
- policy formulation, and long range planning in connection with prospective changes in functions and programs.

OR

b. Supervision of highly technical, professional, administrative, or comparable work at GS-13 or above involving extreme urgency, unusual controversy, or other, comparable demands due to research, development, test and evaluation, design, policy analysis, public safety, public health, medical, regulatory, or comparable implications.

OR

c. Managing work through subordinate supervisors and/or contractors who each direct substantial workloads comparable to the GS-11 level. Such base work requires similar coordination as that described at Factor Level 6-4a. above for first line supervisors.

NOTE: Credit for Factor Level 6-5 cannot be obtained by means of the Special Situations found at the end of the Factor Level Descriptions.

Factor Level 6-6 -- 1325 points

a. Supervision and oversight at this level requires exceptional coordination and integration of a number of very important and complex program segments or programs of professional, scientific, technical, managerial, or administrative work comparable in difficulty to the GS-13 or higher level. Supervision and resource management at this level involves major decisions and actions which have a direct and substantial effect on the organizations and programs managed. For instance, supervisors at this level make recommendations and/or final decisions about many of the management areas listed under Factor Level 6-5a., or about other comparable areas.

OR

b. They manage through subordinate supervisors and/or contractors who each direct substantial workloads comparable to the GS-12 or higher level. Such base work requires similar coordination as that described at Factor Level 6-5a. above for first line supervisors.

NOTE: Credit for Factor Level 6-6 cannot be obtained by means of the Special Situations described below.

SPECIAL SITUATIONS

Supervisory and oversight work may be complicated by special situations and/or conditions. The Methodology section at the beginning of this factor explains how to credit the following situations.

1. Variety of Work:

Credit this situation when more than one kind of work, each kind representing a requirement for a distinctly different additional body of knowledge on the part of the supervisor, is present in the work of the unit. A "kind of work" usually will be the equivalent of a classification series. Each "kind of work" requires substantially full qualification in distinctly separate areas, or full knowledge and understanding of rules, regulations, procedures, and subject matter of a distinctly separate area of work. Additionally, to credit "Variety" (1) both technical and administrative responsibility must be exercised over the work, and (2) the grade level of the work cannot be more than one grade below the base level of work used in Factor 5.

2. Shift Operations:

Credit this situation when the position supervises an operation carried out on at least two fully staffed shifts.

3. Fluctuating Work Force or Constantly Changing Deadlines:

Credit Fluctuating Work Force when the workforce supervised by the position has large fluctuations in size (e.g., when there are significant seasonal variations in staff) and these fluctuations impose on the supervisor a substantially greater responsibility for training, adjusting assignments, or maintaining a smooth flow of work while absorbing and releasing employees.

Credit Constantly Changing Deadlines when frequent, abrupt, and unexpected changes in work assignments, goals, and deadlines require the supervisor constantly to adjust operations under the pressure of continuously changing and unpredictable conditions.

4. Physical Dispersion:

Credit this situation when a substantial portion of the workload for which the supervisor is responsible is regularly carried out at one or more locations which are physically removed from the main unit (as in different buildings, or widely dispersed locations in a large warehouse or factory building), under conditions which make day-to-day supervision difficult to administer.

5. Special Staffing Situations:

Credit this situation when: (1) a substantial portion of the work force is regularly involved in special employment programs; or in similar situations which require involvement with employee representatives to resolve difficult or complex human resources management issues and

problems; (2) requirements for counseling and motivational activities are regular and recurring; and (3) job assignments, work tasks, working conditions, and/or training must be tailored to fit the special circumstances.

6. Impact of Specialized Programs:

Credit this situation when supervisors are responsible for a significant technical or administrative workload in grades above the level of work credited in Factor 5, provided the grades of this work are not based upon independence of action, freedom from supervision, or personal impact on the job.

7. Changing Technology:

Credit this when work processes and procedures vary constantly because of the impact of changing technology, creating a requirement for extensive training and guidance of the subordinate staff.

8. Special Hazard and Safety Conditions:

Credit this situation when the supervisory position is regularly made more difficult by the need to make provision for significant unsafe or hazardous conditions occurring during performance of the work of the organization.

DETERMINING THE GRADE

To determine the final grade of supervisory work:

Assure that you have applied this guide in accordance with the "Instructions for Application" in the introduction to this Guide, and the directions given in each factor.

To reach a final grade level determination, apply all criteria in the GSSG and this DoD Guide. If there is a conflict between material in the DoD Guide and the GSSG, the GSSG takes precedence.

- Total the points for all six factors and convert them to a grade using the point-to-grade conversion chart below. This normally produces the final grade of supervisory major duties.

POINT-TO-GRADE CONVERSION CHART

Point Range	Grade
-------------	-------

4055-up	GS-15
3605-4050	GS-14
3155-3600	GS-13
2755-3150	GS-12
2355-2750	GS-11
2105-2350	GS-10
1855-2100	GS-09
1605-1850	GS-08
1355-1600	GS-07
1105-1350	GS-06
855-1100	GS-05

If the grade which results from applying the conversion chart is not higher than the base grade of work supervised, as determined under Factor 5 of this guide, the final grade for the supervisory work evaluated will be one grade above the "base" grade of work directed, provided:

- a. the "base" level of work directed is determined under Factor 5 of this guide, and involves 25 percent or more of the workload directed, as estimated under Factor 5; and
- b. the delegated supervisory and managerial authorities and responsibilities credited meet the minimum level of authority and responsibility in Factor Level 3-2;

In addition, where the base grade of work directed is GS-9, and the adjustment conditions "a" and "b" immediately above are fully met, the final grade for the supervisory work shall not be less than GS-11.

These adjustments may not be applied directly to "Deputy" or "Assistant Chief" duties causing a position to be graded at the same grade as the "Chief."

SECTION A

OPTIONAL METHOD TO DETERMINE BASIC WORKLOAD, FACTOR 5

A sample workload analysis method to assist in determining the basic workload under Factor 5 may be useful when the basic work level is not apparent (where several subordinate positions are mixed grade). This material is from an OPM briefing on the GSSG.

WORKLOAD ANALYSIS BY WORKHOURS

WORK AT:	POSNS #1 GS-12	IN #2 GS-12	BASE #3 GS-11	CALC #4 GS-11	TOTAL HOURS	DIV BY	% TOTAL WKLD
GS-12	20	10	4		34	160	21.25
GS-11	10	30	30	20	90	160	56.25
GS-9	10		6	20	36	160	22.5
TOTAL	40	40	40	40		160	100%

Four positions, above, meet the GSSG criteria for credit toward the basic workload. GS-12#1 expends 20 workhours at GS-12; 10 at GS-11; and 10 at GS-9, etc. There are 34 GS-12 workhours; 90 GS-11 workhours; and 36 GS-9 workhours for the organization, for a total of 160 workhours per week. To determine the number of hours needed to meet the GSSG 25% requirement, compute 25% of 160, which is 40 workhours. Looking at the last column, percentage of total workload, the highest grade level which meets or exceeds 25% is creditable. This analysis results in a basic work level of GS-11.

**OPTIONAL FACTOR 5 BASE LEVEL EVALUATION SUMMARY BY
WORKHOURS**

WORK AT	POSNS #1 GS-	IN #2 GS-	BASE #3 GS-	LEVEL #4 GS-	CALC #5 GS-	TOTAL HOURS	DIV BY	% TOTAL WKLD
GS-								
GS-								
GS-								
GS-								
GS-								

ORGANIZATION: _____

TOTAL INCLUDABLE IN BASE LEVEL CALC (I.E., DIVISOR): _____

**OPTIONAL FACTOR 5 SUMMARY
PAGE BY WORKHOURS**

WORK AT	WORK Page 1	SHEET Page 2	PAGE Page 3	SUB Page 4	TOTAL Page 5	TOTAL HRS	DIV BY	% TOTAL WKLD
GS-								
GS-								
GS-								
GS-								
TOTAL								

These optional forms may be used in evaluation of Factor 5.

SECTION B
GSSG POSITION EVALUATION SUMMARY

POSITION/ORGANIZATION INFORMATION

POSITION NUMBER: _____

POSITION TITLE: _____

PAY PLAN, SERIES, GRADE: _____

ORGANIZATION INFORMATION: _____

SUPV LEVEL: (1ST, 2ND, HIGHER): _____

CHIEF OR DEPUTY: _____

FACTOR	LEVEL	POINTS	REMARKS
1. PROGRAM SCOPE & EFFECT			
2. ORGANIZATIONAL SETTING			
3. SUPERVISORY & MANAGERIAL AUTH			
4A. NATURE OF CONTACTS			
4B. PURPOSE OF CONTACTS			
5. DIFFICULTY (BASE WORK)			
6. OTHER CONDITIONS			
TOTAL POINTS ASSIGNED			

GRADE CONVERSION: _____

ADJUSTMENT PROVISION: Y or N

OTHER REMARKS:

CLASSIFIER: _____ **DATE:** _____

Appendix D

Classification of Attorney Positions

CLASSIFICATION EXAMPLES

EXAMPLE NO. 1 - Office of Counsel Position including major duties involving Labor Counselling, Contract Claims, and General Law.

EVALUATION STATEMENT

Position Number: xxxx

Classification: General Attorney, GS-0905-14

Organization: Office of Counsel, XYZ District

Reference: US OPM PCS for Attorney General
Series, GS-0905, OCT 59

Title and Series Determination:

This is a professional legal position serving as an Assistant District Counsel for the Office of Counsel, XYZ District. Thus, the appropriate series for classifying this position is US OPM PCS for Attorney General Series, GS-0905, OCT 59.

The work performed by the incumbent consists of Labor Counselor trial work and being an attorney-advisor on construction contract claims and various general law matters. Thus, the functional title of the position is General Attorney because it involves trial work and attorney-advisor duties. (US OPM Stds., pages 2-3) The subject title would also be "General" since the position deals with more than one legal subject matter. However, this is dropped when the Function Title is also "General." (US OPM Stds., page 3)

The title and series are thus determined to be General Attorney, GS-0905.

Grade Determination: The Standard is divided into two grading criteria - Nature of the Case or Legal Problem and Level of Responsibility. Set forth below are examples of regular and recurring work for Labor Counselor duties (performed 50% of the time), Contract Claims (performed 30% of the time), and General Law (performed 20% of the time).

LABOR COUNSELOR

Factor 1 - Nature of the Case or Legal Problem:

Examples of Regular and Recurring Work:

1. Mr. X, a naturalized American citizen born in XYZ, filed an EEO complaint based upon allegations of discrimination and reprisal for past EEO activities. The specific instances were nonselection for one of two engineering positions and failure to receive higher than a Success Level 3 TAPES rating. Additionally, because complainant alleged reprisal, multiple issues from his prior EEO actions were also introduced which included failure to be given performance appraisals for two prior years and harassment by management. The prior complaint was settled by placing Complainant in a GS-12 position.

Complainant was represented by an employment law specialist with over twenty years of experience in that field. Attorney is an honors graduate of the University of California's Boalt Hall Law School where he was editor of law review. Attorney has achieved an AV rating. The incumbent was solely responsible for the presentation of the agency's case without any additional legal assistance. During the discovery stage of the case, Mr. X's attorney deposed approximately ten Corps employees.

This case fully meets the criteria of Type II in the GS-0905 Classification Standards for attorney positions. First, the standards define Type II complexity and nature and availability of precedent decisions as those where there is an absence of clearly applicable precedents due to the novelty of the issue, OR where it is highly arguable which precedents apply because of the complexity of the facts or the different possible constructions which can be placed on either the facts or the laws and precedents involved. In this case, there was conflicting testimony regarding complainant's work performance and whether his TAPES rating correctly reflected that level. In addition, there was conflicting testimony regarding whether the matrix which was created by the selection panel accurately reflected Complainant's level of expertise and experience as compared to the other candidates.

Second, as to the nature of the competition, the standards define Type II as those

cases which are strongly contested in formal hearings or informal negotiations by the individuals involved. EEO cases are inherently strongly contested by the complainants. In this case, Complainant strongly contested the case and hired extremely capable legal talent to represent him.

2. Mr. Y was a 72-year old engineer. After serving in Panama, he was converted from a CZ-801-13 to a GS-12 in a CONUS District and eligible for special reconsideration for repromotion. By letter he was informed by Human Resources that he had inadvertently been left off a selection list from which two GS-13 positions had been filled. Priority consideration was offered to him to correct the problem. Complainant subsequently filed a complaint alleging discrimination based on race and age. An OCI investigation found no discrimination. Complainant appealed to the EEOC. Upon checking their records, HR discovered that Complainant had been left off two additional selection lists and was provided with additional priority considerations.

This case fully meets the criteria of Type II. First, the standards define Type II complexity and nature and availability of precedent decisions as those where there is an absence of clearly applicable precedents due to the novelty of the issue OR where it is highly arguable which precedents apply because of the complexity of the facts or the different possible constructions which can be placed on either the facts or the laws and precedents involved. In this case the issue was novel because complainant was in his seventies. There were four missed promotion opportunities and several other administrative errors including an adjustment error in his grade after returning from Panama and two lost pay checks. The testimony was conflicting as to why Complainant's name had been left off the selection lists.

Second, as to the nature of the competition, the standards define Type II as those cases which are strongly contested in formal hearings or informal negotiations by the individual involved. In this case, Complainant strongly contested his case, both at the OCI level and in the months leading up to the EEOC hearing.

3. This case involved a female engineer over forty years of age who was placed on a Performance Improvement Plan (PIP) for 120 days and given an opportunity to improve her performance through a program instituted by management and monitored through the Human Resources Office. Complainant failed her PIP and was terminated from employment. There was evidence of personality behavior

disorders which were adamantly denied by the Complainant because she wanted to be judged on the quality of her work performance alone. After termination she filed for retirement disability and also filed an EEO complaint on grounds she should have been advised by management of her rights under the Americans with Disabilities Act. Although Complainant was granted a retirement disability, she continued to pursue the EEO action and hired an attorney.

This case fully meets the criteria of Type II in the GS-0905 classification standards for attorney positions. First, the standards define Type II complexity and nature and availability of precedent decisions as those where there is an absence of clearly applicable precedents due to the novelty of the issue OR where it is highly arguable which precedents apply because of the complexity of the facts or the different possible constructions which can be placed on either the facts or the laws and precedents involved. The complexity of the case was reflected by the fact that Complainant's work performance was poor and she had a manic-depressive type behavior problem. She refused to provide management with evidence of her disability and wanted her work to be judged solely by her performance standards.

Regulations provide that an individual cannot be forced to undergo a physical or mental exam, unless they agree to do so. When Complainant was asked if there was any reason to explain her poor performance, her attorney responded with a warning letter. The Americans with Disabilities Act and case law were unclear regarding the degree of accommodation that was to be provided. Management did search for a suitable position but was unsuccessful.

Second, as to the nature of the competition, the standards define Type II as those cases which are strongly contested in formal hearings or informal negotiations by the individuals involved. Complainant vigorously contested her removal. After termination, she continued to contact HR and the EEO Office regarding the status of her case. Very capable legal talent represented Complainant.

4. This case involved a GS-11 Computer Specialist who was over sixty years old and hearing impaired. He was terminated during his probationary period due to poor performance and abusive behavior toward others. Management contended that Complainant was unable to comprehend the nature of his job duties, failed to carry out the tasks assigned to him, and became over involved in supervising the independent contractors, putting the agency at risk.

Complainant filed an EEO complaint alleging discrimination based on sex, age, and physical impairment. He contended his failure to perform was due to a lack of clear direction regarding duty assignments, inability to hear the supervisor, a failure by IMO to provide proper sound enhancing telephone equipment, and lack of training. The OCI formal investigation resulted in a finding of no discrimination.

Complainant was represented by an attorney who specializes in employment law and was formerly an EEOC Administrative Law Judge. The case was complex and dealt with conflicting testimony regarding Complainant's behavior, job performance, degree of impairment, and whether his performance standards were reasonably attainable.

This case fully meets the criteria of Type II in the GS-0905 Classification Standards for attorney positions. First, the standards define Type II complexity and nature and availability of precedent decisions as those where there is an absence of clearly applicable precedents due to the novelty of the issue, OR where it is highly arguable which precedents apply because of the complexity of the facts or the different possible constructions which can be placed on either the facts or the laws and precedents involved. In this case, there was conflicting testimony as

to Complainant's performance and attainability of his standards. As to the nature of the precedents, the law is unsettled as to the degree of accommodation required under the Americans with Disabilities Act.

Second, as to the nature of the competition, the standards define Type II as those cases which are strongly contested in formal hearings or informal negotiations by the individuals involved. EEO cases are inherently strongly contested by the complainants. In this case, Complainant was represented by extremely capable legal talent.

5. In this case, Complainant was hired as a Civil Engineer Student Trainee under a one-year Cooperative Education appointment. Complainant worked from 32 to 40 hours a week while attending graduate school. On the eve of his one-year anniversary date, he was terminated for falsifying time records, conducting personal business during duty hours, and unexcused tardiness. Complainant alleged discrimination due to race, national origin, and age. An OCI investigation

was undertaken with a finding of no discrimination. Management's witnesses included several supervisors who contended that when Complainant arrived in the morning, he signed in at an earlier time. In addition, he allegedly took extensive lunch-study breaks and used the computer and phone to conduct personal business.

Complainant contended that other employees in his section played games on the computers, took long breaks, and that he was being unfairly singled out. On his own behalf, he pointed to a letter of commendation received for his work, alleged he was being replaced by another minority in the all minority section, and that he was being subjected to differential treatment as evidenced by the fact that when he requested financial aid he was turned down, although others were not. Management explained this action by saying that financial aid is provided for undergraduate programs, not graduate programs.

This case fully meets the criteria of Type II in the GS-0905 Classification Standards for attorney positions. First, the standards define Type II complexity and nature and availability of precedent decisions as those where there is an absence of clearly applicable precedents due to the novelty of the issue, OR where it is highly arguable which precedents apply because of the complexity of the facts or the different possible constructions which can be placed on either the facts or the laws and precedents involved. In this case, there was conflicting testimony as to whether Complainant was subjected to differential treatment. Also, there was conflicting testimony regarding whether management had agreed to allow Complainant to take a longer lunch hour to study at the library during the day and make up the time at the end of the day. And there was failure of management to document counseling sessions with Complainant.

Second, as to the nature of the competition, the standards define Type II as those cases which are strongly contested in formal hearings or in formal negotiations by the individuals involved. EEO and MSPB cases are inherently strongly contested by the complainants. In this case Complainant was not represented by counsel; but during the negotiations and pre-hearing settlement conference, he argued vigorously on his own behalf that the agency had acted unprofessionally by terminating him at the last moment and that Complainant deserved some money damages.

6. This case involved a 67 year old GS-510-09 Accountant. He was allegedly asked by his supervisor "when was he going to retire?" When his request for training was denied and when he was not selected for a GS-11 staff accountant position, Complainant alleged disparate treatment based on age and race. He cited instances where his supervisor had embarrassed him with questions urging him to retire. In addition when he was re-assigned, the word "detail" on his SF-52 was crossed out and "reassignment" was written in its place. The re-assignment was allegedly made to keep complainant from a promotion. The OCI investigation resulted in a finding of no discrimination and Complainant appealed to the EEOC.

This case fully meets the criteria of Type II in the GS-0905 Classification standards for attorney positions. First, the standards define Type II complexity and nature and availability of precedent decisions as those where there is an absence or clearly applicable precedents due to the novelty of the issue OR where it is highly arguable which precedents apply because of the complexity of the facts or the different possible constructions which can be placed on either the facts or the laws and precedents involved. In this case the issue was novel because Complainant was in his late 60's, several selection lists were used, and there was a missed consideration where Complainant's name failed to appear on the second list. In addition, since Complainant's spouse had filed a separate discrimination complainant and had won compensatory damages, there was a potential charge of reprisal. The testimony was conflicting as to why Complainant's name had been left off the second list.

Second, as to the nature of the competition, the standards define Type II as those cases which are strongly contested in formal hearings or in formal negotiations by the individual involved. In this case, although Complainant was not represented by counsel, he contested his case vigorously. Because of the conflicting testimony, there was potential jeopardy to the agency.

Factor 2 - Level of Responsibility:

Nature of Functions

Research and Preparation of Documents - The incumbent personally performs

legal research in connection with Labor Counselor cases pending hearing or on appeal. Sometimes questions presented by management are referred back for further development of facts indicating the precise nature of the facts needed; but the incumbent often performs both the factual and legal research required. This fully meets and exceeds Level C which only requires that both factual and legal research is performed some of the time. (OPM Stds., pages 17-18). Accordingly, the intervening Level D is credited.

Litigation - As to litigation, the incumbent is the Principal Attorney in Charge of the litigation. Incumbent does not assist another attorney. This is an element of Level E, but does not fully meet this level because the cases are not of such importance that they often require matching skills with the most distinguished and highly paid talent in the country. (OPM Stds., pages 18 and 22). Accordingly, the intervening Level D is credited.

Legal Advice and Counsel - The incumbent acts regularly as the legal advisor and the assigned specialist for a single program, i.e., the Labor Relations Program. This fully meets Level C. (OPM Stds., page 19)

Unlike "Typing" of cases which is described in the standards in terms of minimum characteristics, the "Levels" of responsibility are described in terms of typical characteristics. (OPM 905 Stds., page 9) The above analysis concludes that this position is credited with Level D for Research and Preparation of Documents; Level D for Litigation; and, Level C for Legal Advice and Counsel. Accordingly, the overall determination of Level D is credited for Nature of Functions.

Supervision and Guidance Received

Research/Instructions - The incumbent is responsible for all cases arising within the Labor Relations Program. This exceeds Level C attorneys who handle only the routine cases. Unlike Level C attorneys, the supervisor does not apprise the incumbent of any unusual circumstances. background information, or important policy considerations. This also exceeds Level C attorneys which receive such preliminary instructions. Accordingly, Level D is credited.

Litigation - As to hearings, unlike Level C attorneys, the supervisor does not discuss the presentation, the line of approach, the possible lines of opposition, or other aspects of the case. Accordingly, Level D is credited.

Supervisor Review - Unlike Level C attorneys, legal work is subject to review after-the-fact for soundness of approach and argument, application of legal principals, and consistency with policy, procedures, and regulations. This exceeds Level C attorneys which receive such review before the work is finalized. Thus, Level D is credited.

The overall determination of Level D is credited for Supervision and Guidance Received. (OPM Stds., pages 19-20)

Personal Work Contacts

Litigation - Level E is credited where, as here, the incumbent tries cases before administrative bodies, i.e., EEOC, MSPB, FLRA, etc. (OPM Stds., page 24)

Legal Advice and Participation - Unlike Level C attorneys, the incumbent does not merely advise negotiating officials; the incumbent is the negotiating official for settlement of claims arising out of the Labor Relations Program. Accordingly, Level D is credited.

Unlike "Typing" of cases which is described in the standards in terms of minimum characteristics, the "Levels" of responsibility are described in terms of typical characteristics. (OPM 905 Stds., page 9) The above analysis concludes that this position is credited with Level E for Litigation and Level D for Legal Advice and Participation. Accordingly, the overall determination of Level D with strengthening characteristics (D+) is credited for Personal Work Contacts.

Nature and Scope of Recommendations and Decisions

Litigation and Legal Advice and Counsel - Recommendations for the settlement of litigation and legal advice and counsel given by the incumbent dealing with pending cases is given directly to the Commander or Deputy Commander, not through the supervisor. The Commander is the head of a major operating program in the Corps of Engineers. However, this advice is limited to the Labor Relations

Program and not all matters pertaining to the District. Thus, it exceeds Level C, but does not meet Level E. Accordingly, Level D is credited. (OPM Stds., pages 20- 21 and 24-25)

Grade Classification:

Factor 1, Nature of the Case or Legal Problem, is evaluated as Type II. Factor 2, Level of Responsibility, consists of Level D for Nature of Functions; Level D for Supervision and Guidance Received; Level D+ for Personal Work Contacts; and Level D for Nature and Scope of Recommendations and Decisions. Thus, Factor 2 is evaluated as Level D. By reference to the grade-level conversion chart on page 25 of the OPM 905 Standards, these duties are classified at the GS-13 level.

CONTRACT CLAIMS

Factor 1 - Nature of the Case or Legal Problem:

1. MX Missile Assembly Building at XYZ AFB - This \$8 million claim involved a performance specification. The contractor's design provoked numerous technical design issues with regard to the integrity of the bridge cranes and thousands of welds. Delay damages were also alleged to have been the fault of the Government. This required the review of voluminous documents and the hiring of outside expert engineering and network assistance to help determine which parts of the claim, if any, were valid. The work involved was somewhat unique to the Corps due to the large bridge cranes specified for handling the MX missiles. Bridge cranes of this size are normally used in smelting plants to carry molten metals. The claim was vigorously defended by a senior partner in an AV rated law firm specializing in Government Contract law. The incumbent drafted the final decision of the Contracting Officer and represented the Contracting Officer in settlement negotiations which were ultimately successful. While this case involved very large sums of money and was vigorously contested by extremely capable opposing legal talent, it does not rise to meet the additional requirement in Type III cases of having nationwide interest. While Government Contractors nationwide may be generally interested, such interest by a single group is stated to be Type II (OPM Stds., page 13). However, it does meet the alternate criteria of Type III complex factual issues being involved since extensive factual research and analysis was required as well as the use and analysis of expert bridge crane design engineering testimony or information. (OPM 905 Stds., pages 14 and 15)

2. Space Transportation System (Space Shuttle) at XYZ AFB - The amount of this claim was approximately \$12 million. Honeywell was the subcontractor on three prime contracts for the construction of this facility. The matter dealt with contract performance specifications in three separate prime contracts and the interpretation as to whether the proffered design in all three contracts would, in fact, accomplish the performance requirements for the sophisticated computer control systems to properly operate the entire facility. The matter required extensive factual research of the complex computer software and hardware with analysis of factual design issues and the use of outside expert computer control system engineers and was vigorously defended by a senior partner of an AV rated law firm dealing in Government Contract Law. It is estimated that contractor legal costs alone approached \$2 million before settlement was ultimately reached. The case also involved alleged fraud on the part of Honeywell in the items claimed as extra cost and in pricing said items. This matter was thoroughly investigated by the incumbent and referred to the Army Criminal Investigations Command which ultimately referred the case to the local U.S. Attorney for criminal prosecution. While this case involved very large sums of money and was vigorously contested by extremely capable opposing legal talent, it does not rise to meet the additional requirement in Type III cases of having nationwide interest. While Government Contractors nationwide may be generally interested, such interest by a single group is stated to be Type II (OPM Stds., page 13) However, it does meet the alternate criteria of Type III complex factual issues being involved since extensive factual research and analysis was required as well as the use and analysis of expert computer control system engineering testimony or information. In addition, Type III is also met due to the unusual delicacy involved with the allegations of fraud. (OPM 905 Stds., pages 14 and 15)
3. XYZ Flood Control Channel - This claim involved the failure of the maintenance road (over three miles) adjacent to the flood control channel. The fix was made by the Government after the contractor refused. The contractor ultimately claimed \$1.6 million alleging that the Government design calling for vegetation with accompanying irrigation caused the road failure. The Government contended that improper compaction by the contractor was the cause. Negotiations were held in an attempt to resolve this matter and prevent an appeal from being filed with the Corps of Engineers Board of Contract Appeals. The incumbent had prepared the final decision of the Contracting Officer and represented the Contracting Officer at negotiations. An extensive research and analysis of the contractor quality control records and the Government quality assurance records was required in addition to those of several follow-on contracts for other reaches of the channel where the maintenance road did not fail. In addition, further compaction tests and the use of

an expert foundation and material engineer from Arizona State University was required to present the Government's side at the negotiations. The contractor used three separate soils engineering experts. A resolution was ultimately reached. The contractor was represented by a senior partner in an AV rated law firm. Although this case involved only large sums of money, it was vigorously contested by extremely capable opposing legal talent. But, it does not rise to meet the additional requirement in Type III cases of having nationwide interest. While Government Contractors nationwide may be generally interested, such interest by a single group is stated to be Type II (OPM Stds., page 13) However, it does meet the alternate criteria of Type III complex factual issues being involved since extensive research and analysis was required as well as the use and analysis of expert soils engineering testimony or information. (OPM 905 Stds., pages 14 and 15)

1. KC-10 Fuel Lines, XYZ AFB - This was a \$5.5 million claim by the contractor concerning alleged impacts and delays caused by the Government and the directed correction of leaking fuel lines. The contractor was represented by a senior partner in an AV rated law firm. The issues involved extensive factual research and analysis and the use of expert design engineers from the Corps of Engineers Research Laboratory (CERL) with regard to fatigue design of the stainless steel pipe and radiographic analysis of the longitudinal welds. The impact portion was similarly complex in researching and analyzing the job site events with the use of expert engineers involved in network analysis. The incumbent represented the Contracting Officer in a "summit" meeting at Washington, D.C., with representatives from the district, division, HQUSACE, Air Force, and CERL personnel to develop a Government negotiation position since this pipe failed on other construction projects. The incumbent presented the factual and engineering analysis and later represented the Contracting Officer in successful negotiations. Although this case involved very large sums of money and was vigorously contested by extremely capable opposing legal talent, it does not rise to meet the additional requirement in Type III cases of having nationwide interest. While Government Contractors nationwide may be generally interested, such interest by a single group is stated to be Type II (OPM Stds., page 13) However, it does meet the alternate criteria of Type III complex factual issues being involved since extensive research and analysis was required as well as the use and analysis of expert metal fatigue engineering testimony or information. (OPM 905 Stds., pages 14 and 15)

4. Concrete Airfield Construction at XYZ AFB - This claim involves slightly greater than \$1 million in costs alleged to have been incurred as the result of additional unanticipated material required to be placed to bring the construction site up to grade. The Contractor asserted that subsidence occurred over a weekend period after it had attained the requisite subgrade elevation. Both the Government and

the contractor hired expert soils engineers to help determine whether subsidence occurred and whether the contractor had performed to grade prior to importing additional quantities, as alleged. The incumbent prepared the final decision of the Contracting Officer and represented the Contracting Officer in negotiations. The contractor was represented by an AV rated law firm. Numerous daily quality control reports and engineering test data had to be researched and analyzed coupled with the use of expert engineering assistance in preparing the final decision of the Contracting Officer and in presenting the Government's side at negotiations. Although this case involved only large sums of money, it was vigorously contested by extremely capable opposing legal talent. But, it does not rise to meet the additional requirement in Type III cases of having nationwide interest. While Government Contractors nationwide may be generally interested, such interest by a single group is stated to be Type II (OPM Stds., page 13) However, it does meet the alternate criteria of Type III complex factual issues being involved since extensive research and analysis was required as well as the use and analysis of expert soils engineering testimony or information. (OPM 905 Stds., pages 14 and 15)

5. Repairs to Electrical Distribution System at Ft. XYZ - This claim was for approximately \$500,000 mainly associated with the costs of repair to the electrical distribution system which was damaged by lightning during a construction suspension. The contractor argued that it was the Government's fault in its design of certain electrical components. The Government argued that the cause was the contractor's temporary connection to an existing fence rather than constructing the required new grid grounding system. Preparation for the final Contracting Officer's decision required extensive research and analysis of the factual circumstances of the Government's design and the contractor's connection to the fence and expert electrical engineering testimony as to which may have caused the lightning not to ground and thus destroy the completed work. The contractor was represented by an AV rated law firm which vigorously contested this case. Although this case involved only large sums of money, it was vigorously contested by extremely capable opposing legal talent. But, it does not rise to meet the additional requirement in Type III cases of having nationwide interest. While Government Contractors nationwide may be generally interested, such interest by a single group is stated to be Type II (OPM Stds., page 13) However, it does meet the alternate criteria of Type III complex factual issues being involved since extensive research and analysis was required as well as the use and analysis of expert electrical engineering testimony or information. (OPM 905 Stds., pages 14 and 15)
6. Flight Administration Building at XYZ AFB - This is a \$1.25 million claim for

alleged Government delays in issuing the notice to proceed, improper testing rejection, and certain numerous change order work causing impact delays. The Government's case required extensive research and analysis of contractor cost data, and quality control and assurance reports to determine any Government caused impacts to the critical path and, if so, any concurrent contractor delays. Both network analysis and accounting experts were utilized by the Government to determine its position and the preparation of the Contracting Officer's Final Decision by the incumbent. Although this case involved only large sums of money, throughout the dispute the claim was vigorously contested by extremely capable opposing legal talent from an AV rated Government Contracts law firm. But, it does not rise to meet the additional requirement in Type III cases of having nationwide interest. While Government Contractors nationwide may be generally interested, such interest by a single group is stated to be Type II (OPM Stds., page

7. Base Operations Building at XYZ AFB - This is a claim for \$3.6 million for impacts and delays caused by a change to the raised flooring for computers. The Government's case required extensive research and analysis of contractor cost data, and quality control and assurance reports to determine any Government caused impacts to the critical path and, if so, any concurrent contractor delays. Both network analysis and accounting experts were utilized by the Government to determine its position and the preparation of the Contracting Officer's Final Decision by the incumbent. Although this case involved only large sums of money, it was vigorously contested throughout the dispute by extremely capable opposing legal talent from an AV rated Government Contracts law firm. But, it does not rise to meet the additional requirement in Type III cases of having nationwide interest. While Government Contractors nationwide may be generally interested, such interest by a single group is stated to be Type II (OPM Stds., page 13) However, it does meet the alternate criteria of Type III complex factual issues being involved since extensive factual research and analysis was required to construct the actual critical path during construction as well as the use and analysis of expert network analysts and accounting testimony or information with regard to costs. (OPM 905 Stds., pages 14 and 15)
8. Hospital Life Safety Upgrade at XYZ AFB - The contractor encountered asbestos during construction. A unilateral change order was issued for asbestos removal. The contractor filed a claim in the amount of \$6 million for alleged additional costs for asbestos removal and impact and delay costs to the original contract work. The Government's case required extensive research and analysis of contractor cost data, and quality control and assurance reports to determine the true costs of asbestos removal and the costs of the Government caused impacts to the critical

path. Both network analysis and accounting experts were utilized by the Government to determine its position and the preparation of the Contracting Officer's Final Decision by the incumbent. This case involved very large sums of money and was vigorously contested throughout the dispute by extremely capable opposing legal talent from an AV rated Government Contracts law firm. But, it does not rise to meet the additional requirement in Type III cases of having nationwide interest. While Government Contractors nationwide may be generally interested, such interest by a single group is stated to be Type II (OPM Stds., page 13) However, it does meet the alternate criteria of Type III complex factual issues being involved since extensive factual research and analysis was required to determine the true costs of asbestos removal and to construct the actual critical path during construction as well as the use and analysis of expert network analysts and accounting testimony or information with regard to costs. (OPM 905 Stds., pages 14 and 15)

Factor 2 - Level of Responsibility:

Nature of Functions

Research and Preparation of Documents - With respect to contract claims, the incumbent has the responsibility to prepare, in final form, the final decision of the Contracting Officer. Once issued, it becomes the final decision of the agency subject to appeal by the contractor to the U.S. Court of Federal Claims or to the Armed Services Board of Contract Appeals (for military contracts) or the Corps of Engineers Board of Contract Appeals (for civil works contracts). All three tribunals are creatures of statute and exercise judicial or quasi-judicial responsibilities. If claims have merit, the incumbent provides the written basis for the Contracting Officer to issue contract modifications. In both instances, the actions of the Contracting Officer are final decisions of the agency. Level E is appropriate in these circumstances. (See OPM 905 Stds., page 22)

Litigation - None

Legal Advice and Counsel - Level C attorneys negotiate usually as a member of a team. Here, the incumbent represents the Contracting Officer during negotiations. Thus, Level C is exceeded. The District Commander exercises management oversight especially over Type III claims and the incumbent provides legal advice and counsel directly to said Commander. Unlike other Federal agencies, there is

no "operating" program in the U.S. Army Corps of Engineers at the Washington or Division Headquarters levels. Accordingly, the District Commander is the head of a major operating program of the agency. Furthermore, in April 1987, HQUSACE contracted with E. L. Hamm & Associates to perform a comparative analysis of attorney career progression patterns in counsel organizations in selected Federal agencies. In addition to the Corps Counsel organization, the contractor analyzed ten other Federal agencies including three other Department of Defense agencies; namely, Defense Logistics Agency, Army Material Command, and the Naval Facilities Engineering Command. The study not only concluded that the District Commanders surveyed were the heads of major operating programs at an installation level; but also, that when compared to the other Federal agencies surveyed, the District Commanders had been delegated unusual authority or authority commonly of a higher echelon. This was the result of Corps policy delegating extensive authority to the District Commanders. In this regard, the study concluded that attorneys at the Corps District level (District and Laboratory Counsels) exercise a range and depth of authority not equaled in the lowest echelon of the two and three-tiered agencies surveyed. (See OPM 905 Stds., page 23) However, here the incumbent, as Assistant District Counsel, does not exercise the same overall Level of Responsibility as the District Counsel. Accordingly, Level E is not met and Level D is credited.

Based on the foregoing, Nature of Functions is credited at Level E and Level D which equates to Level D with strengthening characteristics, i.e., D+.

Supervision and Guidance Received -

Assignments - The incumbent is responsible for all contract claims cases arising from the XYZ Area Office. This exceeds Level C attorneys who handle only routine cases. Accordingly, Level D is credited.

Research/Instructions - Unlike Level C attorneys, the supervisor does not apprise the incumbent of any unusual circumstances, background information, or important policy considerations. This exceeds Level C attorneys which receive such preliminary instructions. Accordingly, Level D is credited.

Supervisor Review - Unlike Level C attorneys, legal work is subject to review after-the-fact for soundness of approach and argument, application of legal principals, and consistency with policy, procedures, and regulations. This exceeds

Level C attorneys which receive such review before the work is finalized. Accordingly, Level D is credited.

Litigation - None

Accordingly, the overall determination of Level D is credited for Supervision and Guidance Received. (OPM Stds., pages 19-20)

Personal Work Contacts

Legal Advice and Participation - In analyzing claims within the jurisdiction of the Office of Counsel, contact is made with Corps and contractor field personal to develop the facts. If the claims have merit, the incumbent prepares the necessary documentation to justify a contract modification and advises the Contracting Officer, the Area Engineer, and respective Resident Engineer. This is more than advice. The incumbent provides the basis for executing the decision. This exceeds Level C which involves merely advising negotiating officials. When claims have no merit, the incumbent prepares the final decision of the Contracting Officer. These decisions are prepared in final form and are normally adopted without change. This similarly exceeds Level C, but does not meet Level E. Accordingly, Level D is credited.

In appropriate circumstances, the incumbent will confer on such claims or negotiate settlements with top administrative personnel in the contractor organization, i.e. usually the president, CEO, or Senior Vice-President. The incumbent takes the lead and is assisted by construction personnel. The contractor's top administrative personnel are often accompanied by their counsel. On occasion, the incumbent deals directly with said counsel who is also to be considered in the category of contractor top administrative personnel with authority to settle. However, the regular and recurring work in this area does not involve important legal and policy questions. Accordingly, Level E is not met and Level D is credited. (See OPM 905 Stds., pages 20 and 24)

Litigation - None.

Accordingly, for Personal Work Contacts, an overall evaluation of Level D is credited.

Nature and Scope of Recommendations and Decisions

Legal Advice and Counsel - When returning meritorious claims with documentation

for contract modifications, such is not given through the supervisor, but directly to Contracting Officers, Area Engineer, and respective Resident Engineer. While not given through the supervisor, the recommendations are also not given to persons outside the agency or administrative officials at higher organizational levels. This exceeds Level C on the one hand since recommendations are not given through the supervisor, but fails to meet Level C on the other (not given outside the agency or to administrative officials at higher organizational levels). Since Level C is not fully met, Level B is appropriate. (OPM Stds., pages 20 and 21)

With regard to preparing final decisions of the contracting officer, such "decisions" by the incumbent are not given through the supervisor, but through Contracting Officers directly to the contractors involved. These "decisions" by the incumbent are tantamount to final since they are invariably adopted without change by the Contracting Officers as their own. This exceeds Level C (OPM Stds., pages 20-21), but does not meet Level E (OPM Stds., pages 24 and 25). Accordingly, Level D is appropriate.

Litigation - None.

Since the position entails both Level B and Level D, an overall rating of Level C is credited.

Grade Classification:

Factor 1, Nature of the Case or Legal Problem, is evaluated as Type III. Factor 2, Level of Responsibility, consists of Level D+ for Nature of Functions; Level D for Supervision and Guidance Received; Level D for Personal Work Contacts; and Level C for Nature and Scope of Recommendations and Decisions. Thus, Factor 2 is evaluated as Level D. By reference to the grade-level conversion chart on page 25 of the OPM 905 Standards, these duties are classified at the GS- 14 level.

GENERAL LAW

Since these duties are performed only 20% of the time, they are not grade controlling. Accordingly, General Law duties need not be evaluated.

OVERALL GRADE CLASSIFICATION

Labor Counselor duties are graded at GS-13 and are performed 50% of the time. However, Contract Claims duties, classified as GS-14, are performed 30% of the time.

NOTE: Although this position consists of GS-13 work 50% of the time, if experience has shown that the amount of Type III work at 30% is regular and recurring and there are no other attorneys trained in this area who could absorb this work if the position became vacant, then this position could be classified as GS-14. This would meet the minimum grade controlling duties of 25% as provided in the classification regulations and the position management regulations. EXAMPLE NO. 2 - Real Estate Position

EVALUATION STATEMENT

Position Number: xxxx

Classification: General Attorney (Real Property), GS-0905-13

Organization: Office of the Chief, Real Estate Division, XYZ

District Reference: US OPM PCS for Attorney Series, GS-0905, OCT

59 Title and Series Determination:

This position serves as a Real Estate attorney-advisor for a Branch Chief of Real Estate. The position advises on real estate matters pertaining to that office for both military and civil works projects and involves the rendering of legal advice and services with respect to the acquisition, management, and or disposal of real property interests. This also requires drafting, negotiating, or examining real estate instruments and other legal documents. The position assists the principal trial attorney in Real Estate or Office of Counsel in laying the complete groundwork for condemnation, real estate claims, inverse takings, or other litigation performed by the Department of Justice and in disputes or claims presented in an administrative hearing or to GAO. No actual trial work is performed. However, OPM standards state that the Functional Title of "Trial Attorney" is also applicable for "positions involved in providing technical guidance to persons preparing for or trying

cases...." (page 2). Since both Trial Attorney and Attorney-Advisor functional titles are applicable, and because the subject matter pertains to Real Property, the correct title and series for this position is General Attorney (Real Property), GS-0905.

Grade Determination:

The OPM Standards are divided into two grading criteria - Nature of the Case or Legal Problem and Level of Responsibility.

Factor 1 - Nature of the Case or Legal Problem:

The examples of regular and recurring work performed in this position set forth below are indicative of Type II work in that they involve one or more of the following: difficult legal or factual issues; large sums of money; less than extremely capable opposing legal talent.

1. Acquisition and Title Evidence Contracts - Researches, analyzes and provides legal advice during various stages of the real estate acquisition process and prepares appropriate legal documents for real estate acquisition impacting a significant segment of private, tribal, state or local governmental entities in a geographic region for various civil work projects and military installations. Reviews title evidence furnished by contractors for legal sufficiency to accomplish the intended purpose of large civil works projects. This review determines whether there were any encumbrances or title deficiencies and, if so, develops and recommends curative actions to be taken by the contractor or the Government negotiator. Often there are different possible constructions that can be placed on these defects to determine the correct cure for the title. As an Attorney approved by the DOJ, for both military and civil, renders title opinions and completes acquisition on behalf of the United States, including preparation deeds and closing. A typical example of regular and recurring work in this area is the ABC Lake Project involving the acquisition of 16 tracts. In this case, numerous liens and encumbrances were discovered and analyzed, and for which curative actions were required. Another example is the acquisition of additional training areas and maneuver permits for Fort ABC.

This is indicative of Type II due to impacts to large segments of the public and difficult legal or factual issues.

2. Facility Relocation Contracts - Determines whether the owner of the facility to be relocated has sufficient title and compensable interest therein requiring relocation to be performed or reimbursed by the Government. Drafts the relocation contract, confers with the Government project manager, as necessary, and negotiates said contract with the facility owner. These contracts typically involve large sums of money and/or are strongly contested during negotiations with the Government agencies or landowners involved, who are represented by capable opposing legal talent. An example is the ABC Creek Bridge Replacement Project. This involved the relocation of facilities belonging to two utility companies. Ownership records were researched to determine sufficient ownership and compensable interest. The amounts of the relocation contracts were approximately \$500,000 each.

Type II is credited due to the large sums of money involved.

3. Civil Works Local Cooperation Projects - Researches and determines the proper estates necessary to be acquired by the local sponsor to accomplish the purpose of large civil works projects. In coordination with Planning Division, tailors the HQUSACE recommended format of a Project Cooperation Agreement for flood control and navigation projects to meet the specific Real Estate needs of the local sponsor and the particular project in question. Extrapolates from said formats and drafts specific clauses. As a team member, negotiates such agreements with the local sponsor. Reviews all aspects of acquisition performed by the local sponsor to include quotation letters to landowners, relocation assistance to landowners, title evidence and instruments, etc. The ABC Flood Control Project and the XYZ River Flood Control Project are typical examples.

Type II is credited due to the impact on large segments of the public by these large civil works projects.

4. Civil Works and Military Condemnation of Real Estate Interests - Prepares and compiles a "Condemnation Assembly" which includes the Declaration of Taking, Recitation of Ownership and Legal Description, and Maps. Prepares forwarding

letter through channels to the appropriate Secretary setting forth the reason for the condemnation and any particular legal problems or issues that may be encountered. Following the filing of the Declaration of Taking, assists the Department of Justice attorney in preparing pleadings, motions, briefs, and trial strategy in the Federal Court condemnation. These cases typically involve large sums of money in dispute between the amount deposited and the amount claimed and are strongly contested in formal hearings or in formal negotiation by less than extremely capable opposing legal talent. A typical example is United States v. xxxxx Acres of Land, etc. et al. involving a just compensation deposit of \$6,296,000. The difference between the deposit and the amount claimed was over \$600,000.

Type II is credited due to large sums of money in dispute and the nature of the competition.

5. Outgrants - Prepares, drafts, and reviews recommended deviations to the standard formats and added site specific conditions for environmental, cultural,

historic, or operational protection for real estate instruments granting various interests and/or rights to third parties in land owned by the United States at large civil works projects or military installations. Final outgrant language is usually strongly contested by the grantees or their attorneys. Advises on difficult outgrant administration legal and factual issues arising during the term of the outgrant. A typical example is banking leases issued to ABC Bank at various Army installations. Site specific environmental clauses, liquidated damages clause and definition of fixtures clause were drafted and negotiated. Factual and legal issues arose as to whether the bank breached certain material provisions of the lease. Noncompliance can result in litigation or disputes under the jurisdiction of the Engineer Board.

Erroneous termination of the lease can result in a takings claim. It is typically difficult to know which precedents apply due to the different possible constructions that can be placed on the applicable laws and regulations and facts at hand.

Type II is credited due to the impact to large segments of the public, the nature of the competition, and difficult factual issues.

6. Disposals - Prepares, drafts, and reviews disposal documents such as deeds or transfers to another Federal agency. Research, analyze, and advise on legal requirements to dispose, including certification of title. Disposals are

accomplished under delegated authority from GSA, under specific continuing disposal authorities, and under special legislative authority. For example, disposal of a deauthorized civil works project impacts economically, or politically, a significant segment of private, tribal, state, or local government entities in a geographic region. Appropriate deed covenants and conditions for environmental, cultural, historic,

and reversionary interest involves preparation and interpretation of avious document provisions and the applicability of state and Federal law. These matters are strongly contested by the governmental regulatory entities and the grantees or their attorneys. Also researches, analyzes, and advises on legal, issues of title and regulatory requirements prerequisite to disposal actions for property to be reported to GSA, e.g., Fort ABC or the XYZ Flood Control Project.

Type II is credited due to the geographic impact for a large public works project or military installation or activity, the nature of the competition and difficult factual issues.

7. Encroachments - Researches, analyzes, and advises on difficult legal or factual issues involving whether the case is a boundary dispute requiring title curative work or an encroachment on large civil works projects or military installations have occurred and, if so, the appropriate recommended corrective action to be taken in accordance with various laws and agency policy. Recommends appropriate remedial action to include boundary line agreements and/or quitclaim deeds, enforced removal, outgrant, disposal, permitting, citations, damages, reimbursement for costs of removal, etc. These are always strongly contested by those committing the encroachments or their attorneys. If the issues is a boundary line dispute, then litigation may result to quiet title. Typical examples include the removal of an extensive fence at the ABC Lake Project, use of a spring box for water withdrawal at XYZ Lake Project, and buildings underneath an electric transmission line along a railroad right of way but within the Fort ABC installation acquisition boundary.

Type II is credited due to the nature of the competition.

Factor 2 - Level of Responsibility:

Nature of Functions

Research and Preparation of Documents - The incumbent researches the law and refers questions back for further factual development. Sometime researches both the facts as well as the law and then prepares necessary legal documents or advisory opinions, e.g., drafts deeds for acquisitions and disposals and outgrant documents. This is indicative of Level C. However, the incumbent may also render final title opinions under the DOJ delegation which exceeds Level C. But such work is not regular and recurring. Accordingly, Level C is credited.

Litigation - The incumbent assists the principal trial attorney in Real Estate or the Office of Counsel in laying the complete ground work for condemnation, real estate claims, inverse takings or other litigation performed by the Department of Justice and in disputes or claims presented in an administrative hearing or to GAO. Level C is credited.

Legal Advice and Assistance - Incumbent acts in the capacity as a member of a team when drafting contract clauses. This is Level C. In addition, the incumbent advises on more than a single program, i.e. Acquisition and Management and Disposal. This is Level D. Thus, an overall Level D may be credited.

Level C for Research and Preparation of Documents, Level C for litigation, and Level D for Legal Advice and Counsel yields an overall rating of Level C.

Supervision and Guidance Received

Research/Instructions - The incumbent handles not just the routine cases, but all cases arising within the incumbent's areas of responsibility. Incumbent is apprised of any unusual circumstances or background information and important policy considerations. This exceeds Level C. Accordingly, Level D is credited.

Litigation - Although the incumbent assists the principal trial attorney in Real Estate or Office of Counsel, no actual trial work is performed so this is not applicable.

Supervisory Review - The incumbent is not supervised by an attorney.

Although all work is subject to cursory review both as to the technical aspects and as to soundness of approach, the standards contemplate an attorney supervisor. Thus, the technical aspects are normally assumed to be correct. Accordingly, Level D is credited.

This yields an overall rating of Level D. Personal

Work Contacts

Litigation: Not applicable.

Legal Advice and Participation - Sometimes advises negotiating officials as a member of the team, but also negotiates directly with lessees, etc. Thus Level C is exceeded and Level D is credited.

Nature and Scope of Recommendations and Decisions

Litigation - not applicable.

Legal Advice and Counsel - Here this is provided to those outside the agency and to higher administrative officials through the supervisor. Thus, Level C is credited.

Nature of Functions is Level C; Supervision and Guidance Received is D; Personal Work Contacts is Level D; and, Nature and Scope of Recommendations and Decisions is Level C. Thus, the overall Level is D.

Grade Classification

Factor 1 is credited with Type II and Factor 2 is credited with Level D. Thus, the overall grade evaluation is GS-13.

NATURE OF THE CASE OR LEGAL PROBLEM OFFICE OF COUNSEL

The standard for Attorneys contains several elements for determining the TYPE of case, i.e., the level of difficulty. The first deals with the COMPLEXITY of the case or legal problem and the AVAILABILITY of PRECEDENT DECISIONS. The second deals with the IMPACT of the case or legal problem in economic, political, or social terms and its DELICACY. The third deals with MONEY, the NATURE OF THE (LEGAL) COMPETITION, and PUBLIC INTEREST. Each element is described in terms of the case or legal problem: TYPE I, TYPE II, or TYPE III, respectively. The difficulty types are described in terms of minimum characteristics. Thus, there are no intervening categories. If the evaluation concludes that TYPE I is exceeded, but TYPE II is not FULLY MET, then only TYPE I is credited. This is true no matter how far TYPE I is exceeded or how close TYPE II is approximated. The same is true for TYPE II and TYPE III.

When analyzing the types of work, it is suggested that one first analyze a major job duty or typical examples of regular and recurring work against TYPE II first. If it is not fully met, then it must be credited as TYPE I. If TYPE II IS fully met, then determine whether it is exceeded. If it is, then determine whether TYPE III is fully met. Again, in order to meet TYPE III, all aspects must be FULLY met; if not, then TYPE II must be credited.

MAJOR FUNCTIONS

A. PROCUREMENT

1. CONTRACT FORMATION

ACTIVITIES Acquisition Planning

Drafting

Specification and Solicitation

Review Mistakes In Bid

Bid

protests

Bonding

Funding

Award

Litigation

MAJOR DUTY: ADVISES AND PERFORMS LEGAL SERVICES IN CONTRACT FORMATION ACTIVITIES

TYPE III EXAMPLES

- Researches, analyzes, and provides legal advice on problems arising during contract formation which directly affect the award of contracts involving very large sums of money with nationwide interest beyond the government contracting community (e.g., protests based upon Adarand v. United States).²

- Researches, analyzes, and provides legal advice on mistakes-in-bid and bonding issues where they involve unusual delicacy including but not limited to cases pertaining to fraud.

- Participates in the development and execution of acquisition planning involving programs with very large sums of money having nationwide interest due to high visibility, sensitivity, or impacting major private or public interests.

- Researches, analyzes and provides legal advice during various stages of the contract formation process where complex factual or policy issues require extensive research and analysis, and obtaining and evaluating expert testimony or information in financial, engineering, and other highly technical areas.

2. CLAIMS, DISPUTES, AND APPEALS

ACTIVITIES Affirmative and Defensive Claims

Drafting Final Decisions of the Contracting Officer

² Cases or problems of this type will involve extremely capable opposing legal talent who frequently vigorously contest the matter at issue.

Trials before Boards of Contract Appeals

Court of Federal Claims Litigation

Alternate Dispute Resolution

MAJOR DUTY: ADVISES AND PERFORMS LEGAL SERVICES
RELATING TO PROCESSING AND RESOLVING CONTRACT CLAIMS,
DISPUTES, AND APPEALS.

TYPE III EXAMPLES

- Reviews, analyzes, and provides legal advice on disposition of contract claims/disputes, or prepares final decisions of the Contracting Officer, or acts as trial attorney on cases involving complex factual issues. Examples of complex factual issues include impact claims, extended overhead, differing site conditions, and quantum issues, which require extensive research, analysis, and obtaining and evaluating expert testimony or information.

3. CONTRACT PERFORMANCE

ACTIVITIES Contract Interpretation

Review of Contract Modifications

Terminations

Suspension/Debarment

Bankruptcy

Contractor Performance Evaluation

Novations/Assignments

Contractor Industrial Relations Program Activities

MAJOR DUTY: ADVISES AND PERFORMS LEGAL SERVICES RELATING TO CONTRACT PERFORMANCE

TYPE III EXAMPLES

- Reviews, analyzes, and provides legal advice during contract performance on issues of unusual delicacy, e.g., performance-based terminations for default, suspensions, debarments, and fraud, all of which have a great burden of proof on the government and can result in serious consequence of error.

- Reviews, analyzes, and provides legal advice during contract performance on questions involving complex factual issues involving contract interpretation, negotiation, and modification which require extensive research, analysis, and obtaining and evaluating expert testimony or information. Examples may include differing site conditions, variations in estimated quantities and terminations for convenience.

4. POST CONTRACT PERFORMANCE

ACTIVITIES Contract closeout

A-E Liability

Warranties

Latent Defects

Litigation

MAJOR DUTY: PROVIDES LEGAL SUPPORT FOR POST-CONTRACT PERFORMANCE ACTION

TYPE III EXAMPLES

- Reviews, analyzes, and provides legal advice on post-contract performance actions, e.g., A-E liability, warranty issues, and latent defects, for cases involving complex factual issues which require extensive research, analysis, and obtaining and evaluating expert testimony or information.

5. PROCUREMENT FRAUD ADVISOR

ACTIVITIES Procurement Fraud Flash Reports

Suspension/Debarment Reports

Procurement Fraud Remedies Plan

Litigation

**MAJOR DUTY: MANAGES AND ADMINISTERS THE
PROCUREMENT FRAUD PREVENTION PROGRAM**

TYPE III EXAMPLES

- Investigates, researches, analyzes, opines and disposes or recommends disposition of cases involving procurement fraud, which could result in criminal prosecution, civil suit, contract action, administrative action, loss of bonding capacity or suspension/debarment. These cases necessarily contain issues of unusual delicacy, involve extremely capable opposing legal talent, or consist of complex factual issues that require extensive research analysis, and obtaining and evaluating expert testimony or information.

B. REGULATORY AND ENVIRONMENTAL LAW

1. REGULATORY ACTIVITIES

Interpretation of regulations, laws, policy,

etc. Review environmental and other

documents

Draft statement of findings in controversial

matters Taking implications analysis

Analyze factual situations as they relate to laws, regulations, policies, etc.

Review mitigation, Performance bonds

Participate in public
meetings/hearingsRecommend
enforcement actions

Participate in Alternative Dispute Resolution

processesLitigation

Regulatory appeals (Implementation Pending)

MAJOR DUTY: PROVIDES LEGAL SUPPORT TO THE REGULATORY PERMIT PROGRAM

TYPE III EXAMPLES

- Reviews, analyzes, and provides legal advice on permit decisions which may involve very large sums of money and/or involve extremely capable opposing legal talent who frequently vigorously contest these cases. They must have nationwide interest from developers, regulatory agencies, public interest groups, environmental organizations and landowners.

- Reviews, analyzes, and provides legal advice on taking cases involving claims of inverse condemnation which often involve complex factual issues requiring extensive research, analysis, and obtaining and evaluating expert testimony or information in the areas of land use, fair market value, highest and best use and uneconomic remnants.

- Reviews, analyzes, and provides legal advice on wetland determinations which normally involve complex factual issues requiring extensive research, analysis and obtaining and evaluating expert testimony or information in the area of wetland and ecosystem sciences.

- Reviews, analyzes, and provides legal advice on regulatory jurisdictional issues/matters which could result in either substantially broadening or restricting the activities of the Department of the Army's regulatory program.

2. ENVIRONMENTAL PROGRAM ACTIVITIES Interpretation of regulations,
laws, policies, etc. Review of environmental and other project documents Attend
public meetings and hearings Participate in Alternative Dispute Resolution
processes Litigation

**MAJOR DUTY: PROVIDES LEGAL SUPPORT TO PROJECTS AND
ACTIVITIES CONCERNING ENVIRONMENTAL LAWS AND
REQUIREMENTS**

TYPE III EXAMPLES

- Reviews, analyzes, and provides legal advice on environmental, cultural and
natural resource matters presenting complex factual issues requiring extensive
research, analysis and obtaining and evaluating expert testimony or
information, e.g., EISs, biological opinions, cultural resource documents.
Although not required, it should be noted that extremely capable legal talent
frequently vigorously contests these cases.

C. ENVIRONMENTAL RESTORATION/REMEDATION

Drafting Negotiation Interpretation

Alternative Dispute Resolution

Processes Intergovernmental affairs

Specialized

contracting Funding

issues Litigation

MAJOR DUTY: PROVIDE LEGAL SUPPORT TO ENVIRONMENTAL RESTORATION/REMEDATION MISSIONS

TYPE III EXAMPLE

- Research, analyze, and provide legal advice on hazardous, toxic and radioactive waste (HTRW), including ordnance and explosive waste, projects being performed at active installations, formerly used defense sites (FUDS), and non-DOD facilities. Questions require the interpretation of Federal and state environmental remediation statutes, determination of responsibility for removal of contaminants or remediation of the site, negotiations with other potentially responsible parties and regulators, advice on the proper use of funds, and advice on the use of specialized contracts any or all of which involve complex factual issues requiring extensive research, analysis, and obtaining and evaluating expert testimony or information covering applicable environmental science and scientific disciplines.

D. NON-CONTRACT CLAIMS

Investigate

Recommend disposition

Decide (within delegated

authority) Process

Advise on corrective

measures Litigation

MAJOR DUTY: INVESTIGATES, PROCESSES, AND DETERMINES OR RECOMMENDS DISPOSITION OF TORT AND ADMIRALTY CLAIMS

TYPE III EXAMPLES

- Researches, analyzes, and provides legal advice on disposition of tort and admiralty claims on cases involving complex factual issues requiring extensive research, analysis and obtaining and evaluating expert testimony or information such as medical testimony or engineering analysis.

- Researches, analyzes, and provides legal advice on disposition of tort and admiralty claims on cases or matters which could result in either substantially broadening or restricting the agencies activities.

- **E. PERSONNEL**

Grievance (negotiated/Army)

ArbitrationFLRA MSPB EEOC/OCI

Union negotiations

Office of Special CounselLitigation

MAJOR DUTY - PROVIDES LEGAL SUPPORT FOR AND PARTICIPATES IN ADMINISTRATIVE PROCEEDINGS AND NEGOTIATIONS CONCERNING PERSONNEL ISSUES

TYPE III EXAMPLE

- Researches, analyzes, and provides legal advice on or acts as agency representative in personnel matters, such as EEO and sexual harassment, involving compensatory damages which frequently involve complex factual issues requiring extensive research, analysis, and obtaining and evaluating expert testimony or information in scientific disciplines involving physical, emotional, and mental conditions. These include specialists such as medical doctors, psychologists, and psychiatrists.

F. GENERAL LAW

PCAs

Legislative requests

Project authorization, modification, and operation

Indian affairsWater supplyRecreation

Navigability/Maritime Mobilization FOIA/Privacy Act Hydropower

Private/public use of project lands International affairs

Emergency operations Fiscal law

Taxation

Law enforcement IG activities

Ethics (Conflicts of Interest & Standards of Conduct) Title 36 (citation authority)

CID matters

Army Audit Agency matters

AR 15-6 (Command Investigations) MOUs/MOAs

Interagency affairs Reports of Survey

Miscellaneous Real Estate law

Project Document Analysis and Interpretation Chief Financial Officers Act

Grant and cooperative agreements Economy Act agreements Intergovernmental agreements

MAJOR DUTY: PROVIDES LEGAL SUPPORT IN ALL AREAS OF GENERAL LAW

TYPE III EXAMPLES

- Most legal work under the general law activities will normally involve Type II work. There may be, however, instances which frequently involve complex factual issues requiring extensive research, analysis, and obtaining and evaluating expert testimony or information involving engineering, scientific and financial disciplines, or are of unusual delicacy in cases of fraud. In the aggregate, Type III cases must involve at least 25% of the attorney's legal work in order to be grade controlling.

NATURE OF THE CASE OR LEGAL PROBLEMREAL ESTATE

MAJOR FUNCTION

A.REAL ESTATE ACQUISITION

1. ACQUISITION ACTIVITIES, BOTH IN-HOUSE AND FOR PROJECTSPONSOR

Interpret regulations, laws, policies, etc.

Review environmental, planning and other documents

Prepare takings analysis

Prepare compensability determinations

Determine nature of estate

Prepare relocation contracts

Prepare Cemetery condemnations/relocations

Review Real Estate design memoranda

Draft non-standard estate

Legal advice for appraisals

Provide advice on real estate issues arising out of title evidence and appraisal contract formation and administration

Perform title search, title review and title curative actions

Prepare/review Offer to Sell

Prepare deeds and curative instruments or transfer documents

Prepare for closing/Closes

PL 91-646 issues, including relocation assistance, last resort housing and appeals

Prepare Final Title Opinion

Handle mineral and water rights issues

PCAs and project sponsor-related real estate issues.

MAJOR DUTY: ADVISES AND PERFORMS LEGAL SERVICES IN CONNECTION WITH THE ACQUISITION OF REAL PROPERTY INTERESTS, BY PURCHASE, DONATION, EXCHANGE, OR INTERAGENCY TRANSFER

TYPE III EXAMPLES

- Researches, analyzes, and provides legal advice during various stages of the real estate acquisition process and prepares appropriate legal documents for real estate acquisitions involving very large sums of money and/or frequently involving extremely capable opposing legal talent **and** where there is nationwide public interest, e.g., acquisitions for Everglades and Tennessee-Tombigbee projects.

- Researches, analyzes, and provides legal advice during various stages of the real estate acquisition process where complex factual or policy issues require extensive research and analysis, and obtaining and evaluating expert testimony or information in financial, engineering, and other highly technical areas, e.g., land use, fair market value, non-standard estates, highest and best use, uneconomic remnants, environmental, cultural or historical issues, remedies to cure defects found in title, mineral or water rights issues, appraisals.

TYPE II EXAMPLES

- Researches, analyzes, and provides legal advice during various stages of

the real estate acquisition process and prepares appropriate legal documents for real estate acquisitions involving large sums of money **or** there is considerable interest from a significant segment of the population in the geographic area, e.g., local groups, environmental associations, or concerned citizens, **or** the case is strongly contested in formal hearings or informal negotiations with the landowner, tribal representatives, government agencies involved and/or their attorney.

- Researches, analyzes, and provides legal advice during various stages of the real estate acquisition process and prepares appropriate legal documents for real estate acquisition impacting economically, socially, or politically, either directly or as a legal or administrative precedent, a significant segment of private, tribal, state or local government entities in a geographic region for a large public works project or military installation or activity.

- Researches, analyzes, and provides legal advice during various stages of the real estate acquisition process which involves difficult legal or factual questions because of the absence of clearly applicable precedents due to the newness of the program or novelty of the issues. This may include many of the same elements as the Type III case, but the legal or factual issues are less complex.

2. IN-LEASING ACTIVITIES

Interpret regulations, laws, policies, etc.

Review environmental documents relating to in-leases
Draft/review non-standard clauses

Negotiate Review title Interpret clauses

Process restoration claims Draft/review in-lease assignments

MAJOR DUTY: ADVISES AND PERFORMS LEGAL SERVICES IN CONNECTION WITH THE NEGOTIATION, PREPARATION, EXECUTION, AND ADMINISTRATION OF IN-LEASES

TYPE III EXAMPLES

- Researches, analyzes, and provides legal advice during various stages of the lease formulation process and prepares appropriate legal documents for leases involving very large sums of money, and/or frequently involving extremely capable opposing legal talent **and** where there is nationwide public interest, e.g., individual lease actions meeting the dollar threshold in connection with such activities as Desert Storm/Desert Shield, Joint Guard, and other NATO peacekeeping missions.

- Researches, analyzes, and provides legal advice during various stages of the lease formulation process where complex factual or policy issues require extensive research and analysis, and obtaining and evaluating expert testimony or information in the areas of financial, engineering, and other highly technical areas, e.g., land use, fair market value, highest and best use, environmental, cultural or historical issues, appraisals, financial analysis.

TYPE II EXAMPLES

- Researches, analyzes, and provides legal advice during various stages of the lease formulation process and prepares appropriate legal documents for leases involving large sums of money **or** there is considerable interest from a significant segment of the population in the geographic area, e.g., local groups, environmental associations, or concerned citizens, **or** the case is strongly contested in formal hearings or informal negotiations with the landowner, tribal representatives, government agencies involved and/or their attorney.

- Researches, analyzes, and provides legal advice during various stages of the lease formulation process and prepares appropriate legal documents for leases impacting economically, socially, or politically, either directly or as a legal or administrative precedent, a significant segment of private, tribal, state or local government entities in a geographic region for a large public works project or military installation or activity.

- Researches, analyzes, and provides legal advice during various stages of the lease formulation process which involves difficult legal or factual questions because of the absence of clearly applicable precedents due to the newness of the program or novelty of the issues. This may include many of the same elements as the Type III case, but the legal or factual issues are less complex.

- B. REAL ESTATE MANAGEMENT AND DISPOSAL

Interpret regulations, laws, policies, etc.

Review of environmental, cultural and historic preservation documents

Resolve encroachments, title disputes and boundary-line disputes

Prepare documents for disposal or outgranting of real property

Support the Defense Environmental Restoration Program

Prepare Title Reports for oil, gas and other minerals

Review FERC licenses for non-Federal hydropower development for real estate issues

Determine ownership of property, including water and mineral rights

Advise on real property tax law

Review impact of annexation/zoning

Prepare documents to retrocede or acquire legislative jurisdiction

Support the Public Domain Withdrawal Review Program

Review/prepare water supply contracts and associated easements

**MAJOR DUTY: ADVISES AND PERFORMS LEGAL SERVICES
RELATING TO MANAGEMENT AND DISPOSAL ACTIVITIES**

TYPE III EXAMPLES

- Researches, analyzes, and provides legal advice during various stages of the real estate outgrant, management or disposal process and prepares appropriate legal documents for these real estate activities involving very large sums of money, and/or frequently involving extremely capable opposing legal talent **and** where there is nationwide public interest.
- Researches, analyzes, and provides legal advice during various stages of the out-grant, management or disposal process where complex factual or policy issues require extensive research and analysis, and obtaining and evaluating expert testimony or information in financial, engineering, and other highly technical areas, e.g., land use, fair market value, highest and best use, environmental, cultural or historical issues, mineral or water rights issues, appraisals, financial analysis, flood frequency and hydrology issues.

TYPE II EXAMPLES

- Researches, analyzes, and provides legal advice during various stages of the real estate out-grant, management and disposal process and prepares appropriate legal documents for these real estate activities involving large sums of money **or** there is considerable interest from a significant segment of the population in the geographic area, e.g., local groups, environmental associations, or concerned citizens, **or** the case is strongly contested in formal hearings or informal negotiations with the proposed grantee, tribal representatives, government agencies involved and/or their attorney.
- Researches, analyzes, and provides legal advice during various stages

of the real estate out-grant, management or disposal process and prepares appropriate legal documents for these real estate actions impacting economically, socially, or politically, either directly or as a legal or administrative precedent, a significant segment of private, tribal, state or local government entities in a geographic region for a large public works project or military installation or activity.

- Researches, analyzes, and provides legal advice during various stages of the real estate out-grant, management or disposal process which involves difficult legal or factual questions because of the absence of clearly applicable precedents due to the newness of the program or novelty of the issues. This may include many of the same elements as the Type III case, but the legal or factual issues are less complex.

- C.REAL ESTATE CLAIMS

Investigate

Recommend Disposition Process

Advise on Corrective Measures

**MAJOR DUTY: INVESTIGATE, PROCESS, AND DETERMINE OR
RECOMMEND DISPOSITION OF REAL ESTATE CLAIMS
INVOLVING DAMAGE TO REAL PROPERTY, INVERSE TAKINGS,
MANEUVER PERMITS, RIGHT-OF-ENTRY PERMITS,
RESTORATION AND OTHER LEASE CLAIMS**

TYPE III EXAMPLES

- Research, analyze, and provide legal advice and prepare legal documents for the disposition of real estate claims involving damage to real property and inverse takings of any real property interest involving very large sums of money and/or issues frequently vigorously contested by extremely capable opposing legal talent and having nationwide interest, e.g., damage to private property by military activities in foreign countries.

- Research, analyze, and provide legal advice and draft legal documents for the disposition of real estate claims involving damage to real property and inverse takings of any real property interest where there are complex factual issues requiring extensive research, analysis, and obtaining and evaluating expert testimony or information, e.g., restoration claims involving settlement by transfer of title to government improvements to the landowner; tort or taking determinations; land use issues; fair market value, damage and appraisal issues; highest and best use.

TYPE II EXAMPLES

- Research, analyze, and provide legal advice and prepare legal documents for the disposition of real estate claims involving damage to real property and inverse takings of any real property interest involving large sums of money or where the issues are strongly contested.

- Research, analyze, and provide legal advice and prepare legal documents

for the disposition of real estate claims involving damage to real property and inverse takings of any real property interest impacting economically, socially, or politically, either directly or as a legal or administrative precedent, a significant segment of residents and state and local government entities in a large geographic region for a large public works project, e.g., changes in project operations which may have resulted in an inverse taking; military maneuvers.

- Research, analyze, and provide legal advice and prepare legal documents for the disposition of real estate claims involving damage to real property and inverse takings of real estate involving novel issues or where it is highly arguable which precedents apply because of the complexity of facts involved or the different possible constructions which may be placed on either the facts or the laws and precedents involved.

D. REAL ESTATE LITIGATION

Investigate

Prepare litigation reports/condemnation assemblies

Assist DOJ attorney in further preparation of case prior to trial, during the trial and at post trial and appellate stages.

Upon request, conduct trial or argue appeal.

MAJOR DUTY: PREPARE LITIGATION REPORTS/CONDEMNATION ASSEMBLIES FOR USE BY DOJ ATTORNEYS IN CASES FILED BY OR AGAINST THE UNITED STATES; ASSIST DOJ ATTORNEYS IN ALL PRETRIAL AND TRIAL ASPECTS, OR TRY THE CASE UPON REQUEST; ON APPEAL ASSIST DOJ ATTORNEYS OR CONDUCT THE APPEAL OF CASES

TYPE III EXAMPLES

- Research, analyze, and provide legal advice and prepare legal documents for real estate condemnation and litigation involving very large sums of money and/or issues frequently vigorously contested by extremely capable opposing legal talent and having nationwide interest.

- Research, analyze, and provide legal advice and prepare legal documents for real estate condemnation and litigation involving complex factual issues requiring extensive research, analysis, and obtaining and evaluating expert testimony or information, e.g., including direct and inverse condemnation; cases involving conflict or differences between or among other Federal agencies or constitutional issues; cases involving navigability determinations and extent of navigation servitudes related to title and just compensation.

TYPE II EXAMPLES

- Research, analyze, and provide legal advice and prepare legal documents for real estate condemnation and litigation involving large sums of money or where the issues are strongly contested.

- Research, analyze, and provide legal advice and prepare legal documents for real estate condemnation and litigation involving any real property interest impacting economically, socially, or politically, either directly or as a legal or administrative precedent, a significant segment of residents and state and local government entities in a large geographic region for a large public works project, e.g., condemnations on behalf of project sponsor.

- Research, analyze, and provide legal advice and prepare legal documents for real estate condemnation and litigation involving novel issues or where it is highly arguable which precedents apply because of the complexity of facts involved or the different possible constructions which may be placed on either the facts or the laws and precedents involved.

E. HOMEOWNERS ASSISTANCE PROGRAM

1. ACQUISITION AND BENEFIT ACTIVITIES

Interpret regulations, laws, policies, etc. Determine Eligibility

Review Market Impact Analysis

Provide advice on real estate issues arising out of title evidence contract formation and administration

Prepare title search, title review and title curative actions

Review Offer to Purchase

Review benefit calculations

Prepare deeds and curative instruments or transfer documents

Prepare for closing/Closes

Prepare Final Title Opinion

Review appeal

Prepare Investigation and Consideration Report

Prepare appeal assembly

MAJOR DUTY: ADVISES AND PERFORMS LEGAL SERVICES
RELATING TO HOMEOWNERS ASSISTANCE PROGRAM
ACQUISITION AND BENEFIT ACTIVITIES INCLUDING ELIGIBILITY
DETERMINATIONS AND APPEALS

TYPE III EXAMPLE

- Research, analyze, and provide legal advice and prepare legal documents for the Homeowners Assistance Program acquisition and benefit activities where there are complex factual issues requiring extensive research, analysis, and obtaining and evaluating expert testimony or information.

TYPE II EXAMPLES

- Research, analyze, and provide legal advice and prepare legal documents for the Homeowners Assistance Program acquisition and benefit activities involving large sums of money or where the issue or activity is strongly contested.

- Research, analyze, and provide legal advice and prepare legal documents for the Homeowners Assistance Program acquisition and benefit activities where there is impact economically, socially, or politically, either directly or as a legal or administrative precedent, a significant segment of residents and state and local government entities in a large geographic

region.

- Research, analyze, and provide legal advice and draft legal documents for the Homeowners Assistance Program acquisition and benefit activities involving novel issues or where it is highly arguable which precedents apply because of the complexity of facts involved or the different possible constructions which may be placed on either the facts or the laws and precedents involved.

2. MANAGEMENT AND DISPOSAL

ACTIVITIES Interpret regulations, laws,
policies, etc.

Provide advice on real estate issues arising out of ownership and management of acquired properties

Resolve encroachments, title disputes and boundary line disputes

Prepare documents for disposal of real property

MAJOR DUTY: ADVISES AND PERFORMS LEGAL SERVICES RELATING TO HOMEOWNERS ASSISTANCE PROGRAM MANAGEMENT AND DISPOSAL ACTIVITIES

TYPE III EXAMPLE

- Research, analyze, and provide legal advice and prepare legal documents for the Homeowners Assistance Program management and disposal activities where there are complex factual issues requiring extensive research, analysis, and obtaining and evaluating expert testimony or information.

TYPE II EXAMPLES

- Research, analyze, and provide legal advice and prepare legal documents for the Homeowners Assistance Program management and disposal activities involving large sums of money or where the issue or activity is strongly contested.

- Research, analyze, and provide legal advice and prepare legal documents for the Homeowners Assistance Program management and disposal activities where there is impact economically, socially, or politically, either directly or as a legal or administrative precedent, a significant segment of residents and state and local government entities in a large geographic region.

- Research, analyze, and provide legal advice and draft legal documents for the Homeowners Assistance Program management and disposal activities involving novel issues or where it is highly arguable which precedents apply because of the complexity of facts involved or the different possible constructions which may be placed on either the facts or the laws and precedents involved.

F. REAL ESTATE GENERAL LAW ACTIVITIES

Mineral Rights Relocations

Private/Public use of project lands Indian real estate affairs Mobilization

International real estate affairs Emergency Operations

IG activities

Army Audit Agency affairs MOUs/MOAs

Interagency affairs Privatization

Third Party Initiatives

**MAJOR DUTY - PROVIDES LEGAL SUPPORT IN ALL AREAS
OF GENERAL LAW INVOLVING REAL ESTATE MATTERS**

TYPE III EXAMPLES

- Most legal work under the general law activities will normally involve Type II work. There may be, however, instances which frequently involve complex factual issues requiring extensive research, analysis, and obtaining and evaluating expert testimony or information involving engineering, scientific and financial disciplines, or are of unusual delicacy in cases of fraud. In the aggregate, Type III cases must involve at least 25% of the

attorney's legal work in order to be grade controlling.

TYPE II EXAMPLES

- Researches, analyzes, and provides legal advice during various stages of real estate activities and prepares appropriate legal documents for actions involving large sums of money **or** there is considerable interest from a significant segment of the population in the geographic area, e.g., local groups, environmental associations, or concerned citizens, **or** the case is strongly contested in formal hearings or informal negotiations with the landowner, proposed grantee, tribal representatives, government agencies involved and/or their legal counsel.

- Researches, analyzes, and provides legal advice during various stages of real estate activities and prepares appropriate legal documents for actions impacting economically, socially, or politically, either directly or as a legal or administrative precedent, a significant segment of private, tribal, state or local government entities in a geographic region for a large public works project or military installation or activity.

- Researches, analyzes, and provides legal advice during various stages of real estate activities which involve difficult legal or factual questions because of the absence of clearly applicable precedents due to the newness of the program or novelty of the issues, e.g., between the landowner, public or special interest groups, environmental issues, other Federal agencies, and the Army's requirements. For example, some Tribal request for use of real property under NAGPRA or Native American Religious Freedom Act, the status of Tribal reservation boundaries on a proposed activity, various international treaties, draft nonstandard interagency or intergovernmental agreements or MOUs/MOAs.

FACTOR TWO: LEVEL OF RESPONSIBILITY

The OPM standard contains elements for FACTOR TWO in order to determine the Level of Responsibility. The four elements are: NATURE OF FUNCTIONS; SUPERVISION AND GUIDANCE RECEIVED; PERSONAL WORK CONTACTS; and NATURE AND SCOPE OF RECOMMENDATIONS AND DECISIONS. The OPM standards contain descriptions of the elements for LEVEL A, LEVEL C, and LEVEL E, respectively. As noted above, Levels are described in terms of typical characteristics. The assignment of intervening levels B and D are appropriate where the position compares in some respects to the lower and higher levels (A and C, or C and E, respectively) or clearly falls between.

Below is an analysis of the Matrix with regard to Levels C, D, and E. These are important for determining journeyman and higher-level positions for attorneys in Office of Counsel and Real Estate. Junior and entrance level positions, Levels A and B, are not in controversy.

7. NATURE OF FUNCTIONS

This element has three sub-elements against which each major duty or work examples should be analyzed where applicable; namely, Research and Preparation of Documents; Litigation, and Legal Advice and Counsel.

8. RESEARCH AND PREPARATION OF DOCUMENTS:

Level C attorneys perform legal research referring questions back when further development of the facts is necessary, but sometimes perform both the factual and legal research. The attorney then prepares any necessary legal documents or opinions.

Level E attorneys review or draft final agency decisions for execution by officials who exercise final authority in such matters. Some examples include drafting final decisions for adoption by Contracting Officers regarding settlement/denial of contract disputes, contractor performance evaluations, terminations for default and convenience, mistakes-in-bid releases, and contract

reformation due to mutual mistake; drafting the final agency decision or position in agency and/or GAO protests, or requests for upward adjustment of bids due to mistakes; drafting final agency decisions regarding issuance of permits under the Department of the Army Regulatory Permit Program or appeals from denials thereof; drafting decisions for the removal of wrecked vessels from general navigation channels; drafting the agency position on Real Estate claims submitted to GAO; rendering final title opinions by attorneys approved by the Department of Justice; and, drafting documents for outgrants and disposal of real property.

At the intervening level (Level D) attorneys perform legal research and more than sometimes also perform the requisite factual research. Level D attorneys may also prepare draft final agency decisions which are reviewed by another attorney who in turn makes the recommendation for adoption.

9. LITIGATION:

Level C attorneys participate in pretrial or prehearing conferences; prepare, provide, or present technical guidance during the litigation; and may examine or cross examine witnesses; but, not have the full responsibility for the development and presentation of the case.

Level E attorneys must meet three sub-elements. First, they must be the Principal Attorney in Charge of the litigation. While District Counsels are "accountable" for the work of trial attorneys, individual attorneys (Counsel or Real Estate) may be credited as the principal attorney where they exercise full responsibility for the development and presentation of the case. Thus, depending upon the amount of supervision and guidance received by the staff attorney, either the District Counsel or the staff attorney will be the Principal Attorney in Charge of the case.

This typically occurs in contract appeals from final decisions of the Contracting Officer to both the Armed Services and Corps of Engineers Boards of Contract Appeals. The Chief Trial Attorney at Headquarters USACE and the Department of the Army are not usually involved in the preparation and presentation of such cases before the Boards of Contract Appeals. They merely review the Rule 4 files, pleadings, motions, and briefs. The standards are concerned with the meat of the trial, i.e. discovery through the use of interrogatories, requests for admissions and

production of documents, and depositions: preparation of witnesses and exhibits; and the actual presentation of the case at the hearing. Accordingly, the District Counsel or trial attorney exercises full responsibility for the development and presentation of the case. Similarly, either the District Counsel or trial attorney may be the Principal Attorney in Charge of trying cases before the EEO Commission, MSPB, FLRA or grievance arbitrations.

Either the District Counsel or trial attorney (Counsel or Real Estate) may be the Principal Attorney in Charge of preparing Litigation Reports utilized by the Department of Justice attorneys in trying cases before the courts involving litigation on behalf of or against the United States. These litigation reports lay the complete groundwork for the Government's case by providing the factual background, legal analysis, suggested pleadings, a list of proposed witnesses together with a synopsis of their respective testimony, and other suggested legal documents such as dispositive motions, crossclaims, counterclaims, third-party impleaders, etc.

In such cases, the standards allow credit to be given to the District Counsel or trial attorney as though they had personally tried the case. (See 905 Stds., Pg. 8)

The second sub-element is Scope. Type III appeals and litigation are of such scope that they, in many instances, warrant the use of one or two lower-graded attorneys OR specialists in engineering, financial, scientific, or other highly technical areas. Type II appeals or litigation also frequently require the utilization of engineering, scientific or financial experts.

The third sub-element is Importance. The highly specialized area of Government Contract law and the areas of environmental, regulatory, water law, admiralty, tort, and inverse condemnation litigation have attracted some of the most distinguished and highly paid legal talent in the country. This is mainly true in the area of Type III cases due to their large dollar value and nationwide interest, and, to some extent, Type II cases where there is nationwide interest. For Level E, all three (Principal Attorney in Charge; Scope; and Importance) must be present.

Level D attorneys either try the case or are credited for trying the case because they lay the complete groundwork therefor, but are not the Principal Attorney in charge of trying the case; or, if they are the Principal Attorney in charge of trying the case, they do not meet the other two Level E sub-elements for regular and recurring work.

10. LEGAL ADVICE AND COUNSEL:

Level C attorneys participate in negotiations as a member of a team and then draft any necessary legal documents resulting therefrom; or act regularly as the legal advisor on a single program, or activity; or serve as the assigned specialist on a single program or a major phase of several related programs or major activities, (District Claims Officer, Regulatory attorneys, Labor Counselor, etc.); or, reviews for legal soundness and accuracy, program material emanating from operating units of the organization (Environmental Impact Statements, etc.).

Level E attorneys act as legal counsel to the head of a major operating program, e.g., a command (USACE), regional office (Divisions), or a field installation (Districts) which has been delegated unusual authority or authority commonly of a higher echelon. In determining whether the latter is present, one is not constrained to viewing higher echelons within the command's own hierarchy but may look to other Federal agencies.

The Hamm Study concluded that Corps District Counsels were legal counsel to the head of a major operating program at a field installation and when compared to the other Federal agencies surveyed, had been delegated unusual authority or authority commonly of a higher echelon.

District, Lab, and Center Counsels are thus ordinarily credited with Level E on a programmatic basis. MSC Counsels are also credited with Level E for this sub-element of Nature of Functions either on a programmatic or regional basis.

Level D attorneys chair or co-chair negotiating teams; act as the attorney or specialist for more than a single program; or, are responsible for the Office of Counsel or Real Estate position as to the legal soundness and accuracy of assigned program material.

11. SUPERVISION AND GUIDANCE RECEIVED

This element has three sub-elements against which each major duty should be

analyzed where applicable, namely, Research/Instructions, Litigation, and Supervisor Review.

8. RESEARCH/INSTRUCTIONS

Level C attorneys are assigned the routine legal work assignments with instructions on unusual circumstances, background information, and important policy considerations.

Level E attorneys are expected to carry out any assignments without preliminary instructions.

Level D attorneys either perform routine cases without any preliminary instructions, or perform more than nonroutine cases with Level C instructions.

9. LITIGATION

For Level C attorneys, before a case is presented in an administrative hearing or before a court, the supervisor discusses the presentation, the line of approach, the possible lines of opposition to be encountered, and other aspects of the case to ensure that proper groundwork has been laid for successful prosecution of the case.

Level E attorneys represent the Government at hearings or trials without any preliminary instructions. Note that unlike the case in Nature of Functions, trying the case is NOT credited here for those attorneys laying the complete groundwork for the Government's case in Litigation Reports.

Level D attorneys lay the complete groundwork for the Government's case, and/or assist the trial attorney at the trial.

10. SUPERVISOR REVIEW

For Level C attorneys all written work is SUBJECT TO review for soundness of approach and argument, application of legal principles, and consistency with governing policies, procedures, and regulations of the employing agency.

For Level E attorneys these standards contemplate an attorney supervisor. Completed work in the advisory or regulatory areas IS REVIEWED before it is signed out for consistency with agency policy, for possible precedent effect, and for overall effectiveness. Thus, attorneys who are supervised by a non-attorney supervisor, Level E with strengthening characteristics is credited, i.e., E+. (See the discussion below regarding "strengthening characteristics.")

For Level D attorneys, written work is NOT subject to review by an attorney supervisor for soundness of approach and argument, application of legal principles, and consistency with policies, procedures and regulations.

12. PERSONAL WORK CONTACTS

This element has two sub-elements against which each major duty should be analyzed where applicable, namely, Litigation and Legal Advice and Participation.

1. LITIGATION

Level C attorneys participate in pretrial or prehearing conferences, explain points of law, and refer suggested settlements or compromise offers to superiors with recommendations.

Level E attorneys try cases before courts or administrative bodies (Boards of Contract Appeals, EEOC, MSPB, FLRA, etc.).

Level D attorneys would go beyond the prehearing or pretrial stage and involve assisting the trial attorney in preparing and trying the case.

2. LEGAL ADVICE AND PARTICIPATION

Level C attorneys: (a) advise negotiating officials in legal contractual matters by recommending appropriate clauses, provisions, and general wording; (b) participate in conferences with representatives of operating programs, state and local governments, industry, private organizations, or other Federal government agencies; and (c) participates in negotiations with state officials concerning conflicts in state and Federal regulations.

Level E attorneys actually confer or negotiate with top administrative personnel in the agency, private business, or State, local, or foreign governments on important legal and policy questions.

Level D attorneys are responsible for negotiations (instead of merely advising negotiating officials) and exercise a lead role in conference participation. Level D is also credited where the attorney confers or negotiates with top administrative personnel on routine legal and policy questions, or vice versa.

Note that some major duties may not involve personal work contacts, other than with associates in Offices of Counsel or Real Estate. In such cases, the Classification Standards provide that the Level of Responsibility will be controlled by the other three elements and will not be diminished because of the lack of personal work contacts.

13. NATURE AND SCOPE OF RECOMMENDATIONS AND DECISIONS

This element has two sub-elements against which each major duty or work examples should be analyzed where applicable, namely, Litigation and Legal Advice and Counsel.

- LITIGATION

Examples include: whether to initiate litigation; settlement of claims; the organization, order of presentation, and line of argument to be used in the presentation of cases or hearings; or settlement of suits brought by the Government against others.

- LEGAL ADVICE AND COUNSEL

Examples include: replies to requests for legal advice or interpretation of law arising out of the day-to-day operations of the office; proposed substantive changes to legislation, policies, and regulations to make them more equitable, responsive, or easier to administer; and, whether to approve a contract or other legal document in its proposed form and content.

- LITIGATION AND LEGAL ADVICE AND COUNSEL

Level C attorneys make recommendations to those outside the agency or to administrative officials at higher levels normally through the supervisor.

Level E attorneys make similar recommendations as set forth for Level C attorneys above. The major difference is that at this level advice on the interpretation of law or on proposed changes in legislation, policy, and regulations is often given directly to heads of programs, bureau chiefs, cabinet officers, members of congress, or representatives of State and local governments. Recommendations that are tantamount to final decisions made through the supervisor are also Level E.

Level D attorneys make similar recommendations as Level C attorneys but make them directly to those outside the agency or to administrative officials at higher levels. The major difference is that such recommendations are not made through the supervisor and do not reach Level E.

14. STRENGTHENING CHARACTERISTICS

This is a classification concept that may assist in raising the overall Level of Responsibility. For example, if analysis of a major duty or work examples determines that Level C for one of the elements is greatly exceeded and approaches, but does not fully meet Level E, then Level D "with strengthening characteristics" is credited, i.e., D+. The same can be true for the intervening Level B yielding a B+. The following illustrates this importance:

NOF	D	D
S&GR	B	B
PWC	D	D+
NSR&D	C	C
OVERALL LEVEL IS	C	D

In the first instance, the Personal Work Contacts "D" and Supervision & Guidance Received "B" equate to a "C." Since we are then left with this "C" and a Nature of Function "D" and a Nature and Scope of Recommendations & Decisions "C", the overall Level is credited with Level "C." However, in the second case we have a Personal Work Contacts "D+" with a Supervision & Guidance Received "B" which exceeds "C" and thus equates to a "D." Since we are then left with this "D," a Nature of Function "D", and a Nature and Scope of Recommendations & Decisions "C," the overall Level is credited with Level "D."

15. DISCUSSION OF JOB TITLE

In classifying a position, you must be able to correctly identify the job title.

While this does not impact the grade determination, it is a prerequisite to correct job classification. The position title consists of a functional title and a subject matter title. The latter is shown in parenthesis. These are on pages 2-4 of the classification standard. There are four functional titles, name: (a) Trial Attorney, which involves duties of preparation for trial, trying cases, or providing technical guidance; (b) Attorney-Advisor, which includes rendering advice and services; (c) Attorney-Examiner, which includes Hearing Officers; and (d) General Attorney when two or more of the above functional titles are applicable, i.e., Trial Attorney and Attorney-Advisor.

The listed subject matter titles are shown in parentheses, e.g., Attorney-Advisor (Real Property) or General Attorney (Contracts). Attorney-Advisor (General) is used where there are two or more subject matter areas or the subject matter is not reflected in a specific title, such as: Environmental or Regulatory. Do not use the title; General Attorney (General).

1. CONCLUSION

All of the foregoing culminates in an evaluation statement which determines the appropriate position title, series, and grade for major duties or examples of regular and recurring work. Using the methodology presented in this Supplementary Guidance should reflect accurate classifications to ensure that our attorneys in Offices of Counsel and Real Estate are being paid at the correct grade level for the work actually being performed.

Appendix E

USACE Finance and Accounting Officer Standard Position Description

 ARMY POSITION DESCRIPTION				
PD#: CCPOID 447738	Sequence#: VARIES	Replaces PD#:		
ACCOUNTING OFFICER GS-0510-13				
Organization Title:				
POSITION LOCATION: <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Servicing CPAC: SERVICING CPAC NAME Installation: VARIES Region: CHRA REGION </td> <td style="width: 50%; vertical-align: top;"> Agency: VARIES Army Command: VARIES Command Code: VARIES </td> </tr> </table>			Servicing CPAC: SERVICING CPAC NAME Installation: VARIES Region: CHRA REGION	Agency: VARIES Army Command: VARIES Command Code: VARIES
Servicing CPAC: SERVICING CPAC NAME Installation: VARIES Region: CHRA REGION	Agency: VARIES Army Command: VARIES Command Code: VARIES			
POSITION CLASSIFICATION STANDARDS USED IN CLASSIFYING/GRADING POSITION: Citation 1: JFS PROFESSIONAL & ADMIN WORK ACCOUNTING & BUDGET GRP, DTD DEC 2000				
<p>Supervisory Certification: <i>I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational relationships, and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds, and that false or misleading statements may constitute violations of such statutes or their implementing regulations.</i></p> <p>Supervisor Name: MICHAEL WALSH Reviewed Date: 03/08/2015</p>				
Classification Review: <i>This position has been classified/graded as required by Title 5, U.S. Code in conformance with standard published by the U.S. Office of Personnel</i>				

Management or if no published standards apply directly, consistently with the most applicable published standards.

Reviewed By: JILL MARSHALL

Reviewed Date: 04/09/2015

<p>POSITION INFORMATION:</p> <p>Cyber Workforce:</p> <ul style="list-style-type: none"> • Cert Type/Level Required 1: VARIES • Cert Type/Level Required 2: VARIES • Cert Type/Level Required 3: VARIES <p>FLSA: EXEMPT</p> <p>FLSA Worksheet: EXEMPT</p> <p>FLSA Appeal: NO</p> <p>Bus Code: VARIES</p> <p>DCIPS PD: NO</p> <ul style="list-style-type: none"> • Mission Category: VARIES • Work Category: VARIES • Work Level: VARIES <p>Acquisition Position: NO</p> <ul style="list-style-type: none"> • CAP: • Career Category: • Career Level: <p>Functional Code:</p>	<p>CONDITION OF EMPLOYMENT:</p> <p>Drug Test Required: VARIES</p> <p>Financial Management Certification:</p> <p>Position Designation: VARIES</p> <p>Position Sensitivity: VARIES</p> <p>Security Access: VARIES</p> <p>Emergency Essential:</p> <p>Requires Access to Firearms: VARIES</p> <p>Personnel Reliability Position: VARIES</p> <p>Information Assurance: VARIES</p> <p>Influenza Vaccination:</p> <p>Financial Disclosure: VARIES</p> <p>Financial Disclosure: NO</p> <p>Enterprise Position: VARIES</p>	<p>POSITION ASSIGNMENT :</p> <p>Competitive Area: VARIES</p> <p>Competitive Level: VARIES</p> <p>Career Program: VARIES</p> <p>Career Ladder PD: NO</p> <p>Target Grade/FPL: 13</p> <p>Career Pos 1:</p> <p>Career Pos 2:</p> <p>Career Pos 3:</p> <p>Career Pos 4:</p> <p>Career Pos 5:</p> <p>Career Pos 6:</p>
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Interdisciplinary: NO Supervisor Status: VARIES PD Status: VERIFIED		
<p>POSITION DUTIES: CL: 00A0</p> <p>Works independently under the general direction of the Chief, Resource Management Officer/Chief Financial Officer (RMO/CFO) as District Finance and Accounting Officer (F&AO) and member of the Regional Business Center's (RBC) accounting community of practice. The Chief, RMO/CFO sets the overall objectives, but the employee plans, directs, and monitors work within the accounting section to include creating internal deadlines, determining project priority, and assigning daily work to several lower graded accountants to meet deadlines. The employee resolves conflicts that arise, coordinating the work with others as necessary, and interpreting policy on own initiative in terms of established objectives. Completed work is judged only from an overall standpoint of compatibility with the office's mission, regulatory guidance, and higher command objectives.</p> <p>MAJOR DUTIES</p> <p>1. As District Finance & Accounting Officer (F&AO), serves as the primary accounting and fiscal law advisor to the Chief, RMO/CFO, the Commander, and other top management officials in the district. Financial responsibility includes planning, directing, and overseeing the district's entire accounting program; providing accounting and fiscal law advice to key district, division, and reimbursable customer leaders; and establishing an administrative system of funds control and delegations that prevent fiscal violations and assign personal accountability. The district's multi-million dollar workload includes a mixture of multipurpose civil works projects, cost shared civil works projects with local states and municipalities; military projects, and complex multi-mission International and Interagency Support (IIS) projects. This complex workload requires establishing accounting policy and funds control processes for a diverse mixture of direct and reimbursable projects and programs funded by unique appropriations that are governed by unique fiscal laws, policies and regulations. . . Appropriations managed include United States Army Corps of Engineers (USACE) civil works and military appropriations, Department of Army (DA) and other Department of Defense (DoD) appropriations, other government agency appropriations, non-federal cost shared contributions, reimbursable and escrow funds. In addition, manages accounting policy and procedures for the district's USACE Revolving Fund that has private industry like accounting processes, requires establishing rates and fees to produce income that offsets expenses, and requires attaining nominal fiscal year end balances in all accounts.</p> <p>a. Participates in district, RBC, and Headquarters (HQ) USACE Resource Management (RM) Community of Practice meetings, advising and recommending improved and necessary actions regarding managerial, procedural, organizational, and fiscal matters. Recommends courses of action to accomplish business processes in an economical, efficient, and legal manner to include methods for regular evaluation of progress and work results. Responsible for the proper accounting and reporting on command funds, obligations, and expenditures. Presents a complete analysis of the finance and accounting status of the district including all</p>		

CFO audit reviews. Reviews current and projected operations and activities to detect trends in financial operations and the probable effect on proposed work. Analyzes trends in Revolving Fund operating, overhead, and other distributive accounts to determine validity and reasonableness of cost accounting processes and rate structures. Provides Chief, RMO/CFO, Commander and staff with the capability to analyze all facets of organizational costing as it relates to work products to determine standard costing variances. Reviews financial status of organization and facility accounts to determine status and ascertain the effect on the overall financial program and consistency with past experience and/or projections for the district.

b. Provides advice and recommendations on complex issues to the Commander, Chief, RMO/CFO, and staff at all levels that are compliant with fiscal laws, appropriation laws, regional and higher authorities, policies, procedures, and sound/acceptable accounting practices. Provides an authoritative interpretation of fiscal laws, policies, and decisions. These laws include Public Law 97-258, Federal Managers Financial Integrity Act, Data Act, the Chief Financial Officer's Act, and the appropriation purpose, time, and amount statutes. Assures district compliance with federal accounting principles contained within the General Accountability Office (GAO) manual. Ensures the district remains compliant with RBC and HQ CFO directives. Authors district policies and operating guidance. Keeps all levels of management informed of changes in the laws and implementing guidance and ensures functional managers understand controls needed for their areas. Provides guidance and leadership on the role of fiscal and financial management control as provided for in the Federal Managers' Integrity Act of 1982 and the CFO Act of 1990. Responsible for establishing accounting practices that meet the requirements of Managers' Internal Control Program (MICP).

c. Maintains liaison on a USACE-wide basis with other levels in the command, with other DoD and federal agencies, and with customers in order to clarify procedures and policies in dealing with fiscal, financial, and administrative issues. Provides advice and counsel to all levels on the implementation of process and procedure changes and the recommended course of action to minimize disruption of good customer services while creating a high level of fiscal integrity. Briefs key customers to explain the USACEs' unique project and program related funding and accounting requirements and how they differ with typical installation mission funded activities.

35%

2. Supervises subordinates. Interviews candidates and makes selection for subordinate positions in the organization. Approves performance standards and makes evaluations for directly supervised subordinate positions. Distributes work, provides technical guidance, and reviews completed assignments of subordinate staff. Initiates personnel actions for recruiting, selecting, training, promoting, and disciplining employees. Schedules and approves leave. Performs other personnel and administrative tasks inherent to the Accounting Officer's role. Actively supports the Equal Employment Opportunity Program. Incumbent is responsible for the overall management of the Finance and Accounting function of the Resource Management Office to include the following functional areas - finance and accounting, managerial accounting, systems accounting, local and upward reporting, access to and maintenance of the Corps of Engineers Financial Management System (CEFMS), Payroll Customer Service Representative (CSR) functions, Government Travel Credit Card Program (GTCC), business practices, and strategic management. Develops short and long range organizational plans and goals, assigns work, and determines work schedules and priorities for personnel within the accounting branch. Oversees the overall planning,

direction, and timely execution of the accounting program, authors or recommends policy changes in response to changes in levels of appropriations or other legislated changes, and recommends organizational changes needed for accounting compliance. Incumbent is responsible for the accounting, reporting, organizational analyses, and statistical services to include methods of performing these services and promoting effective use of resources. Controls and manages these functional segments by implementing local and higher echelon policies providing guidance on questionable matters, deviations from usual courses of action, and installation of procedures and systems that produce a material impact on the district's organization. Confers with other functional chiefs to negotiate and/or coordinate work-related changes. Advises the Chief RMO/CFO, Commander, and district leaders on the Finance and Accounting Office's work relationship to other district programs. Sets priorities as necessary to accomplish the accounting mission and assigns daily work to accounting personnel, a payroll CSR, and the GTCC Program Coordinator. Advises the Chief, RMO/CFO on work relationships between accounting and other RMO/CFO and district programs. Recommends actions necessary to assure effective implementation and operation of district, RBC, Office of Chief of Engineers (OCE), and Department of Army (DA) policies, regulations, and guidelines. 20%

3. Serves as the program manager for all systems accounting activities within the district. As program manager for operations and maintenance of the district's Corps of Engineers Financial Management System (CEFMS) provides professional support to those who operate standardized systems that interface with CEFMS. Reviews development and implementation of new financial systems (regional and USACE standard; and local), and is responsible for determining new financial and managerial accounting reporting requirements in support of district operations. Coordinates and advises users of system changes such as implementation of new procedures, enhancements, and processes. Evaluates and submits systems change requests for locally recommended enhancements and new requirements. Develops policies and establishes procedures controlling access to the CEFMS data base. Ensures that adequate controls are designed, implemented, and maintained for all automated systems that interface with CEFMS within the district. Establishes procedures to ensure internal controls are in place for the administrative control of appropriated funds and that those making entries into CEFMS have proper delegation of authority for the duties they perform and are properly trained on CEFMS processes and governing fiscal laws. This is accomplished through strict requirements for accessing CEFMS and by periodic reviews and comparisons of procedures, work methods, functions, resources, and organizational changes against required standards. Maintains a comprehensive internal fiscal quality assurance to identify and correct potential problems and/or modify operating procedures on a district wide basis. The incumbent serves as the District-wide training authority for personnel who use the automated CEFMS, time and attendance and payroll systems, the Government Travel Credit Card (GTCC) program, and other accounting related training needs. Manages the training needs, schedules, and performs training utilizing a diverse team of systems, professional, technical and contractor personnel. Also provides training as part of the formal new employee orientation on a recurring basis. As the district training authority on fiscal law requirements, has complete authority over use of these programs and automated systems and authority to grant or deny personnel access. As manager of the district GTCC program and Agency Program Coordinator (APC), reviews reports, delinquency ratings, and responds to APC issues needing higher management attention. The incumbent oversees and manages the district year-end financial closeout process and has full responsibility for the approval of the district tri-annual Unliquidated Obligation (ULO) Joint Review Program (JRP). Develops and maintains internal managerial reporting of progress towards command goals and objectives. Provides direction on implementation of the CFO Test Plans program based on

guidance provided by higher headquarters, but retains full responsibility for the development, administration, execution, analysis and evaluation of district CFO activities. Provides leadership and direction on the CFO Test Plans program and gathers data to explain and justify transactions questioned by CFO auditors.

25%

4. As part of the RBC accounting community of practice, participates and contributes to the RBC activities to include sharing in governance of regional financial activities. Contributes to the development and implementation of regional accounting policy and guidance to include developing and enforcing standard costing guidance that allows accurate comparison of financial activities across the region. Supports Headquarters Resource Management (CERM) and RBC policy initiatives as necessary to help resolve complex issues. Provides trend and other analytical data to the district Chief, RMO/CFO, district Budget Officer, and RBC counterparts for use in establishing and monitoring the district's financial position in the regional business center. Alerts key district and RBC leaders when the district's financial results vary significantly from plans/budgets and will impact the region's meeting of key financial performance indicators. Assists the district Chief, RMO/CFO by preparing account projections and analyses for Chief, RMO/CFO participation in the Regional Program and Budget Committee (RPBAC). Participates as member on RBC quality assurance teams that visit districts within the region to validate that standard costing, accounting practices, and CCFO activities are compliant with statutes and guidance

20%

Performs other duties as assigned.

Factor 1. Knowledge Required by the Position: Level 1-8, 1550 points

Mastery of the provisions and guidelines of Public Law, CFO, Office of Management and Budget (OMB), Treasury, DoD, Defense Finance and Accounting Service (DFAS), DA and USACE and other regulatory guidance in order to provide managerial accounting advice, conduct regulatory reviews, and develop district policy and procedure. Mastery of and skill in applying a professional or expert knowledge of professional accounting principles, practices and procedures to serve as a technical authority on a broad spectrum of financial management issues. Complicating factors are the diverse mixture of district and customer appropriations with unique statutory guidelines, the diverse nature of programs serviced, and the complicated mix of internal organizations. Programs range from traditional engineering and construction services to contracting activities, planning studies, regulatory activities, emergency management activities, environmental issues, and real estate activities.

Superior knowledge and skill in operating accounting to conduct feasibility studies of accounting processes and procedures and to participate in the management decision making process as relates to the execution of the district's mission. Demonstrated knowledge and application of generally accepted accounting principles (GAAP) and professional managerial accounting standards.

Specialized knowledge of the District's programs and priorities in order to balance these needs with regulatory and legal requirements and with sound, efficient management practices. Knowledge of supervisory concepts, principles and practices.

Mastery of technical skills to make financial accounting decisions in absence of prescribed guidelines and to recommend changes or more accurate interpretations due to changes in

missions and programs. Knowledge to simplify very complex laws and business practices into easily understandable reports and guidance that assist with mission related financial decisions. This requires the ability to integrate analyses from a variety of complex sources, the ability to recognize the significance of that data, and the ability to that key info into a simplified, understandable format.

The position requires knowledge and skill in analyzing accounting systems (both USACE and cost share sponsor) or adapting existing accounting techniques to solve a variety of problems. The district has complex long term Project Partnership Agreements that cross accounting systems, have multiple rates of cost share participation, and multiple sources of funding that require manual reconciliation with innovative methods to ensure legislative intent is maintained. The position also requires the skill and knowledge to develop and monitor the districts accounting MICP to identify problems and determine action required to operating maintain/improve program effectiveness and maintain the integrity of financial information. In addition multiple funding sources per project complicate the financing arrangements and create reliance on advanced levels of knowledge and expertise of the F&A Officer. Projects involve broad interface across several functional elements of the district. The project life-cycle is complicated and has multiple deliverables.

Factor 2. Supervisory Controls: Level 2-4, 450 points

Serves under the general administrative direction of the Chief, RMO/CFO for the district in terms of broad objectives to be achieved. As District Finance and Accounting Officer incumbent is fully responsible for carrying out all phases of the finance and accounting program for the District Chief RMO/CFO. The Incumbent is held responsible for the day-to-day execution of the finance and accounting functions within the framework of existing laws, regulations, policies, and procedures applicable and governing these activities. Incumbent exercises initiative, judgment, and technical expertise in interpreting directives, for planning, implementing, and directing the finance and accounting program, financial advisory functions, and CFO program directives. Work is reviewed by the Chief, RMO/CFO only for responsiveness to critical requirements and program accomplishment of objectives and mission goals.

Factor 3. Guidelines: Level 3-4, 450 points

Guidelines provide general guidance and parameters, but are not completely applicable to the work or have gaps in specificity. Because of the complex mixture of direct and reimbursable appropriations that fund a district and the complex programs and organizations involved, the accountant is frequently required to develop new procedures or reports when no specific guidance exists. Judgment is required in interpreting and adapting guidelines such as Federal Acquisition Regulation (FAR), Public Law, OMB, GAO, DoD, Federal Travel Regulations (FTR), Joint Travel Regulation (JTR), Joint Federal Travel Regulations (JFTR), agency F&A manuals, GAO Comptroller General decisions, agency travel regulation supplements, agency service regulations, manuals, policies, practices, and procedures for application to specific cases or problems. Work requires initiative and critical judgment in analyzing and recommending measures to rectify accounting system output problems and to provide a more efficient method for creating desired management reports and information.

Factor 4. Complexity Level 4-5, 325 points

Position involves solving accounting problems in particularly difficult, unusual and responsible

circumstances as the recognized authority or expert in the district. Position has major responsibility for overall analysis for district activities. The accountant works with a variety of F&A processes and in an environment where there is significant interface with other automated systems such as personnel, logistics, contracting, etc. CEFMS is very broad-based and accountants must develop local operating procedures to ensure sound financial management and compatibility. CEFMS and changes thereto are not always fully tested in an operating environment prior to implementation. Therefore, a thorough review of the general ledger update, account balances and effects is necessary to ensure reports to higher headquarters and management is accurate. CEFMS is dynamic and requires more in-depth analysis to ensure program effectiveness and continued responsiveness to increasing financial management needs. Significant complexity is due to the large number of interfacing automated systems, diversity in customer requirements, complexity of governing laws for direct and reimbursable funding received, and info requirements of internal managers. This requires understanding very complex laws and business practices, extracting and interpreting financial data from numerous automated systems, and creating understandable reports and guidance for mission related decisions.

As the primary accounting system professional accountant, with functional program responsibility, employee is responsible for resolving a wide range of problems associated with the operation of the accounting system. The accountant uses knowledge of the entire accounting system to develop new or revised procedures for the solution of accounting problems. Provides continuing analysis of program operations and the interrelationship of these operations within the financial management system of the district. Responsibility extends to implementation and analysis of the effectiveness of the system and to working for improvement of the accounting system through implementation of changes or modifications directed by higher authority and establishment and installation of local changes or modifications. Provides advice, solutions, and assistance to top management, Commander, Chief RMO/CFO and others, and establishes necessary internal controls to assure system integrity.

Factor 5. Scope and Effect Level 5-5 325 points

The purpose is to solve significant problems in the analysis of financial management operations. The accountant is expected to provide expert advice to the district Commander, Chief RMO/CFO, managers, and subordinates. Advice involves interpreting accounting regulations for program operations, assessing the impact of proposed improvements on major operations or similar advice where the accountant functions as a technical authority and has significant advisory responsibilities. The work provides a basis for the maintenance and improvement of complex accounting operations and/or the resolution of financial management problems that have an impact district-wide and on cost-share or other partner accounting systems. The proper recording and reporting of financial accounting and trial balance sheets enhances the ability for USACE and the DA to receive acceptable audit opinions. Incumbent is required to apply comprehensive application of accounting principles, concepts and techniques to manage the complex accounting system of USACE; identify changes for improvement; recommend solutions to systems problems; and resolve financial management problems that improve the reputation of the USACE at the highest government levels and with the public. Incumbent is a key figure in establishing a framework for audit theories, concepts and techniques that eventual affect all levels of government.

Factors 6 & 7. Personal & Purpose of Contacts Level 3C, 180 points

Frequent contacts are with higher-ranking managers, supervisors and subordinates. Contacts also include personnel from other agencies, state and local government, lawyers, contractors and private industry.

Contacts are to influence others to the accountant's point of view regarding technical methods or procedures or to secure cooperation when others may hold strongly opposed points of view or are resistant to change. In many cases, any number of courses of action may ultimately be successful, but there may be wide disagreement on the relative merits of each in terms of time and effort expended and the efficient use of funds, manpower and computer resources as well as the merits of the technical accounting issues in question. Contacts with subordinate staff are to provide direction and oversight of team work and individual assignments.

Factor 8. Physical Demands Level 8-1, 5 points

The employee does sedentary work, such as sitting comfortably. There may be some walking, standing, bending, carrying of light items, or driving an automobile. No special physical effort or ability is required to perform the work.

Factor 9. Work Environment Level 9-1, 5 points

The employee works in an adequately lighted and ventilated office environment. Requires occasional travel.

Total Points: 3290

Range: 3155-3600 = GS-13

**Fair Labor Standards Act (FLSA)
Determination = (EXEMPT)**

☐

1. Availability Pay Exemption - (e.g., Criminal Investigators, U.S. Customs and Border Protection pilots who are also Law Enforcement Officers).

☐

2. Foreign Exemption - (Note: Puerto Rico and certain other locations do not qualify for this exemption – [See 5 CFR 551.104](#) for a list of Nonexempt areas.)

☐

3. Executive Exemption:

☐

a. Exercises appropriate management responsibility (primary duty) over a recognized organizational unit with a continuing function, AND

☐

b. Customarily and regularly directs 2 or more employees, AND

☐

c. Has the authority to make or recommend hiring, firing, or other status-change decisions, when such recommendations have particular weight.

Note: Shared supervision or "matrix management" responsibility for a project team does not meet the above criteria. Limited "assistant manager" functions or "acting in the absence" of the manager does not meet the above criteria.

4. Professional Exemption:

a. Professional work (primary duty)

b. Learned Professional, ([See 5 CFR, 551.208](#)) (Registered Nurses, Dental Hygienists, Physician's Assistants, Medical Technologists, Teachers, Attorneys, Physicians, Dentists, Podiatrists, Optometrists, Engineers, Architects, and Accountants at the independent level as just some of the typical examples of exempt professionals). Or

c. Creative Professional, ([See 5 CFR, 551.209](#)) (The primary duty requires invention and originality in a recognized artistic field (music, writing, etc.) and does not typically include newspapers or other media or work subject to control by the organization are just some examples of Creative Professionals). Or

d. Computer Employee, ([See 5 CFR, 551.210](#)) (must meet salary test and perform such duties as system analysis, program/system design, or program/system testing, documentation, and modification). Computer manufacture or repair is excluded (non-exempt work).

5. Administrative Exemption:

a. Primary duty consistent with [5 CFR 551](#) (e.g.; non-manual work directly related to the management or general business operations of the employer or its customers), AND job duties require exercise of discretion & independent judgment.

⦿ **FLSA Conclusion:**

✓ **Exempt**

⌊ **Non Exempt**

FLSA Comments/Explanations:

Position involves solving accounting problems in particularly difficult, unusual and responsible circumstances as the recognized authority or expert in the District. Position has major responsibility for overall analysis for district activities. The accountant works with a variety of accounting and finance processes and in an environment where there is significant interface with other automated systems such as personnel, logistics, contracting, etc.

CONDITIONS OF EMPLOYMENT & NOTES:**POSITION EVALUATION:**

THIS IS A FINANCIAL MANAGEMENT Level 2 Certified position designated as such in accordance with the National Defense Authorization Act (NDAA) 2012, Public Law 112-81, Subtitle F-Financial Management, section 1051, amending 10 United States Code, section 1599d.

Incumbent of this position is required to comply with all Department of Defense and Department of the Army requirements of this certification program within two years.
This is a HQ standardized PD.

PD is updated to replace team leader duties with supervisory duties for 20% of the incumbent's time. Since these duties fall below the 25% required for coverage under the General Schedule Supervisory Guide (GSSG), position is not titled or graded as a supervisor. This position is coded as a Category 4 supervisor and the grade is based on the GS-510 duties as documented by the factors contained in the PD.

The RMO in LRD verified that this change will apply to all incumbents in the region.

Appendix F

USACE Floating Plant Classification and Wage Setting Process

F-1-1. Purpose. This document provides guidelines and instructions for wage setting and classification of U. S. Army Corps of Engineers (USACE) floating plant positions.

F-1-2. Applicability. This guidance is applicable to all USACE elements, major subordinate commands (MSC), districts, and field operating activities (FOA). Elements of the Engineer Research and Development Center which are part of the Demonstration Project are not covered by this Appendix.

F-1-3. Authority. Vessel employees of the Corps of Engineers shall have their pay fixed and adjusted under the provisions of section 5343 of title 5, United States Code.

F-1-4. References.

- a. Memorandum, ENGPV 248, 27 July 1953, subject: Application of the Wage Board Supervisory Pay Plan in the Corps of Engineers.
- b. Memorandum, CEPE-CP, 30 July 1987, subject: First Installment of the Revised Floating Plant Ladder Diagram.
- c. Memorandum, CEPE-CP, 24 April 2003, subject: Revised Ladder Diagram Benchmarks for Towboats, Tugs, Tenders, Derrickboats, and Survey Boats
- d. OPM, Federal Wage System (FWS) Appropriated Fund Operating Manual, Appendix V, Listing of Agency Special Wage Schedules and Rates, Paragraph B, U.S. Army Corps of Engineer Floating Plant and Hopper Dredge Schedules, 2014
- e. Department of the Army Manual of Evaluation Standards (DAMES), August 1948, 1949, and 1951; April 1949; December 1961 [DAMES](#)

F-1-5. Authorities.

- a. The Office of Personnel Management is responsible for overseeing the administration of the Federal Wage System to include publishing Federal wide regulatory guidance, defining wage and survey areas, and prescribing the industries and jobs to be surveyed.

- b. The Department of Defense (DOD), Civilian Personnel Advisory Service, Wage and Salary Division conducts FWS wage surveys and establishes pay rates for all regular FWS wage schedules and most special FWS wage schedules. The Wage and Salary Division works with both management and labor conducting local prevailing rate wage surveys to develop and adjust pay schedules under the FWS. The DoD Wage Setting Division is responsible for conducting wage surveys, establishing pay rates and issuing wage schedules for USACE floating plant positions.
- c. The HQUSACE Directorate of Human Resources is responsible for developing policies and procedures regarding USACE unique wage and classification systems and providing USACE-wide guidance on their use. This includes establishing position classification guidance and instructions for the classification of floating plant positions within USACE.

F-1-6. OVERVIEW AND HISTORY.

F-1-6.1. BACKGROUND.

- a. Navigation was the Corps of Engineers' earliest Civil Works mission, dating to Federal laws in 1824 authorizing and funding the Corps to improve safety on the Ohio and Mississippi Rivers and several ports. The Corps provides safe, reliable, efficient, and environmentally sustainable waterborne transportation systems (channels, harbors, and waterways) for movement of commerce, national security needs, and recreation. A unique cadre of the Corps' workforce are its floating plant staff.
- b. Floating plant are self-propelled and non-propelled floating equipment that are used in the U.S. Army Corps of Engineers (USACE) to conduct construction, operations and maintenance activities in and along inland navigable waters and coastal waters.
- c. Since the Civil War, the Federal government has employed trades and crafts workers whose pay was set according to local private sector prevailing rates. For many years, individual Federal agencies had the authority to determine the wages for its employees. This methodology resulted in pay disparities with employees in different agencies being paid different pay rates for the same job, at the same grade level, and often in the same geographic location. By Presidential memo, agencies were directed to coordinate wage setting activities and the Consolidated Federal Wage System was established. In 1972, a public law was passed establishing the Federal Wage System (FWS) which combined the existing administrative policies into a Federal wide system covering both appropriated fund and non-appropriated fund positions.
- d. The history of policies for the administration of pay for floating plant employees of the Corps date back to November 1948, which was prior to the passing of the Classification Act of 1949 governing the classification of white collar positions. These policies were administered by the Army-Air Force Wage Board. There were two primary foci for

establishing pay for floating plant personnel – prevailing industry practice and geographic location.

- e. In 1948, the Board established the fundamental policies that sets prevailing rates for floating plant positions. Under this policy, pay rates for marine jobs were to be established in accordance with prevailing practices in the marine or maritime industry. The Board was also required to conduct surveys to make adjustments to such rates.
- f. In 1953, the Board established an exception to existing policy, and authorized a special schedule for floating plant employees, using the location of the USACE District headquarters. One of the reasons the District headquarters was selected was because the various floating plants operate throughout a district, regardless of where the plants are based. In many cases, floating plant employees with different home bases can be working side by side.
- g. In 1964, a subsequent study of pay policy reviewed the pay setting practices for hopper dredge positions due to the unique nature of the work performed. At that time, it was determined that a separate pay schedule should be established for those positions. Special approval was granted for the hopper dredge schedule to address the unique nature of those vessel's work and geographic coverage. Hopper Dredge schedules include pay rates for Masters and Chief Engineers. Salaries for these positions are established by reference to marine industry rates as established in the 1953 pay policy. Hopper dredge wage schedules that cover a larger geographic territory were also issued due to the locations where the work was being performed. Hopper dredge schedules are issued for the U. S. Atlantic, the Gulf Coast, and the U. S. West Coast. The other licensed floating plant positions continue to be paid from the 'other than hopper dredge' schedules (Schedule B and Schedule C). These pay policies and practices for floating plant positions were integrated into the FWS and continue to the present time.

F-1-6.2. WAGE SURVEY ROLES AND RESPONSIBILITIES.

- a. The U. S. Office of Personnel Management (OPM) is responsible for prescribing practices and procedures governing the implementation and administration of the FWS. This includes establishing pay fixing policy and practices. Changes in wage or survey area, industries surveyed, survey jobs, and similar matters must be approved by OPM.
- b. Within the DoD, the Defense Civilian Personnel Advisory Service (DCPAS) Wage and Salary Division conducts wage surveys, establishes wage rates, and publishes wage schedules for floating plant positions in accordance with 5 U.S.C. 5343 and guidance in the OPM FWS Appropriated Fund (AF) Operating Manual.
- c. OPM publishes the nationwide schedule of regular wage surveys in the FWS AF Operating Manual Appendix C, <https://www.opm.gov/policy-data-oversight/pay-leave/pay-systems/federal-wage-system/appropriated-fund-operating->

[manual/appendixc.pdf](#). The schedule is listed alphabetically by state. It also includes the wage area, lead agency, survey month, the year full scale wage survey is conducted (even or odd fiscal year), and location of the host activity.

- d. Guidelines for establishing local wage survey committees have been published by OPM. Local wage survey committees are established in each area where a labor organization has been granted exclusive recognition. The local wage survey committee's responsibilities are outlined in OPM FWS Operating Manual Subchapter 5-3(f)

(<https://www.opm.gov/policy-data-oversight/pay-leave/pay-systems/federal-wage-system/appropriated-fund-operating-manual/subchapter5.pdf>) and include for example the following: conducting hearings with interested parties desiring to make recommendations to the committee; determining the required number of data collectors; and making preliminary arrangements with employers. The complete list of responsibilities and guidelines for conducting wage surveys are provided in the OPM FWS Operating Manual.

- e. In each local wage area, the lead agency, DoD, designates a host installation or activity for wage survey responsibilities. Host activities obtain information concerning total wage employment and wage employees under exclusive recognition in the area. They also provide support facilities and clerical assistance for the wage survey.
- f. USACE local organizations are responsible for providing the local wage survey committee lead (host) activity with information concerning the number of wage employees, number of these employees under exclusive recognition within the coverage of regular wage schedules; and providing members of the local wage survey committee, data collectors and clerical assistance as requested by the local wage survey committee. DoD has designated the USACE Northwestern Division, Walla Walla District as a host activity. They have the lead and are the host for the local wage survey conducted in the Southeastern Washington-Eastern Oregon wage area.

F-1-6.3. GENERAL PROCESS FOR WAGE SETTING.

- a. Wage rates are established based on the results of wage surveys conducted. Rates are regulated by Congressional legislation which establishes a minimum and a maximum amount payable for prevailing rate employees. Congressional appropriations acts establish the annual limit for prevailing rate increases. These limits are tied to across the board pay adjustments and the difference between the average percentage for locality payments for the General Schedule between the current and preceding fiscal year.
- b. Two types of wage surveys are conducted – full scale and wage change surveys. Full scale surveys and wage change surveys are conducted in alternating years in a wage survey area. The full scale wage survey includes development of a current sample of establishments and collection of wage data by visits to the establishment. The scope of wage change surveys is limited to the data points (employers, occupations, etc.) in the

preceding year's full scale survey and may be collected by telephone, mail or personal contact.

- c. The Wage and Salary Division conducts annual surveys in the 130 OPM determined wage areas. Teams from Wage and Salary visit private industry establishments and collect blue collar wage data for a predetermined set of survey jobs. The survey jobs benchmarked in each wage area are spread across 15 grades. The data points collected at various grades mathematically allow the generation of a linear regression line that represents all grades, 1-15. Congressional pay mandates are then applied to Wage and Salary Division's survey results to generate the new pay schedule for any given area. Looking at regular FWS positions (i.e. WG), there are hundreds of occupations which are not physically surveyed. However, the grade equivalent for all FWS jobs are accounted for in this survey process. In comparison and more specific to floating plant positions, the grade equivalent for all positions, except the Hopper Dredge Master and Assistant Engineer, are represented in the survey pay lines. Due to the sheer size and scope of FWS, with hundreds of occupational series spanning multiple pay plans, the surveys that are conducted represent the entire FWS workforce.
- d. Standard instructions for conducting wage surveys (Subchapter 5, <https://www.opm.gov/policy-data-oversight/pay-leave/pay-systems/federal-wage-system/appropriated-fund-operating-manual/subchapter5.pdf> and Appendix F, <https://www.opm.gov/policy-data-oversight/pay-leave/pay-systems/federal-wage-system/appropriated-fund-operating-manual/appendixf.pdf>) are provided in the OPM FWS AF Operating Manual and include detailed instructions for data collectors and a description of survey jobs and listing of key ranking jobs for wage surveys (Appendices E, <https://www.opm.gov/policy-data-oversight/pay-leave/pay-systems/federal-wage-system/appropriated-fund-operating-manual/appendixe.pdf> , <https://www.opm.gov/policy-data-oversight/pay-leave/pay-systems/federal-wage-system/appropriated-fund-operating-manual/appendixi.pdf>).
- e. The FWS is designed to respond to local wage differences. However, there may be occasions where local conditions create circumstances that contribute to recruitment and retention problems. In these situations, special (pay) rate authority is available when hiring authorities, i.e., direct hire authority, and/or incentives have been exhausted and have not been effective. Other incentives include recruitment, retention, and relocation bonuses, higher pay rate for superior qualifications, student loan repayment, and service credit granted for leave.

F-1-6.4. FLOATING PLANT WAGE SETTING PROCESS.

- a. In accordance with the pay setting policy for Hopper dredges, the rates for officers (Masters and Chief Engineers) are derived by survey and analysis of pay rates and benefits paid in the commercial maritime industry.

- b. Pay rates for all other floating plant personnel (both on the plant and land based support personnel) are derived by determining the levels of wages paid by private industry for representative jobs in the FWS. These positions include: Pilots, 3rd Mate, 3rd Assistant Engineer, etc. OPM prescribes which representative jobs are required to be surveyed and also provides a list of optional jobs which may be included in the survey. Jobs selected are representative of the level of difficulty, complexity, experience and knowledge required in FWS key jobs.

U.S. ARMY CORPS OF ENGINEERS
FLOATING PLANT
SERIES DEFINITIONS

Crane Operator, WG/WS/WY-5725: Includes jobs involved in the operation of cranes to lift, transport, and position materials; to dig and move earth or other materials; to drive pilings; or to destroy obsolete structures. Cranes use attachments such as hooks, clamshell buckets, orange peel buckets, dragline buckets, magnets, piledrivers, demolition hammers, and other special material handling devices.

Small Craft Operating, XF, XG, XH, WK: This occupation includes jobs involved in operating small oar, sail or mechanically propelled craft, generally under 180 feet (55 meters) in length, to transport personnel and supplies, control harbor pollution, remove aquatic plants, conduct hydrographic surveys of rivers and harbors, or similar duties. The operations are characterized by regular daily tours of duty followed by employee's physical departure from the boat rather than watch-and-watch, which is characteristics of maritime industry practices. The work requires the ability to steer and navigate the small craft, operate the engines, and in some assignments, make operating repairs to the engine and the boat itself. (Includes positions formerly titled Launch Operator and Surveyboat Operator.)

Derrickboat Operator, XF-5725: Operates a derrickboat engaged in channel maintenance and hoisting services such as wrecking, hoisting, removing channel obstructions, submarine drilling and blasting, repairing breakwaters, setting stone on breakwaters, construction and repair of docks and pile driving. Regulates clamshell, rock hooks, orange peels, and grapples used in digging, lifting and depositing dredged materials. Lifts driven piling and core rock from old existing structures and drives new piling and places new core material.

Derrickboat Master, XH-5725: Supervises the operation of derrickboat. Directs and assigns crew in work to be performed, directs the placement of the derrickboat in position, the placement of anchors and fastening of the lines, the operation of deck winches and the anchoring of the boat. Also operates derrickboat.

Riverboat Operating, XH-5784: Includes jobs involved in operating riverboats, towboats, with tows, self-propelled dredges and other similar craft, often larger than 180 feet (55 meters) in length engaged in transporting passengers and freight, moving nonself-propelled vessels and floating plant, making hydrographic surveys, dredging and maintaining waterways, etc. The work includes steering the boat, standing watch, setting and maintaining speed and course, determining position using navigational aids, and coordinating activities of members of the crew. The work requires knowledge of river currents, stages, obstructions, navigation locks and dams, and the handling and operation of large vessels or tows on rivers. Positions in this series include: Masters, Mates, Pilots, Tender Operators.

Ship Operating, WJ-5782: Includes jobs involved in operating ships, tugboats, seagoing dredges, fishing vessels, or other similar vessels, often greater than 180 feet (55 meters) in length, engaged in transporting passengers and freight, towing or assisting the maneuvering of large vessels, making hydrographic and oceanographic surveys, drilling or probing subaqueous holes, conducting fishing operations, etc. The work includes navigating the ship, standing watch, setting and maintaining speed and course, using navigational aids and devices to compute position, and coordinating the activities of members of the crew. The work requires knowledge of the handling and operation of large vessels offshore or in the Great Lakes and/or large vessels under tow. Positions in this series include: Masters, Mates, Pilots on Hopper Dredges.

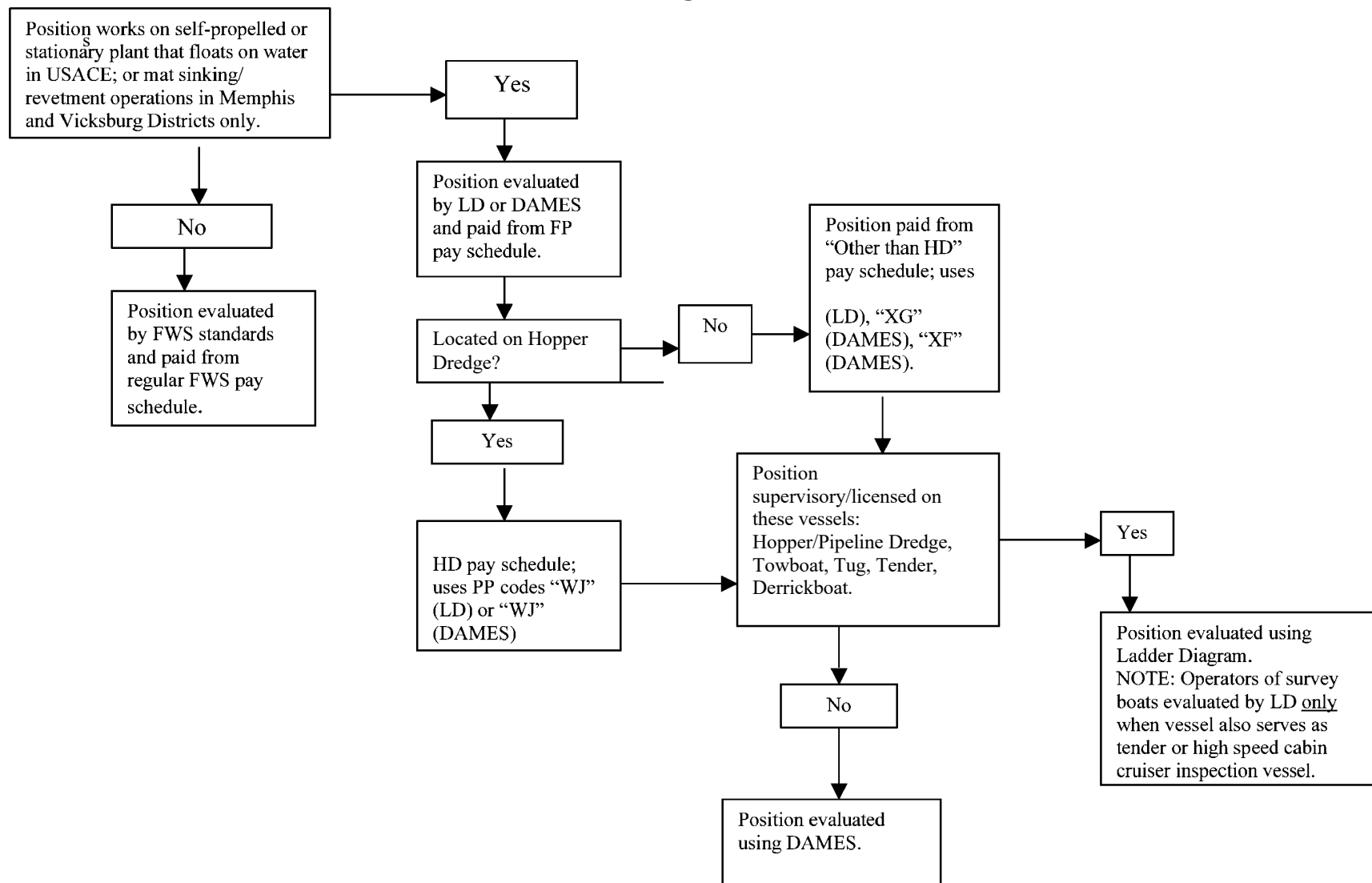
Utility Systems Repairing-Operating, WJ/ XH-4742: Includes jobs that primarily involve repairing and operating one or more utility systems (air conditioning, heating, water, sewage, electricity generation and distribution, etc.). The work requires the ability to start, stop, and regulate the utility or utilities for optimum efficiency and troubleshoot, maintain, and repair them, and knowledge of the locations and functions of all equipment in the system(s) and the kind and quality of materials to be used in repairs. The levels of work performed in repair and operation must be the same and must represent the highest level of work performed. Positions in this series include: Engineers on all floating plant.

Cook, WJ/WK/XF-7404: Includes jobs involved in cooking regular or special diet foods and meals.

Boatswain/Deckhand, WJ/WK/XF/XG/XH-5788: Includes jobs that involve doing general maintenance work; repairing and painting decks, hulls, superstructure and interior spaces of vessels; operating cargo gear and deck machinery; rigging booms; handling lines during docking, moving and towing operations; mending lines and canvas; standing lookout, security and wheel watches; connecting and disconnecting hoses and pipelines; operating fishing gear; and similar work.

Other Nonsupervisory Floating Plant, XF/XG/WK: Marine Machinery Mechanic, Marine Electrician, Welder, Dredging Equipment Operator, Engineering Equipment Mechanic, Revetment Worker, Winchman, Tying Tool Repairer, Electrical Instrument Mechanic, Marine Equipment Operator, Administrative Technician.

Decision Tree for Classifying Floating Plant Positions



LADDER DIAGRAM OF FLOATING PLANT JOBS

HOPPER DREDGE - SCHEDULE A

Series - 5782

4742

7404

GRADE	BN	DECK	BN	ENGINE	BN	GALLEY
WJ-16	A-1	Master				
WJ-15	A-2	Asst Master	A-30	Ch Engr		
WJ-14	A-4	Asst Master	A-31	Asst Ch Engr, Diesel		
WJ-13			A-33	Asst Ch Engr		
WJ-11	A-7 A-8	Ch Mate Ch Mate/DCO	A-36	1st Asst Engr		
WJ-10			A-39	Ch Elect *2805		
WJ-08	A-10 A-11	2nd Mate 2nd Mate/DCO	A-42	2nd Asst Engr		
WJ-07	A-13 A-14	3rd Mate 3rd Mate/DCO	A-45	3rd Asst Engr		
WJ-05	A-16 A-19	Jr. Mate Boatswain *5788				
WJ-04					A-50	Cook Steward
WJ-03	A-22 A-23	DCO Asst Bos'n *5788				
WJ-02	A-25	Boatswain *5788				
WJ-01					A-53	S. Cook Steward

*Indicates series other than the one for that column

HOPPER DREDGE GRADE DIFFERENCES

Bmk. No.	Title, Series, & Grade	Statement of Differences Between Grades
A-1	Master, Hopper Dredge, WJ-5782-16	Scope of responsibility is greater than any one crew or department of the dredge. Includes long-range supervisory responsibilities for planning, work direction and administration over several crews on the dredge, each staffed with a supervisory position. Has 24-hour responsibility for all aspects of the dredge operation and maintenance.
A-2	Asst Master, Hopper Dredge, WJ-5782-15	Serving as Acting Master 80% of the time.
A-30	Chief Engineer, WJ-4742-15	Scope of responsibility includes the three-shift work program of the dredge engine room and related mechanical, electrical-electronic equipment and systems. Involves the highest-level technical supervisory requirements for any crew/department on the dredge. Has 24-hour responsibility for engine room department work requirements.
A-4	Asst Master, Hopper Dredge, WJ-5782-14	Responsible for a department which is support in nature; made up of a variety of skills and without a large staff.
A-31	Asst Chief Engineer, Diesel, WJ-4742-14	Serving as Acting Assistant Engineer 80% of the time.
A-33	Asst Chief Engineer, Hopper Dredge, WJ-4742-13	Works as a less than full foreman in a highly technical department. Has no long-range supervisory responsibility.
A-7	Chief Mate, Hopper Dredge, WJ-5782-11	Responsible only for a shift for bridge supervision.
A-8	Chief Mate, DCO, Hopper Dredge, WJ-5782-11	Responsible only for a shift for bridge supervision.
A-36	First Asst Engineer, WJ-4742-11	Serves in the absence of the Chief Engineer. Assists the Chief Engineer in his supervisory work planning, direction and administration responsibilities. Otherwise, has responsibility for engine room department work requirements with one shift/watch. Technically supervises and works with the engine room crew on the assigned shift.
A-39	Chief Electrician, WJ-2805-10	Responsible for one skill in the engine room. This takes into consideration troubleshooting and repair throughout the ship.
A-10	Second Mate, Hopper Dredge, WJ-5782-08	Has responsibility for deck department work requirements on one shift/watch. The difference between this job and the First Mate is that the First Mate has 24-hour responsibility for all crews and work of the deck department and the supervisory responsibilities of the First Mate are greater than those of the Second Mate.

A-11	Second Mate, DCO, Hopper Dredge, WJ-5782-08	Has shift responsibility with less experience required in the occupation or assists with the maintenance of equipment in the department for an assigned shift.
A-42	Second Assistant Engineer, WJ-4742-08	Has responsibility for the engine room department work requirements on one shift/watch. Technically supervises and works with the engine room crew on the assigned shift. The difference between this job and the First Assistant Engineer job is that there is no requirement in this position to assist the Chief Engineer or to serve in his absence.
A-13	Third Mate, Hopper Dredge, WJ-5782-07	Has responsibility for the deck department work requirements on one shift/watch. The difference between this job and that of the Second Mate is that the work of the Third Mate is subject to closer supervision by the First Mate, the job requires the development of progressively greater experience, and the incumbent is in line for promotion to the position of Second Mate
A-14	Third Mate, DCO, Hopper Dredge, WJ-5782-07	Less experience required than the next higher level.
A-45	Third Asst Engineer, WJ-4742-07	Has responsibility for engine room department work requirements on one shift/watch. Technically supervises and works with the engine room crew on the assigned shift. The differences between this job and that of the Second Assistant Engineer is that work is subject to closer supervision by the Chief Engineer, the job requires the development of progressively greater experience, and the incumbent is in line for promotion to the position of Second Assistant Engineer.
A-16	Junior Mate, WJ-5782-05	Works under very close supervision and OJT for an occupation.
A-19	Boatswain, Hopper Dredge, WJ-5788-05	Responsible for a small support group with long-range responsibilities and a variety of skills.
A-50	Cook Steward, WJ-7404-04	Has responsibility for supervision of the galley crew and work requirements. Supervisory planning and administration requirements are long-range.
A-22	Dredging Control Officer, WJ-5782-03	Responsible for the function on the bridge which controls the drag arms and is contained within the shift assigned.
A-23	Assistant Boatswain, WJ-5788-03	Serving as Acting Boatswain 75% of the time.
A-25	Boatswain, WJ-5788-02	Responsible for a very small crew of support personnel, where full performance of any trades and crafts are not utilized.
A-53	Substitute Cook-Steward, WJ-7404-01	Has limited responsibility for administrative aspects of the department. Has no long-range responsibilities for the department.

Bmk. No. A-01

Master, Hopper Dredge, WJ-5782-16

MAJOR DUTIES

Serves as Master of a self-propelled, seagoing, automated hopper dredge. Directs and is responsible for the proper maintenance, operation, administration, navigation and safety of the vessel. When the vessel is moving at sea from one dredging location to another, is responsible for proper navigation and piloting of the vessel. Plans, supervises, and directs all operations, maintenance, navigation and safety of the vessel and crew in all departments. Issues instructions to subordinate deck officers as to the areas to be dredged, economic loading cycle to be maintained, and other such pertinent information regarding the dredging operations. Insures that work is performed and reported in accordance with the Manual of Instructions. Trains subordinate deck officers in current and potential aspects of their positions. Maintains proper morale and discipline of the entire crew.

Working from plans, specifications, and charts, incumbent plans, lays out and directs daily operation of the dredge. Directs dredging in areas as called for in plans and specifications, to required depth and width and directs disposal of soil in the dump areas. Upon the determination of economic dredging time, depending on type of material and other considerations, informs mates of approximate dredging time. Coordinates with operating district to insure proper marking and lighting of channels and dump areas as laid out by the survey parties.

Supervises the Chief Engineer responsible for the maintenance, repairs, and proper functioning of all dredge equipment. Reviews reports submitted by Chief Engineer, and consults relative to recommendations for major repairs.

Supervises the Cook-Steward in the operation of the galley. Reviews requisitions for subsistence; insures that the crew is adequately subsisted within the meal allowance authorized, and that the monthly inventory of food is performed. Supervises, through the Assistant Master, the navigation and operations of the dredge, including the operation and maintenance of navigation equipment and deck machinery.

Directs repairs to dredge made by dredge crew; makes estimate of cost and requisitions necessary supplies and parts in connection therewith. Recommends major repairs necessary and compiles list of requirements for periodic shipyard repairs

Performs a variety of administrative duties, and establishes practices to be observed by crew while aboard vessel. Makes periodic safety inspections throughout the dredge and maintains safety violation log and supervises corrective action or recommends such action when beyond the dredge's resources. Sees that quarters are clean and maintained in an orderly manner and that leave is properly scheduled. Supervises the dredge clerk and directs functions such as submission of progress reports, timekeeping, and the maintenance of personnel and property records.

Conducts personnel administration by assigning work to subordinates. Plans regular and emergency work requirements. Initiates or participates in review and improvement of work methods and structuring positions. Evaluates results of work in terms of economy, simplicity, and accuracy. Establishes performance requirements and prepares regular performance appraisals. Periodically reviews job descriptions of subordinates for currency and accuracy. Counsels employees regarding conduct, leave benefits, non-performance and initiates necessary disciplinary action. Promotes participation of subordinates in programs such as safety, cost reduction, incentive awards, suggestions, and EEO. Approves leave of subordinates.

Performs other duties as assigned. **SKILLS AND KNOWLEDGES**

Must possess U.S. Coast Guard license for the specific vessel, as Master of seagoing vessels. In addition to the appropriate nautical rules of the road, the most fully utilized license functional areas are piloting, seamanship including shiphandling, and tides and currents. There is a requirement for knowledge of dredging operations. Must possess the ability to understand the principles of operation of automated dredging and related mechanical systems. Must be capable of being trained in the operation, troubleshooting, and repairs of electronic-mechanical systems.

Must be able to operate the maintenance management system and to develop a knowledge of regulations required for proper administration and procurement of supplies.

RESPONSIBILITY

Works under general administrative supervision. The majority of assignments are carried out at locations remote from the operating District. The dredge is assigned to a specific project to the dredged and incumbent is furnished charts and other data specifying the amount and limits of dredging.

Regulatory controls or guides include Navigation Rules and Regulations prescribed by the U.S. Coast Guard, District policies published in Circulars, Memoranda, Special Orders, letter directives, dredging charts, and established ranges and years of experience with dredging operations. The work is checked by review of the daily dredging reports and occasional inspections of the physical appraisal standards established by the supervisor.

WORKING CONDITIONS

Spends most of the time on bridge or in office. Occasionally exposed to weather conditions, heat, and noise when making inspection tours. Danger of drowning is limited to accidents. There is danger from traffic hazards, particularly in foggy weather and at night. There is danger of slippery decks and drowning.

PHYSICAL EFFORT

Light to moderate physical effort is required for continuous standing and operation of various controls while on watch. Incumbent must have color and depth perception and be able to see in low visibility conditions in order to navigate a dredge.

Bmk. No. A-02

Assistant Master, Hopper Dredge, WJ5782-15

MAJOR DUTIES

Serves as Assistant Master of a self-propelled, sea-going, hopper dredge engaged in 24 hours per day/7 days per week dredging activities. As the "Second in Command", relieves superior of the necessity for personally directing routine operational activities. When serving as "Acting Master", is fully responsible for all aspects of the on-site management of the operation of the dredge. (80%). In the absence of the Master, plans and directs the operation, maintenance, and navigation of the vessel as well as the activities of 54-57 licensed and unlicensed crew. Working through key subordinate supervisors, incumbent is responsible for the oversight and direction of the work and other activities of employees in the Deck, Engine, and Galley Departments.

1. As Acting Master, establishes and/or enforces operating policies, practices, standards, etc., required to be observed by the crew during work and non-working hours, while on board the dredge and in direct transit between the vessel and shore facilities; issues oral or written orders, directives, assignments, or other instructions covering the above requirements. Oversees the maintenance of good order and discipline by accomplishing regular and special inspections of quarters, work areas, galley, stores and storerooms, engine room, pump room, auxiliary and deck equipment, etc., to assure that they and the vessel as a whole are maintained in an orderly, safe, sanitary, and generally seaworthy condition. Performs a wide variety of administrative tasks such as preparing and/or reviewing operating reports, conducting safety meetings and required drills, overseeing the maintenance of the ship's log, initiating and/or approving requisitions, etc. Initiates and/or reviews such personnel management activities as performance ratings, personnel action requests, disciplinary actions, training, employee selections, work and leave schedules, etc. Provides equal opportunity for all employees supervised, regardless of race, color, religion, sex, handicap, age, or national origin; and affords minorities and women full consideration in employment and in personnel policies and practices.
2. As the Assistant Master and next senior deck officer, is in immediate charge of the direction of Deck Department and coordinates routine operational activities of the dredge, thereby providing the Master with the time to concentrate on long-term planning and more difficult management problems. Also, is particularly concerned with overseeing the accomplishment of dredging activities; plans and lays out work, conferring with Mates and other involved employees to assure that work plans and charts are fully understood, and that the dredging is accomplished in accordance with specifications. Works closely with Chief Mate to plan and implement routine deck maintenance and repair work; provides technical assistance, if needed, in directing or accomplishing major repairs to deck machinery and equipment; coordinates and oversees lay-day and similar activities. Works with Chief Mate and Boatswain to prepare list of recommended repair and replacement items for shipyard refit. Coordinates Deck Department activities with those of the other two departments to assure smooth and

cooperative operations; attempts to resolve all interdepartmental and operating problems not requiring the personal attention of the Master.

3. Performs other duties as assigned

SKILLS AND KNOWLEDGES

Must possess U.S. Coast Guard license for the specific vessel, as Master of seagoing vessels. In addition to the appropriate nautical rules of the road, the most fully utilized license functional areas are piloting, seamanship including shiphandling, and tides and currents. There is a requirement for knowledge of dredging operations. Must possess the ability to understand principles of operation of automated dredging and related mechanical systems. Must be capable of being trained in the operation, troubleshooting, and repairs of electronic-mechanical systems. Must be able to operate the maintenance system and to develop a knowledge of regulations required for proper personnel administration and procurement of supplies.

RESPONSIBILITY

Works under general administrative supervision. The majority of assignments are carried out at locations remote from the operating District. The dredge is assigned to a specific project to be dredged and incumbent is furnished charts and other data specifying the amount and limits of dredging. Regulatory controls or guides include Navigation rules and regulations prescribed by the U.S. Coast Guard, District policies published in Circulars, Memoranda, Special Orders, letter directives, dredging charts, and established ranges and years of experience with dredging reports and occasional inspections of the physical operations. Overall performance is evaluated in terms of performance appraisal standards established by the supervisor. When acting as the Master, has exceptionally wide latitude for exercising independent technical judgment on matters pertaining to ship-handling and marine practices; is also relied upon to employ considerable managerial and supervisory initiative in planning and directing the operations of the dredge and activities of her crew.

Supplemental guidance and assistance is generally readily available on major problems or matters which require special authorizations, are extremely controversial or of a policy nature, deviate significantly from established plans and/or procedures, or which require extensive coordination with other organizations.

WORKING CONDITIONS

Spends most of the time on the bridge or in the office. Occasionally is exposed to weather conditions, heat, and noise when making inspection tours. Danger of drowning is limited to accidents. There is danger from traffic hazards, particularly in foggy weather and at night.

There is danger of slippery decks and drowning.

PHYSICAL EFFORT

Light to moderate physical effort is required for continuous standing and operation of various controls while on watch. Incumbent must have color and depth perception and be able to see in low visibility conditions in order to navigate a dredge.

Bmk No. A-04

Assistant Master, Hopper Dredge, WJ-5782-14

MAJOR DUTIES

Serves as Assistant Master on a self-propelled, seagoing, automated diesel-powered hopper dredge, engaged in dredging activities on a continuous 7-day per week operation, or on a modified schedule depending on economic and national defense factors involved. Acts for the Master during that individual's regularly scheduled days off, as well as periods of annual and sick leave, and is on call 24 hours a day at such times. As necessary, stands port watch. As full assistant to the Master of the ship, issues his orders and assignments to the Mates and other deck forces, and insures compliance therewith. Maintains discipline and is responsible for crew's safety.

1. Plans and supervises the dredging operations. Issues instructions to the mates concerning the areas to be dredged. Selects the dumping areas. Determines when changes in dredging operations are necessary due to winds, tides or other conditions. Navigates or supervises the navigation of the vessel when changing from one dredging location to another, when operating in strange waters, when docking, or when vessel is navigating under unusual conditions.
2. Supervises and directs through the Chief Engineer, the operation, specified and emergency maintenance and repairs of engines, refrigeration, plumbing and heating systems, pumping machinery, etc. Reviews log and reports as submitted by Chief Engineer, and consults with the Chief relative to recommendations for major repairs.
3. Supervises and directs through Cook Steward the operation of the galley and mess rooms. Reviews requisitions for subsistence.
4. Directs specified or emergency repairs to dredge made by dredge crew; makes estimate of cost and requisitions necessary supplies and parts in connection therewith. Recommends to Master major repairs necessary and assures that repairs are made in accordance with existing standards.
5. Performs a variety of administrative duties such as assuring that crew follows established practices during working and non-working hours, and in accordance with the SOP. Sees that quarters are clean and maintained in an orderly manner, that the crew is adequately subsisted within allowable funds authorized, that leave is scheduled, etc. Supervises and directs through a clerk all clerical functions such as submission of progress reports, timekeeping, maintenance of files, property records, etc. Recommends employment and discharge of crew members; is responsible for good morale of the crew and maintains discipline.
6. Responsible for seeing that the ship is in safe operating condition and that operations are

in accordance with local policies and Marine regulations. Makes periodic inspections of the ship for orderliness and to see that safety equipment is in place and workable. Conducts fire, lifeboat, and man-overboard drills.

7. Conducts personnel administration by assigning work to subordinates. Plans regular and emergency work requirements. Initiates or participates in review and improvement of work methods and structuring positions. Evaluates results of work in terms of economy, simplicity, and accuracy. Establishes performance requirements and prepares regular performance appraisals.

Periodically reviews job descriptions of subordinates for currency and accuracy. Counsels employees regarding conduct, leave, benefits, and non-performance and initiates necessary disciplinary action. Promotes participation of subordinates in programs such as safety, cost reduction, incentive awards, suggestions, and EEO. Approves leave of subordinates.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must possess U.S. Coast Guard license for the specific vessel, as Master of seagoing vessels. In addition to the appropriate nautical rules of the road, the most fully utilized licensed functional areas are piloting, seamanship including shiphandling, and tides and currents. There is a requirement for knowledge of dredging operations. Must possess the ability to understand principles of operation of automated dredging and related mechanical systems. Must be capable of being trained in the operation, troubleshooting, and repairs of electronic-mechanical systems. Must be able to operate the maintenance system and to develop a knowledge of regulations required for proper personnel administration and procurement of supplies.

RESPONSIBILITY

Works under general administrative supervision. The majority of assignments are carried out at locations remote from the operating District. The dredge is assigned to a specific project to be dredged and incumbent is furnished charts and other data specifying the amount and limits of dredging. Regulatory controls or guides include Navigation Rules and Regulations prescribed by the U. S. Coast Guard, District policies published in Circulars, Memoranda, Special Orders, letter directives, dredging charts, and established ranges and years of experience with dredging reports and occasional inspections of the physical operations. Overall performance is evaluated in terms of performance appraisal standards established by the supervisor.

WORKING CONDITIONS

Spends most of the time on the bridge or in the office. Occasionally is exposed to weather conditions, heat, and noise when making inspection tours. Danger of drowning is limited to accidents. There is danger from traffic hazards, particularly in foggy weather and at night. There is danger of slippery decks and drowning.

PHYSICAL EFFORT

Light to moderate effort is required for continuous standing and operation of various controls while on watch. Incumbent must have color and depth perception and be able to see in low visibility conditions in order to navigate a dredge.

Bmk. No. A-07

Chief Mate, Hopper Dredge, WJ-5782-11

MAJOR DUTIES

Serves as Chief Mate of a self-propelled, sea-going, automated hopper dredge, engaged in the maintenance and improvement of harbors and channels. Serves as Assistant Master when the Assistant Master is absent or serving as Master. During such periods, the incumbent is responsible for the maintenance and upkeep of the vessel.

1. Consults with the Chief Engineer to determine the amount and kind of deck equipment maintenance and repair to be performed, and inspects and supervises crew members and contracts in the accomplishment thereof. Requisitions material to be used by the Deck Department. Directs personnel under his supervision in safe work methods and in the proper utilization of all safety equipment. Makes regular inspections to insure the proper functioning of all deck operated equipment.

2. Stands regularly scheduled bridge watches with duties consisting of complete navigation and control of the vessel; steering or supervision of steering; controlling propulsion and variable pitch propeller systems; operating pilothouse, navigation, safety, and emergency equipment; and supervising of the dredging function. Maintains bridge log during watches and records movement of vessel, tide, sea conditions, and other events and activities. Gives signals as prescribed by International and Inland Rules of the Road.

3. Makes regular inspection of life-saving and fire-fighting equipment to determine that such equipment is in safe operating condition. Assists Master or Assistant Master in conducting fire, lifeboat, and man-overboard drills. Serves as First Aid Officer for the dredge with responsibility for the dispensing, maintaining, and requisitioning of medical supplies and equipment on board.

4. When assigned, the incumbent will be in charge of the vessel during tie-up periods. Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must possess U.S. Coast Guard unlimited license for at least Chief Mate, Oceans. In addition to the Nautical Rules of the Road, the most fully utilized licensed functional areas are piloting, seamanship including shiphandling, and tides and currents. Must possess the ability to understand the principles of operation of automated winches and related mechanical systems. Must be capable of being trained in the operation, troubleshooting, and repair of

electronic-mechanical systems.

Development of a greater degree of expertise in the fields of shiphandling and pilotage than is required by the Coast Guard must be attained. Must possess a currently valid license as Chief Mate of vessels of this type, for waters in which the dredge operates.

RESPONSIBILITY

Works under the general supervision of the Assistant Master. Performs duties and carries out responsibilities in accordance with established practices as required by regulations governing the operation of the vessel. Work is given an occasional spot check by observation of the vessel operation and review of log. Regulatory controls consist of Corps of Engineers Policies, U.S. Coast Guard rules and regulations, and dredging orders. Is required to possess a valid license for Chief Mate of Ocean Vessels issued by the U.S. Coast Guard appropriate to that vessel.

WORKING CONDITIONS

Work is performed in the pilot house, on deck and in other locations of the vessel. Spends most of the time in the pilothouse. Occasionally goes outside in all kinds of weather to attend to duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning is present in case of accident. There is danger from traffic hazards, particularly in foggy weather and at night.

PHYSICAL EFFORT

Light to moderate physical effort is required for continuous standing and operating of various controls. Incumbent must have color and depth perception and be able to see in low visibility conditions in order to navigate a dredge.

Bmk. No. A-08

Chief Mate, Dredging Control Officer, Hopper Dredge, WK-5782-11

MAJOR DUTIES

1. Serves as Chief Mate of a self-propelled, sea-going, automated hopper dredge, engaged in the maintenance and improvement of harbors and channels. Serves as Assistant Master when the Assistant Master is absent or serving as Master. During such periods, the incumbent is responsible for the maintenance and upkeep of the vessel. Consults with the Chief Engineer to determine the amount and kind of deck equipment maintenance and repair to be performed, and inspects and supervises crew members and contracts in the accomplishment thereof. Requisitions material to be used by the Deck Department. Directs personnel under his supervision in safe work methods and in the proper functioning of all deck operated equipment.

2. Stands regularly scheduled bridge watches with duties consisting of complete navigation and control of the vessel; steering or supervision of steering; controlling propulsion and variable pitch propeller systems; operating pilothouse navigation, safety, and emergency equipment; and supervising of the dredging function. Maintains bridge log during watches and records movement of vessel, tide, sea conditions, and other events and activities. Gives signals as prescribed by International and Inland Rules of the Road.

3. Stands dredge control watches performing dredging operation in accordance with plans, specifications and instructions. Operates controls involving the dredging and dumping function. Observes gages and adjusts controls to insure optimum loads. Performs the dredging and dumping functions as directed by the mate on the Bridge Watch. Is cognizant of sidewise set of vessel due to the combined effects of wind current and sea conditions, and raises drags when necessary to prevent binding and breakage of pipe against side of dredge. Records dredging production information and makes entries on multiple load data sheets. Performs and directs maintenance on all dredging equipment during assigned watch.

4. Makes regular inspection of life-saving and fire-fighting equipment to determine that such equipment is in safe operating condition. Assists Master or Assistant Master in conducting fire, lifeboat, and man-overboard drills. Serves as First Aid Officer for the dredge with responsibility for the dispensing, maintaining, and requisitioning of medical supplies and equipment on board.

5. When assigned, the incumbent will be in charge of the vessel during tie-up periods. Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must possess U.S. Coast Guard unlimited license for at least Chief Mate, Oceans. In addition to the Nautical Rules of the Road, the most fully utilized licensed functional areas are piloting, seamanship including shiphandling, and tides and currents. Must possess the ability to understand the principles of operation of automated winches and related mechanical systems. Must be capable of being trained in the operation, troubleshooting, and repair of electronic-mechanical systems. Development of a greater degree of expertise in the fields of shiphandling and pilotage than is required by the Coast Guard must be attained. Must possess a currently valid license as Chief Mate of vessels of this type, for waters in which the dredge operates.

RESPONSIBILITY

Works under the general supervision of the Assistant Master. Performs duties and carries out responsibilities in accordance with established practices as required by regulations governing the operation of the vessel. Work is given an occasional spot check by observation of the vessel operation and review of log. Regulatory controls consist of Corps of Engineers policies, U.S. Coast Guard rules and regulations, and dredging orders. Is required to possess a valid license for Chief Mate of Ocean Vessel issued by the U.S. Coast Guard appropriate to that vessel.

WORKING CONDITIONS

Work is performed in the pilot house, on deck and in other locations of the vessel. Spends most of the time in the pilothouse. Occasionally goes outside in all kinds of weather to attend to duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning is present in case of accident. There is danger from traffic hazards, particularly in foggy weather and at night.

PHYSICAL EFFORT

Light to moderate physical effort is required for continuous standing and operating of various controls. Incumbent must have color and depth perception and be able to see in low visibility conditions in order to navigate a dredge.

Bmk. No. A-10

Second Mate, Hopper Dredge, WJ-5782-08

MAJOR DUTIES

Serves as Second Mate on a self-propelled, seagoing, diesel-powered, automated hopper dredge, engaged in the maintenance and improvement of harbors and channels. In the absence of the Assistant Master/Chief Mate, or for training purposes, assumes the duties of that position.

1. Stands regularly scheduled bridge watches with duties consisting of complete navigation and control of the vessel; steering; operating pilothouse navigation, safety, emergency equipment; and supervision of the dredging function. Maintains bridge log during watches and records movement of vessel, weather, tide, sea conditions, and other events and activities. Gives signals as prescribed by International and Inland Rules of the Road. Is in charge of one or more lifeboats and/or life rafts.

2. As required, stands dredge control watches performing dredging operations in accordance with plans, specifications and instructions from the Master. Operates controls involving the dredging and dumping functions. Observes gauges and adjusts controls to insure optimum loads. Coordinates the dredging and dumping functions with the Mate on the bridge watch. Is cognizant of sidewise set of vessel due to the combined effects of wind, current and sea conditions and raises drags when necessary to prevent binding and breakage of pipe against side of dredge. Coordinates dredging activities with the navigation, movement, and speed of the vessel. Records dredging production information and makes entries on multiple load data sheets. Helps supervise maintenance on all dredging equipment during assigned watch.

3. Serves as Navigation Officer for the dredge with responsibility for the maintenance, care, updating and preservation of navigating equipment such as sextant, gyrocompass, radar, chronometer, clocks, charts and publications. Lays out work to be performed by Mate temporarily assuming Navigation Officer duties prior to periods of absence.

4. Performs a variety of supervisory tasks such as informally recommending promotions, reassignments, performance ratings and awards, disciplinary actions, step increases, etc. Also, establishes work standards, provides technical guidance, is responsible for training subordinates in safe working practices, for studying the method of performance of operations under his supervision, and correcting or reporting for correction any condition detrimental to the safety of the worker or others. Provides equal opportunity to all employees supervised regardless of race, color, religion, sex, or national origin; and provides minorities and women full consideration in employment and personnel policies and practices.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must possess U. S. Coast Guard unlimited license for Second Mate, and for Assistant Master/Chief Mate license when acting in that capacity. In addition to the Nautical Rules of the Road, the most fully utilized functional areas are piloting, seamanship with heavy emphasis on shiphandling, and tides and currents. Must possess the ability to understand the principles of operation of automated winches and related mechanical systems. Must be capable of being trained in the operation, troubleshooting, and repair of electronic-mechanical systems.

RESPONSIBILITY

Works under general supervision. Performs duties and carries out responsibilities in accordance with regulations governing the operation of the vessel. Responsible for safe navigation and dredging during watch. Work is given an occasional spot check by observation of the vessel operation and review of log. Regulatory controls consist of U. S. Coast Guard rules and regulations, and District policies and operating procedures. Overall performance is evaluated in terms of performance appraisal standards established by the supervisor.

WORKING CONDITIONS

Work is performed in the pilot house, on deck and in other locations of the vessel. Spends most of the time in the pilothouse. Occasionally goes outside in all kinds of weather to attend to duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning is present in case of accident. There is danger from traffic hazards, particularly in foggy weather and at night.

PHYSICAL EFFORT

Light to moderate physical effort is required for continuous standing and operating various controls. Incumbent must have color and depth perception and be able to see in low visibility conditions in order to navigate a dredge.

Bmk. No. A-11

Second Mate, Dredge Control Officer, Hopper Dredge, WJ-5782-08

MAJOR DUTIES

Serves as Second Mate on a self-propelled, seagoing, diesel-powered, automated hopper dredge, engaged in the maintenance and improvement of harbors and channels. Performs duties in two primary functions. Stands regularly scheduled bridge watches and production control watches. In the absence of the Assistant Master/Chief Mate, or for training purposes, assumes the duties of that position.

1. Stands regularly scheduled bridge watches with duties consisting of complete navigation and control of the vessel; steering; operating pilothouse navigation, safety, emergency equipment; and supervision of the dredging function. Maintains bridge log during watches and records movement of vessel, weather, tide, sea conditions, and other events and activities. Gives signals as prescribed by International and Inland Rules of the Road. Is in charge of one or more lifeboats and/or life rafts.

2. Responsible for operating the automatic dredging machinery. The workstation is on the bridge and consists of a "one man" automated dredge control station. Stands regularly scheduled production control watches, monitoring and controlling dredging operations in accordance with plans, specifications and instructions. Operates controls involving the dredging and dumping function. Observes gauges and adjusts controls to insure optimum loads. Is cognizant of sidewise set of vessel due to the combined effect of wind, current and sea conditions. Constantly monitors the automatic dredging control system. In event of malfunction, provides immediate manual response to override the automatic system, and raises the appropriate drag to prevent binding and breakage of the dredge pipe against side of dredge. Monitors the dredging and dumping functions and maintains continuing verbal communication with the mate on watch as to the effects of vessel speed and drift on dredging production. Records dredging production information and makes entries on multiple load data sheets. Incumbent periodically inspects dredging equipment and observes its working during production control watches. Any malfunction or maintenance needs are noted and coordinated with the Boatswain to obtain necessary repairs or preventive maintenance work.

3. Serves as Navigation Officer for the dredge with responsibility for the maintenance, care, updating and preservation of navigating equipment such as sextant, gyrocompass, radar, chronometer, clocks, charts and publications. Lays out work to be performed by Mate temporarily assuming Navigation Officer duties prior to periods of absence.

4. Performs a variety of supervisory tasks such as informally recommending promotions, reassignments, performance ratings and awards, disciplinary actions, step increases, etc. Also, establishes work standards, provides technical guidance, is responsible for training

subordinates in safe working practices, for studying the method of performance of operations under his supervision, and correcting or reporting for correction any condition detrimental to the safety of the workers or others. Provides equal opportunity to all employees supervised regardless of race, color, religion, sex, handicap, age, or national origin; and provides minorities and women full consideration in employment and personnel policies and practices.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must possess U. S. Coast Guard unlimited license for Second Mate, and for Assistant Master/Chief Mate license when acting in that capacity. In addition to the Nautical Rules of the Road, the most fully utilized functional areas are piloting, seamanship with heavy emphasis on shiphandling, and tides and currents. Must possess the ability to understand the principles of operation of automated winches and related mechanical systems. Must have the capability to operate the automated dredging control station and inspect the related equipment. Must be capable of being trained in the operation, troubleshooting, and repair of electronic-mechanical systems.

RESPONSIBILITIES

Works under general supervision. Performs duties and carries out responsibilities in accordance with regulations governing the operation of the vessel. Responsible for safe navigation and dredging during watch. Work is given an occasional spot check by observation of the vessel operation and review of log. Regulatory controls consist of U. S. Coast Guard rules and regulations, and District policies and operating procedures. Overall performance is evaluated in terms of performance appraisal standards established by the supervisor.

WORKING CONDITIONS

Work is performed in the pilot house, on deck and in other locations of the vessel. Spends most of the time in the pilothouse. Occasionally goes outside in all kinds of weather to attend to duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning is present in case of accident. There is danger from traffic hazards, particularly in foggy weather and at night

PHYSICAL EFFORT

Light to moderate physical effort is required for continuous standing and operating of various controls. Incumbent must have color and depth perception and be able to see in low visibility conditions in order to navigate a dredge. At times incumbent is expected to assist with loading and unloading stores and other items. This activity requires moderate to heavy physical effort.

Bmk. No. A-13

Third Mate, Hopper Dredge, WJ-5782-07

MAJOR DUTIES

Incumbent is assigned as a Third Mate aboard a seagoing, automated hopper dredge engaged in the maintenance and improvement of harbors and channels; and is responsible for the navigation, movement, speed and safety of the vessel, for the crew during assigned bridge watches, and for the control of dredging operations and equipment during assigned dredging control watches. In the absence of the Second Mate, or for training purposes, assumes the duties of that position.

1. Stands regularly assigned dredge control officer watches, performing dredging operations in accordance with plans, specifications and instructions from the Master or other deck officer. Operates controls involving the dredging and dumping functions. Observes gauges and adjusts controls to insure optimum loads. Coordinates the dredging and dumping functions with the Mate on the bridge watch. Is cognizant of sidewise set of vessel due to the combined effects of wind, current, and sea conditions and raises drags when necessary to prevent binding and breakage of pipe against side of dredge. Coordinates dredging activities with the navigation, movement, and speed of the vessel. Records dredging production information and makes entries on multiple load data sheets. Checks maintenance on all dredging equipment during watch.

2. Stands regularly assigned bridge watches with duties consisting of complete navigation and control of the vessel; steering or supervision of steering; controlling propulsion and variable pitch propeller systems; operating pilot house navigation, safety and emergency equipment; and supervising of the dredging function. Maintains bridge log during watches and records movement of vessel, weather, tide, sea conditions, and other events and activities. Gives signals as prescribed by International and Inland Rules of the Road.

3. Assists First and Second Mates in the accomplishment of repairs and performance of general maintenance work by the deck department. Is responsible for the care of deck and superstructure; the handling of hawsers and mooring lines; loading and unloading of stores and supplies; and the cleanliness and sanitation of the dredge. Has charge of one or more lifeboats and/or life rafts.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must possess U. S. Coast Guard unlimited license for Third Mate, Ocean and for Second Mate when acting in that capacity. In addition to the Nautical Rules of the Road, the most fully utilized licensed functional areas are piloting, seamanship with heavy emphasis on

shiphandling, and tides and currents. Must possess the ability to understand the principles of operation of automated winches and related mechanical systems. Must be capable of being trained in the operation, troubleshooting, and repair of electronic-mechanical systems.

RESPONSIBILITY

Works under general supervision from oral and written instructions. Performs duties in accordance with established practices and pertinent regulations. Regulatory controls consist of U. S. Coast Guard rules and regulations, and District policy and operating procedures. Responsible for navigation and dredging during watch. Exercises care not to damage dredge. Work is spot checked by observation of vessel operations and review of dredging reports. Responsible for changing operating orders (within limits established by Master) to conform to conditions brought about by unforeseen changes in weather and tide conditions. Overall performance is evaluated in terms of performance appraisal standards established by the supervisor.

WORKING CONDITIONS

Spends most of the time in the pilothouse. Occasionally goes outside in all kinds of weather to attend certain duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning exists in case of accident.

PHYSICAL EFFORT

Light effort is required for continuous standing and operating of various controls while on watch. Incumbent must have color and depth perception and be able to see in low visibility condition in order to navigate a dredge. Incumbent is required to exert moderate to heavy physical effort when required to assist with the loading and unloading of stores and other items.

Bmk. No. A-14

Third Mate, Dredge Control Officer, Hopper Dredge, WJ-5782-14

MAJOR DUTIES

Incumbent is assigned as a Third Mate aboard a seagoing, automated hopper dredge engaged in the maintenance and improvement of harbors and channels; and is responsible for the navigation, movement, speed and safety of the vessel, for the crew during assigned bridge watches, and for the control of dredging operations and equipment during assigned dredging control watches. Performs duties in tow functions, stands regularly scheduled production control watches and bridge watches. In the absence of the Second Mate, or for training purposes, assumes the duties of that position.

1. Responsible for the operation of the automatic dredging machinery. The workstation is in the bridge and consists of a "one man" automated dredge control station. Stands regularly scheduled production control watches, monitoring and controlling dredging operations in accordance with plans, specifications and instructions. Operates controls involving the dredging and dumping function. Observes gauges and adjusts controls to insure optimum loads. Is cognizant of sidewise set of vessel due to the combined effect of wind, current and sea condition. Constantly monitors the automatic dredging control system. In event of malfunction provides immediate manual response, to override the automatic system, and raises the appropriate drag to prevent binding and breakage of the dredge pipe against side of dredge. Monitors the dredging and dumping functions and maintains continuing verbal communication with the mate on watch as to the effects of vessel speed and drift on dredging production. Records dredging production information and makes entries on multiple load data sheets. Incumbent periodically inspects dredging equipment and observes its working during production control watches. Any malfunction or maintenance needs are noted and coordinated with the Boatswain to obtain necessary repairs or preventive maintenance work.

2. Stands regularly assigned bridge watches with duties consisting of complete navigation and control of the vessel; steering or supervision of steering; controlling propulsion and variable pitch propeller systems; operating pilot house navigation, safety and emergency equipment; and supervising of the dredging function. Maintains bridge log during watches and records movement of vessel, weather, tide, sea condition, and other events and activities. Gives signals as prescribed by International and Inland Rules of the Road.

3. Assists First and Second Mates in the accomplishment of repairs and performance of general maintenance work by the deck department. Is responsible for the care of deck and superstructure; the handling of hawsers and mooring lines; loading and unloading of stores and supplies; and the cleanliness and sanitation of the dredge. Has charge of one or more lifeboats and/or life rafts.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must possess U.S. Coast Guard unlimited license for third Mate, Ocean, and for Second Mate when acting in that capacity. In addition to the Nautical Rules of the Road, the most fully utilized licensed functional areas are piloting, seamanship with heavy emphasis on shiphandling, and tides and currents. Must possess the ability to understand the principles of operation of automated winches and related mechanical systems. Must be capable of being trained in the operation, troubleshooting, and repair of electronic-mechanical systems.

RESPONSIBILITY

Works under general supervision from oral and written instructions. Performs duties in accordance with established practices and pertinent regulations. Regulatory controls consist of U. S. Coast Guard rules and regulations, and District policy and operating procedures. Responsible for navigation and dredging during watch. Exercises care not to damage dredge. Must have the capability to operate the automated dredging control station and inspect the related equipment.

Work is spot checked by observation of vessel operations and review of dredging reports. Responsible for changing operating orders (within limits established by Master) to conform to conditions brought about by unforeseen changes in weather and tide conditions. Overall performance is evaluated in terms of performance appraisal standards established by the supervisor.

WORKING CONDITIONS

Spends most of time in the pilothouse. Occasionally goes outside in all kinds of weather to attend to certain duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning exists in case of accident.

PHYSICAL EFFORT

Light effort is required for continuous standing and operating of various controls while on watch. Incumbent must have color and depth perception and be able to see in low visibility conditions in order to navigate a dredge. Incumbent is required to exert moderate to heavy physical effort when required to assist with the loading and unloading of stores and other items.

Bmk. No. A-16

Junior Mate, WJ-5782-05

MAJOR DUTIES

As a trainee for Bridge Control Officer or Dredge Control Officer on a seagoing hopper dredge, incumbent performs a variety of duties designed to supplement employee's knowledge of general maritime practices by providing on-the-job experience and exposure to the more specialized practices and procedures required in hopper dredge operations.

1. Serves as assistant to the bridge watch officer in order to learn ship handling and channel navigation procedures peculiar to dredging. Stands quartermaster watch and is responsible for steering the vessel following specific instructions from the Mate; uses compass, ranges, fixed navigation aids, and electronic positioning equipment to maintain required courses. With experience, incumbent is expected to learn the handling characteristics of the dredge and be able to compensate for action of wind and current on the movement of the ship. Incumbent is expected to develop a good working knowledge of the river and bar channel areas where the dredge normally operates; should be knowledgeable about channel condition, navigation aids, currents, shoaling, traffic, obstructions, etc., in these areas. In addition, employee is required to develop an understanding of the US Lateral Buoyage System and applicable "rules of the road" (i.e. use of ship's lights, steering rules, whistle and fog signals, etc.), be able to respond to the various bridge alarm systems, and internal and ship communications systems. Also, helps to maintain ship's dredging and bridge logs, operates dredging lights and signals, and serves as an additional lookout during the watch. As a trainee, also works with the Dredge Control Officer to develop a good working knowledge of the dredging controls and the operation of dredging equipment. As assigned, operates dredge plant controls under the immediate direction of the control officer to accomplish routine dredging activities in accordance with plans and specifications or following instructions from the Master. Also under initially close supervision, accomplishes routine maintenance and operator's repair to dredging controls and equipment, learns procedures for transferring from automated to manual mode of operations. When the Master has determined that the incumbent is fully capable of independently performing the duties of the bridge watch officer and dredge control officer, employee may be assigned to relieve these officers for brief periods (i.e. meal relief, breaks, and other occasions of very short absence).

3. Performs other miscellaneous deck-officer duties as required. As needed, may operate crewboat, survey boat, rescue boat, etc., in the absence of the regularly assigned operators or for training purposes. Also, as required, may serve as "lifeboat captain" during abandon ship drill or operations. Stands security watch when dredge is docked for supplies or repair. May be assigned to direct or participate in routine deck maintenance activities or in the difficult overhaul or repair of deck and dredging machinery and equipment.

Performs other duties as assigned.

SKILLS AND KNOWLEDGE

The incumbent of this position is required to possess at least a Third Mate (Oceans) license. Must possess the ability to understand the principles of operation of automated winches and related mechanical systems. Must be capable of being trained in the operation, troubleshooting, and repair of electronic-mechanical systems.

RESPONSIBILITY

Works under the general supervision of the Master, and under the more immediate direction of the Mate on watch, who provides orientation and training on dredging practices and procedures.

Superiors provide initially close guidance and direction on the maneuvering of the vessel and the operation of dredging equipment; however, as employee progresses in skill and experience these controls are gradually lessened. Incumbent works within the general framework of established maritime practices, and is expected to apply and adapt these skills and knowledges in accomplishing assigned duties. Work is continually reviewed and assessed to evaluate employee's development and determine future training needs.

WORKING CONDITIONS

Spends most of time in the pilothouse. Occasionally goes outside in all kinds of weather to attend to certain duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning exists in case of accident.

PHYSICAL EFFORT

Light effort is required for continuous standing and operating of various controls while on watch. Incumbent must have color and depth perception and be able to see in low visibility conditions in order to navigate a dredge. Incumbent is required to exert moderate to heavy physical effort when required to assist with the loading and unloading of stores and other items.

BMK. NO. A-19

Boatswain, Hopper Dredge, WJ-5788-05

MAJOR DUTIES

Serves as boatswain aboard a seagoing hopper dredge. The main function of the dredge is to maintain entrances, estuaries, harbors and channels. The dredge is highly automated and equipped with sophisticated electro-hydraulic and electronic equipment to perform the dredging function. As the supervisor of the deck crew, incumbent is responsible for the planning, assigning crew to jobs, directing the maintenance, upkeep and repair of deck machinery, dredging equipment and related systems, rigging, steel work, ship's gear, etc. Also immediately overseas mooring, anchoring, boat launching and retrieving, dredging ranges markings and lighting, cargo loading and unloading and other similar shipboard operation.

1. Supervises activities of deck crew which consists of an assistant Boatswain, Marine Mechanics and Deckhands. Mechanics performs all scheduled and non-scheduled maintenance and repair of dredging machinery including: dredge pumps, dragarms, dragarm operating gear, swell compensators, suction and discharge piping, hopper distribution equipment, hopper door operating gear, jetting and washdown equipment, adjustable weir equipment, etc. Work is primarily mechanical in nature involving the servicing, modular exchange, testing, and repair of pumps, motors, hydraulic system components (pumps, valves, cylinders, etc.) nuclear density gauges, winches, automatic valves, and gear sets. Performs maintenance on the electrical and electromechanical transducers, transmitters, receivers, solenoids, limit switches and actuators that are associated with the automatic dredging systems. In addition supervises dredge workers in the handling and fastening of hawsers and mooring lines; operation of deck crane; caring for, renewing, and splicing rope; light rigging; chipping, scraping and painting of dredge; maintenance and repair of deck machinery; repair of handrails, and walkways; loading, and unloading supplies, and general housekeeping. Operates ship's launch and vehicle as required.

2. Determines supplies and tools required for maintenance and repair of deck machinery and related deck operations and notifies supervisor of needs. Is responsible for deck equipment and operating supplies, storeroom, issues tools and supplies and periodically takes inventories to project needs and assure adequacy of supplies. Maintains or oversees the maintenance of lifesaving and firefighting equipment, shop's gear and rigging.

3. Directs and assists subordinates in the interpretation and performance of complex jobs and those requiring extensive emergency repair operations. Uses acetylene and electric welding equipment to perform simplified types of structural welding throughout the vessel. Uses cutting torches in removing metal materials, and in cutting parts to size and shape. Performs the more difficult rigging. Directs others in making slings and rigs for heavy lifts, and in splicing cables and ropes. Oversees the cutting, sewing, and repair of canvas, and tarpaulins in making boat covers and cargo slings. Operates ship's launch and vehicle as required. Accompanies Chief Mate or other designated officer in the periodic inspection of quarters,

storage and work areas to insure they are maintained in a clean, orderly and safe condition.

4. Within the framework of general assignments from the Chief Mate establishes priorities and prepares work schedules. Performs a variety of personnel management functions such as selecting employees, evaluating performance, providing informal recommendations on promotions, reassignments, step increases, performance awards, disciplinary actions, training needs, etc. Resolves informal complaints, explains work and performance standards, provides on-the-job training, and identifies and recommends additional training needs, etc. Supports equal opportunity for all employees supervised and instructs personnel in safe work methods and in proper utilization of safety and emergency equipment. Insures that subordinate personnel comply with all pertinent safety regulations. Trains subordinates in safe work methods and utilization of all prescribed safety equipment. When assigned, the incumbent remains aboard during tie-up periods.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must be able to lead and direct workers. Must be able to lay out and check completed work. Must have a knowledge of deck operations, machinery and equipment on hopper dredges. In addition to the knowledge to oversee the work of deckhands also must be able to effectively technically supervise marine machinery mechanics. Must have a knowledge of welding techniques, equipment and materials. The incumbent is required to possess a U.S. Coast Guard Motorboat Operator and AB certificates. Must have the ability to use a lead in the procedures associated with living on a vessel, such as firefighting, first aid and use of life saving equipment.

RESPONSIBILITY

Works under the general supervision of the Assistant Master or Mate who makes work assignments and outlines overall work requirements. Incumbent is relied upon to control work operations and to assure that high quality work is accomplished safely and in a timely manner. Work is reviewed for efficient and economical accomplishment within priorities and controls received. Work is spot- checked.

WORKING CONDITIONS

Works mostly outside exposed to various weather conditions. Possibility of falling or slipping on wet decks, ladders, etc. Possibility of drowning exists in the case of collision or more especially, when working over the side. Subject to dust, grease and soiling of clothing and skin surface.

PHYSICAL EFFORTS

Moderate to heavy lifting is typically required. Must possess sufficient agility to climb ladders in all sea conditions and to work in close quarters

Bmk. No. A-22

Dredging Control Officer, WJ-5782-03

MAJOR DUTIES

1. Regularly stands scheduled production control watches. As such is assigned the production control function aboard on automated hopper dredge. The main function of the dredge is to maintain entrances and estuaries of harbors along a coastline and in large rivers. The dredge is highly automated and equipped with sophisticated electronic equipment to monitor dredging functions. The dredging machinery is automated. The dredging control station is located on the bridge and operates the dragarms for both sides with the help of indicators on the console, minors and/or video monitors. Monitors and controls dredging operations in accordance with plans, specifications and instruction. Operates console controls involving the dredging and dumping function. Responsible to monitor the speed up the vessel as it affects dredging production. Coordinates with the mate on watch in order to attain optimal dredging production. Observes gauges and adjusts controls to insure optimum loads. Is cognizant of sideways set of vessel due to the combined effect of wind, current and other sea conditions. Constantly monitors the automatic dredging control system. In the event of malfunction provides immediate manual response to override the automatic system. Raises the appropriate drag to prevent binding and breakage of the dredge pipe against side of dredge. Records dredging production information and makes entries on multiple load data sheets.
2. Periodically inspects dredging equipment and observes its working during production control watches. Any malfunction or maintenance needs are noted and coordinated with the Boatswain to obtain necessary repairs or preventive maintenance work.
3. May have charge of one or more lifeboats and/or life rafts. May also be required to stand duty watch aboard the vessel during tie-up periods.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Required to possess a valid AB endorsement by the U.S. Coast Guard. Must possess the ability to understand the principles of operation of automated winches and related mechanical systems. Must be capable of being trained in the operation, troubleshooting, and repair of electronic-mechanical systems. Must have the ability to use the procedures associated with living on a vessel, such as life saving equipment.

RESPONSIBILITY

Works under the general supervision of the Mate on watch. Performs duties and carries out responsibilities in accordance with regulations governing the operation of the vessel. Work is given an occasional spot check by observation of the dredging operation and review of the production records. Regulatory controls consist of U.S. Coast Guard rules and regulations, and District policies and operating procedures.

PHYSICAL EFFORT

Light effort is required when performing inspections of dredging equipment. Work at the dredging control station is sedentary in nature.

WORKING CONDITIONS

Work is performed on the bridge and during inspections, on deck and in other locations of the vessel. Subject to extreme heat, cold and inclement weather while on the deck. There is danger of slipping on wet deck and from drowning.

Bmk. No. A-23

Assistant Boatswain, WJ-5788-03

MAJOR DUTIES

As Assistant Boatswain, serves as the direct supervisor of the deck crew during the absence of the Boatswain. Normally he works in this capacity 75 percent of the time. As the supervisor of the deck crew, incumbent is responsible for the planning, assigning to jobs, directing the maintenance, upkeep and repair of deck machinery, dredging equipment and related systems, rigging, steel work, ship's gear, etc. Also, during the Boatswain's absence, immediately oversees mooring, anchoring, boat launching and retrieving, dredging markings and lightings, locating electronic transponders at selected geographical points for electronic positioning equipment, cargo loading and unloading, and other similar shipboard operations.

1. As "Assistant Boatswain", incumbent is responsible for the administrative supervision of 6-7 Marine Machinery Mechanics who have individual work assignments scattered throughout the vessel at any given time. Makes cursory review of the work in progress of his deck crew engaged in the installation, repair, modification, adjustment and service of anchor windlass, capstans, 30" diameter pump ashore pipe line connections, numerous hydraulic actuators, pumps, and connecting lines, tanks, boat winches, dragheads, equipment related to dredging systems, swell compensators, sluice valves, jetting and washdown systems, fire and safety equipment for helicopter operations. Advises, assists, and directly supervises the more complicated/complex jobs and large scale emergency repair operations that are to be accomplished in the field by the vessel's crew, instead of in shipyards. Incumbent is also responsible for the direction of subordinates engaged in various deck operations, such as mooring, anchoring, boat launching and retrieval, setting out dredging range lights, cargo handling, etc. Operates or directs the operations of the 20 ton and auxiliary cargo booms. Performs periodic inventory of supplies on hand (i.e., paint, lubricants, rope, tools, etc.) to insure that quantities are sufficient for current and anticipated needs, prepares lists of items for requisitions, and directs stowage of items received. Incumbent is responsible for issuing and overseeing the use of supplies, tools, and equipment for the deck crew. Accompanies Chief Mate or other designated officer in the periodic inspection of quarters, storage and work areas to insure they are maintained in a clean, orderly and safe condition. When required, provides technical guidance in instructions to subordinates on work methods and procedures to be employed.
2. Within the framework of general assignments from the Chief Mate, establishes priorities and prepares day-to-day work schedules. As a supervisor, performs a variety of personnel management functions, such as providing informal recommendations on promotions, reassignments, step increases, performance awards, disciplinary actions, etc.; resolves informal complaints, explains work and performance standards, provides on-the-job training, etc. Provides equal opportunity for all employees supervised, regardless of race, color, religion, sex, handicap, age or national origin; and affords minorities and women full consideration in employment and personnel policies and practices.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must be able to lead and direct workers. Must be able to lay out and check completed work. Must have a knowledge of deck operations, machinery and equipment on hopper dredges. In addition to the knowledge to oversee the work of deckhands, must also be able to effectively technically supervise marine machinery mechanics. Must have a knowledge of welding techniques, equipment and materials. The incumbent is required to possess U.S. Coast Guard Motor Boat Operator and Able Bodied Seaman certificates. Must have the ability to use and lead in the procedures associated with living on a vessel, such as firefighting, first aid and use of life saving equipment.

RESPONSIBILITY

Works under the general supervision of the Assistant Master or Mate who makes work assignments and outlines overall work requirements. Incumbent is relied upon to control work operations and to assure that high quality work is accomplished safely and in a timely manner. Work is reviewed for efficient and economical accomplishment within priorities and controls received. Work is subject to spot check review to insure compliance with marine standards and instructions.

WORKING CONDITIONS

Works mostly outside exposed to various weather conditions. Possibility of falling or slipping on wet decks, ladders, etc. Possibility of drowning exists in the case of collision or more especially, when working over the side. Subject to dust, grease and soiling of clothing and skin surface.

PHYSICAL EFFORT

Moderate to heavy lifting is typically required. Must possess sufficient agility to climb ladders in all sea conditions and to work in close quarters.

Bmk. No. A-25

Boatswain, WJ-5788-02

MAJOR DUTIES

Serves as Boatswain aboard an automated, seagoing hopper dredge. The main function of this dredge is to maintain entrances, estuaries, harbors and channels. The dredge is highly automated and equipped with sophisticated electro-hydraulic and electronic equipment to perform the dredging function. Operates ship's launch and vehicle as required.

1. Assigns, directs, provides guidance for and inspects the work of a small crew of deckhands engaged in routine deckhand work. Gives training to new deckhands in new work. The deckhands are engaged in handling, fastening, and casting off mooring lines when docking and undocking the vessel; caring for, renewing, and assisting in splicing; performing light rigging; chipping, scraping; and painting hull elements and various parts of the dredge; cleaning, greasing, and repairing deck machinery and equipment; loading, unloading and storing supplies, and general upkeep of the vessel.
2. Performs the more difficult ship rigging, including installation and repair. Rigs, equips, and stows lifeboats and rafts. Makes rope and cable slings and rigs heavy articles for lifting. Ties a variety of bends and hitches; splices and lashes ropes and steel cables. Cuts, sews, installs and repairs canvas equipment covers and tarpaulin. Installs grommets. Uses acetylene and electric welding equipment to perform simplified types of structural welding throughout the vessel. Uses cutting torches in removing metal materials, and in cutting parts to size and shape.
3. Determines supplies and tools needed and notifies Master or Mate of needs. Is in charge of storeroom for deck equipment and operating supplies. Maintains lifesaving and firefighting equipment, shop's gear, and rigging in good working order.
4. Instructs personnel in safe work methods and in proper utilization of safety and emergency equipment. Insures that subordinate personnel comply with all pertinent safety regulations. Trains subordinates in safe work methods and utilization of all prescribed safety equipment. Inspects, checks and maintains lifesaving and firefighting equipment, ships gear and rigging to ensure that they are properly installed and in good working order. Serves as crew leader during fire and lifeboat drills. Inspects crews quarters for cleanliness and orderliness and ensures that corridors, companionways, exits and ladders are kept clear of obstructions
5. Conducts personnel administration by assigning work to subordinates. Plans regular and emergency work requirements. Initiates or participates in review and improvement of work methods and structuring positions. Evaluates results of work in terms of economy, simplicity, and accuracy. Establishes performance requirements and prepares regular performance appraisals. Periodically reviews job descriptions of subordinates for currency and accuracy.

Counsels employees regarding conduct, leave, benefits, and non-performance and initiates necessary disciplinary action. Promotes participation of subordinates in programs such as safety, cost reduction, incentive awards, suggestions, and EEO. Approves leave of subordinates.

Perform other duties as assigned.

SKILLS AND KNOWLEDGES

Must be able to lead and direct workers. Must be able to lay out and check completed work. Must have knowledge of deck operations and equipment on hopper dredges. Must have knowledge of welding techniques, equipment and materials. The incumbent is required to possess U. S. Coast Guard Motorboat Operator and AB certificates. Must have the ability to use and lead in the procedures associated with living on a vessel, such as firefighting, first aid and use of life saving equipment.

RESPONSIBILITY

Works under supervision of the Assistant Master or Mate who makes work assignments and outlines overall work requirements. Receives guidance on new or unusual tasks, but generally is expected to carry out assignments on own initiative in accordance with established methods and procedures. Work is spot-checked.

WORKING CONDITIONS

Works mostly outside exposed to various weather conditions. Possibility of falling or slipping on wet decks, ladders, etc. Possibility of drowning exists in the case of collision or more especially, when working over the side. Subject to dust, grease and soiling of clothing and skin surfaces.

PHYSICAL EFFORT

Moderate to heavy lifting is typically required. Must possess sufficient agility to climb ladders in all sea conditions and to work in close quarters.

Bmk. No. A-30

Chief Engineer, WJ-4742-15

MAJOR DUTIES

Serves as Chief Engineer of a self-propelled, automated, seagoing, diesel powered hopper dredge engaged in the maintenance and improvement of harbors and channels leading from these harbors.

Incumbent is responsible for the 24 hour operation of the automated engine room department, supervising and directing the work of those subordinates engaged in the operation, maintenance and repair of all engine room machinery, electrical systems, and auxiliary mechanized equipment of the dredge. Plans, lays out, and directs daily operations. Issues verbal written orders and instructions to key subordinates as to the special and unusual work to be performed, in addition to routine work involved. Posts watch schedules in advance and keeps accurate records of hours and shifts worked for submission to timekeeper. Certifies correctness of Time and Attendance cards for engine room department and submits requests for necessary overtime on a timely basis. Trains or directs the training of subordinates. Insures that subordinate personnel comply with all pertinent safety regulations. Trains subordinates in safe work methods and utilization of all prescribed safety equipment.

Responsible for the continued operation and maintenance of the engine room. Makes periodic checks of engine room machinery, auxiliary plants, electrical systems, refrigerating, plumbing and heating systems, dredging pumps and machinery, propelling equipment, etc., for the purpose of maintaining all in good working order and directing necessary repairs as required.

Supervises the making of repairs, and performs the most difficult repair work personally. Requisitions parts, supplies and replacements as needed. Manages the shipboard spare parts inventory and coordinates the shore-based activity.

Makes estimates and submits recommendations for annual repairs for the engine room department to keep the dredge in first class operating condition for the following year. Periodically inspects watertight bulkhead doors to insure efficient operation. Inspects repairs accomplished to ascertain that work is satisfactory, and that machinery and equipment are in good operating condition.

Conducts personnel administration by assigning work to subordinates. Plans regular and emergency work requirements. Initiates or participates in review and improvement of work methods and structuring of positions. Evaluates results of work in terms of economy, simplicity and accuracy. Establishes performance requirements and prepares regular performance appraisals. Periodically reviews job descriptions of subordinates for currency and accuracy.

Counsels employees regarding conduct, leave, benefits, and non-performance and initiates necessary disciplinary action. Promotes participation of subordinates in programs such as safety, cost reduction, incentive awards, suggestions, and EEO. Approves leave of subordinates.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Required to possess a Chief Engineer license for vessels of sufficient rating issued by the U. S. Coast Guard. Must understand the principles of operation of an automated engine room monitoring system, the care and maintenance of that system, and operation of maintenance management system. Must be able to operate and maintain marine machinery and tools. Has a basic working skill of welding.

RESPONSIBILITY

Works under the general administrative supervision of the Master of the vessel but with complete technical responsibility for the proper functioning, maintenance and repair of all dredging, mechanical, and deck machinery and electrical equipment aboard the vessel. Work is reviewed by actual observation or through the medium of reports. Overall performance is evaluated in terms of performance standards established by the supervisor.

WORKING CONDITIONS

Subject to dangers caused by extreme heat, moving machinery, hot pipes, escaping steam, slippery decks, etc., although not to the same degree as subordinate workers, who are continuously exposed to such hazards, since incumbent moves from one location to another. There may be danger in event of a collision. Incumbent works regularly in areas where noise exceeds 80 decibels. Incumbent is exposed to the effects of paints, acids, and solvents.

PHYSICAL EFFORT

Incumbent is required to exert moderate to heavy physical effort in handling engine room equipment. Incumbent must possess color perception in order to perform troubleshooting and repair work on the full range of equipment.

Bmk. No. A-31

Assistant Chief Engineer, Diesel, WJ-4742-14

MAJOR DUTIES

Serves as Assistant Chief Engineer on a self-propelled, sea-going diesel powered, hopper dredge engaged in continuous 24 hours per day/7 days per week dredging activities. As the Assistant Chief Engineer, serves as senior watchstander and relieves superior of the necessity of immediately directing engine room activities during days when tours overlap. In absence of Chief Engineer, is fully responsible for the management of the Engine Department. (80%)

Supervises and directs the activities of 18-20 subordinate licensed and unlicensed employees engaged in the servicing, operation, maintenance, and repair of all engines, machinery, systems, and auxiliary equipment assigned to the Engine Department. Incumbent plans, schedules, lays-out, and directs both the long-term and day-to-day activities of subordinates; establishes and posts watch schedules, keeps records of employees' work hours, requests any necessary overtime, and certifies work hours for payroll. Issues oral and/or written orders and instructions to key subordinate supervisors outlining work to be performed; may provide supplemental guidance or personal attention on projects of an unusual or especially difficult nature. Provides and/or obtains training for subordinates as needed. Is responsible for the maintenance of employee morale and discipline; rates and/or participates in the rating of employee performance; initiates disciplinary action and award recommendations as appropriate. Is required to be knowledgeable and aware of all applicable safety regulations and requirements; provides safety training and encourages safe working practices; remains observant for potential safety hazards and promotes accident prevention activities. Participates, as required, in employee selection and promotion programs; provides equal opportunity for all employees supervised, regardless of race, color, religion, sex, handicap, age, or national origin; affords minorities and women full consideration in employment and in personnel policies and practices.

In the absence of the Chief Engineer, assumes responsibility for the continued management and direction of the Engine Department. Serves as the technical expert and advisor to the Master and the district staff on matters pertaining to the on-site operation, maintenance, and repair of engine room machinery and related equipment on the dredge. If necessary, plans and directs the accomplishment of major and/or emergency repairs; provides input in the development of plans for shipyard repairs and refit of equipment, machinery, and items assigned to the Engine Department. Inspects repair work of subordinates, contractors, shipyard workers, etc., to assure that it has been satisfactorily accomplished and that machinery and equipment has been satisfactorily accomplished and that machinery and equipment are in good and safe operating condition. Periodically inspects watertight doors and other safety systems and equipment to assure efficient operation. Requisitions major items of plant, parts, equipment, etc., required for stock or emergency repair use.

When Chief Engineer is aboard, serves as senior watchstander and "second in command" of the Engine Department. Incumbent is in immediate charge of the routine direction of the day-to-day operations of the engine room and its personnel. Stands a regular watch during which he oversees the activities of other watchstanders engaged in the surveillance, operation,

maintenance and repair of engine room equipment and machinery such as engines, generators, pumps, motors, and auxiliary machinery (i.e., air conditioning, waste disposal, heating, etc.). Is the primary point of contact for subordinate watchstanders to report problems or request technical guidance or decision; supervises and/or personally performs the more difficult repair work not requiring the attention of the Chief Engineer. Assures that subordinates on all watches effectively accomplish assigned responsibilities; monitors work of watchstanders and conducts regular and/or special inspections of engine room and other workspaces to assure that proper servicing of equipment is performed. Oversees the requisition, issue, and use of tools, parts, operating supplies, etc., required by the Engine Department for day-to-day operations. Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must possess license as Chief Engineer, Diesel, any horsepower. In addition to the skills and knowledge implicit in the attainment of a Coast Guard License, must possess the ability to understand the principles of operation of an automated engine room monitoring system. Must understand the marine machinery and the basic welding skills. Must be able to develop a knowledge of regulations for personnel administration and procurement of supplies.

RESPONSIBILITIES

Works under the general supervision of the Chief Engineer and under the administrative direction of the Master or Assistant Master. Incumbent follows general policies, plans, and practices developed in consultation with the Chief Engineer; however, has wide latitude exercising independent technical judgment and supervisory initiative in overseeing Engine Department operations. Normal maintenance and routine repairs are generally directed independently; however, incumbent may consult with the Chief Engineer and/or District technical staff when non-standard repair situations occur which could require special authorization or supplemental instruction. Technical guidance and assistance is not normally required, but is available if needed. Work is reviewed and appraised in terms of incumbent's technical skills and ability to effectively provide continuity of management and leadership over the Engine Department during the absence of the Chief Engineer.

WORKING CONDITIONS

Incumbent is exposed to abnormal heat, dirty and greasy equipment, and moving machinery. Is subject to burn by hot pipes or escaping steam. There is the constant hazard of boat traffic and, in the event of a collision, there is the danger of being thrown against moving equipment, and the danger of drowning if the vessel takes in water. Incumbent works regularly in areas where noise exceeds 80 decibels. Incumbent is exposed to the effects of paints, acids and solvents.

PHYSICAL DEMANDS

Incumbent is required to exert moderate to heavy physical effort in handling engine room equipment. Incumbent must possess color perception in order to perform troubleshooting and repair work on the full range of equipment.

Bmk. No. A-33

Assistant Chief Engineer, Hopper Dredge, WJ-4742-13

MAJOR DUTIES

Serves as Assistant Chief Engineer on a self-propelled, sea-going diesel powered hopper dredge, engaged in the maintenance and improvement of harbors and channels leading from these harbors. Acts for the Chief Engineer during that individual's regularly scheduled days off, as well as periods of annual and sick leave, and is on call 24 hours a day at such times. Incumbent is expected to perform all duties pertinent to that license when serving in that capacity, and in addition performs the duties listed below:

Stands a regular watch and is in charge of engine-room activities, checking operation, maintenance and repair of all equipment and machinery such as engines, generators, pumps, motors, and auxiliary machinery (e.g., refrigerating, plumbing and heating systems) for efficient and continuous operation of all such equipment and the production of power during assigned shift. Makes regular inspection of such plant, and directs repairs, personally performing the most difficult jobs.

Plans, supervises and directs the engine-room crew in the performance of their various duties, and assured compliance with instructions issued by the Chief Engineer. Plans, lays out and directs daily operations, issuing verbal or written orders to subordinates as appropriate. Assists in scheduling individual shifts. Trains or directs the training of subordinates. Maintains discipline of crew. Is responsible for becoming completely familiar with all safety requirements and procedures, and assures the safe performance of subordinates' duties and responsibilities. Provides equal opportunity for all employees supervised, regardless of race, color, religion, sex, handicap, age or national origin; and affords minorities and women full consideration in employment, and personnel policies and practices.

Is accountable for assigned tools and machinery. Assists in recommending repairs and replacements required to maintain and service the dredge in first class condition for the ensuing year. Inspects completed repairs to ascertain that work is accomplished in a satisfactory manner, and that machinery and equipment are in good operating condition.

Responsible for the overall charge of all engine department operations in the absence of the Chief of Engineer. When bridge controls are not functioning, directs manipulation of manual controls by subordinates according to signals from bridge.

Performs other duties as assigned

SKILLS AND KNOWLEDGES

Must possess license as Chief Engineer, Diesel, any horsepower. In addition to the skills and knowledges implicit in the attainment of a Coast Guard License, must possess the ability to

understand the principles of operation of an automated engine room monitoring system. Must understand the marine machinery and the basic welding skills. Is required to be able to develop knowledge of regulations for personnel administration and procurement of supplies.

RESPONSIBILITIES

Works under the general supervision of the Chief Engineer, who makes work assignments on a functional basis in addition to specific job assignments. Repairs are subject only to general supervision from the Chief Engineer.

Completed work is spot checked by the Chief Engineer who makes periodic inspections to observe the operation, condition, cleanliness and orderliness of equipment. Overall performance is evaluated in terms of performance appraisal standards established by the supervisor.

WORKING CONDITIONS

Incumbent is exposed to abnormal heat, dirty and greasy equipment, and moving machinery. Is subject to burn by hot pipes or escaping steam. There is the constant hazard of boat traffic and, in the event of a collision, there is the danger of being thrown against moving equipment, and the danger of drowning if the vessel takes in water. Incumbent works regularly in areas where noise exceeds 80 decibels. Incumbent is exposed to the effects of paints, acids and solvents.

PHYSICAL DEMANDS

Incumbent is required to exert moderate to heavy physical effort in handling engine room equipment. Incumbent must possess color perception in order to perform troubleshooting and repair work on the full range of equipment.

Bmk. No. A-36

First Assistant Engineer, WJ-4742-11

MAJOR DUTIES

Serves as First Assistant Engineer on an automated, diesel powered, seagoing hopper dredge. In the absence of the Assistant Chief Engineer, or for training purposes, assumes the duties of that position. When assigned, incumbent will be in charge of the Engine Department during tie-up periods. Performs the following duties:

As required, stands regularly scheduled watches in the central control/monitor room of the engine room. At prescribed intervals makes routine inspection of all engine spaces and equipment including dredge pumps, bow thruster, steering gear and emergency areas. Starts, stops and adjusts engine room equipment as necessary. Observes pressure and temperature gauges and alarms and listens for sounds which indicate abnormal operating conditions. Makes regular periodic inspection of all operating machinery to insure proper functioning. Maintains a log of operations on assigned watch.

Makes routine repairs to operating machinery during assigned watch. Supervises and/or performs the operation, routine repair and maintenance of all engine room equipment and assists Chief Engineer and Assistant Engineer with major repairs. Is responsible for insuring that all tests and analyses are conducted in connection with the operation of machinery.

Installs, maintains, tests and repairs AC and DC electrical systems, equipment, components, converters, safety devices, wiring and controls, switchboards and consoles. Utilizes test equipment, wiring diagrams and schematics to troubleshoot and make repairs. Inspects and services pilothouse and engine room controls, gyrocompass and steering, fire detection, ventilation refrigeration, lighting, emergency and communication systems. Is responsible for insuring that all tests and analyses are conducted in connection with the operation of the Engine Department.

Reviews the work of Second Assistant Engineers, Third Assistant Engineers and Junior Engineers by visual inspection of engine room equipment, to insure proper operation and servicing of all equipment. Instructs subordinate personnel in safe work methods and procedures in the utilization of all prescribed safety equipment. Directs the keeping of logs and charts covering the operation of equipment, progress of work, and consumption of fuel and water. Incumbent performs a variety of personnel management tasks such as approving leave for short periods, participating in performance evaluations, recommending disciplinary actions, adjusts informal complaints, etc.

Provides equal employment opportunity for all employees supervised regardless of race, color, religion, sex, handicap, age, or national origin; affords minorities and women full consideration in employment and personnel policies and practices. Is responsible for the safety of personnel and for complying with and enforcing all applicable safety regulations and prescribed maritime practices to minimize injury to personnel and damage to property. Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must possess license for 1st Assistant Engineer and Assistant Chief Engineer license when acting in that capacity, for diesel-powered, self-propelled, seagoing vessels of appropriate horsepower. Must possess the ability to understand the principles of operation of an automated engine room maintenance management system. Must be able to operate and maintain marine machinery and tools. Has a basic working skill of welding.

RESPONSIBILITY

Works under the general supervision of the Chief Engineer who makes functional and specific job assignments from time to time. Minor and routine repairs are subject to spot check upon completion, but major repairs are subject to close review while in progress and upon completion. Such repairs are spot checked during various stages of the work. Major parts of equipment found to be questionable from the standpoint of replacement because of cost, man-hours involved, etc., are referred to supervisor for decision. Overall performance is evaluated in terms of performance appraisal standards established by the supervisor.

WORKING CONDITIONS

Incumbent is exposed to abnormal heat, dirty and greasy equipment, and moving machinery. Is subject to burns by hot pipes or escaping steam. There is the constant hazard of boat traffic and, in the event of a collision, there is the danger of being thrown against moving equipment, and the danger of drowning if the vessel takes in water. Incumbent works regularly in areas where noise exceeds 80 decibels. Incumbent is exposed to the effects of paints, acids and solvents.

PHYSICAL DEMANDS

Incumbent is required to exert moderate to heavy physical effort in handling engine room equipment. Incumbent must possess color perception in order to perform troubleshooting and repair work on the full range of equipment

Bmk. No. A-39

Chief Electrician, WJ-2805-10

MAJOR DUTIES

Serves as Chief Electrician on an automated hopper dredge. Typical equipment aboard the dredge consists of approximately 250 separate units ranging from High Voltage AC to Control Voltage DC. Auxiliaries and other electrical equipment typically include switchboards, rheostats, relays, circuit breakers, voltage regulators, dredge pump speed control system, telemotor steering system, engineer order telegraph, remote controlled searchlights, deck machinery motors, battery charging equipment, storage battery banks, DC to AC converters, balance sets, ventilation systems, radio telephone, miscellaneous lighting equipment, indicating and recording instruments, and several miles of lead and armored cables and electrical wiring. Enforces all applicable safety regulations to minimize injury to personnel and damage to property.

Responsible for the maintenance, adjustment, and minor and major repair of electrical machinery and equipment enumerated above, including inspection, testing, cleaning, overhauling, and replacement of defective parts. Personally performs the most difficult, complex, and important work. Uses all general electrician's hand tools and testing equipment, operates power machines, and performs electrical machinist work. Works from shop drawings, electrical diagrams, and specifications. Rewinds the smaller armatures. Replaces bearings, bushings, and parts of motors, generators, and sub-assemblies.

Prepares itemized schedules of electrical repairs to be performed during the annual overhaul, showing work to be done, materials, and parts required and man hour and cost estimates. Personally supervises completion of this work or inspects the work of contractor forces for conformance with plans and specifications. Keeps the Chief Engineer informed on status of electrical equipment and repairs, and advises the Chief Engineer on electrical matters. Furnishes lists with technical descriptions for requisitioning of electrical parts, supplies, and equipment; and maintains stock of repair parts and electrical supplies.

Plans and lays out work for 2 to 5 subordinate electricians, issuing specific or general instructions as required. Personally performs and/or directs the more responsible tasks involved in emergencies and major repairs.

Is responsible for the maintenance of electronic dredging equipment up to the level prescribed in the appropriate shipboard maintenance manuals. Coordinates higher echelon repair with appropriate shore-based activities. Assists shore-based personnel in performing higher echelon repairs as required. Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Knowledge and application of electrical principles, materials, and safety standards. Knowledge of the make up, operation, and installation of a variety of electrical systems, circuits, equipment,

and controls aboard the vessel and the ability to install them in ways that insure proper and safe operation. Must understand the principles of operation of an automated engine room monitoring system, the care and maintenance of the system. Skill in planning and laying out work, tracing hard-to-locate defects or problems, and completing repairs and installations is required. The ability to interpret and apply plans, blueprints, wiring diagrams and engineering drawings, and use of mathematical formulas basic to the trade is required. Incumbent also needs to possess skill in the use of handtools and a wide variety of test equipment.

RESPONSIBILITY

Works under general supervision of the Chief Engineer. Responsible for the maintenance, proper operating conditions, installation and repair of all electrical machinery and equipment of the dredge. Receives instructions in terms of overall job requirements, objectives to be attained, procedures to be followed, and schedules to be maintained. Work receives spot check inspection or review to determine adequacy of production and end results obtained, proper upkeep of electrical equipment, and adherence to established practices and procedures. Technically responsible for appropriate application of electrical principles, trade techniques, and procedures. Overall performance is evaluated in terms of performance appraisal standards established by supervisor.

WORKING CONDITIONS

Work is performed primarily in closed areas with some work outside. Much time is spent in or adjacent to the engine room area with its attendant noise, heat, fumes, etc. Works in very close places and in awkward positions. Employee is subject to the usual hazards, involving shock, strain, burns, cuts, falling from ladders, fumes and heat while working in confined quarters. Incumbent is exposed to the effects of paints, acids, and solvents.

PHYSICAL EFFORT

Makes repairs and installations from ladders, scaffolding, and platforms, and where the parts of the system worked on are in hard-to-reach places. Duties require long periods of standing, stooping, bending, kneeling, climbing, and working in tiring and uncomfortable positions. Incumbent is required to exert moderate to heavy physical effort in handling equipment. Frequently lifts, carries, and sets up tools and equipment. Incumbent must possess color perception in order to perform troubleshooting and repair work on the full range of equipment.

Bmk. No. A-42

Second Assistant Engineer, WJ-4742-08

MAJOR DUTIES

Serves as 2nd Assistant Engineer on an automated, diesel-powered, seagoing hopper dredge and is responsible for the proper and continuous operation of all engine room machinery during assigned watch. Incumbent is expected to perform all duties pertinent to the 2nd Assistant Engineer, Diesel license together with or in addition to those listed below:

As required, stands regularly scheduled watches in the central control monitor room of the engine room. At prescribed intervals, makes routine inspection of all engine spaces and equipment including dredge pumps, bow thruster, steering gear, and areas. Starts, stops and adjust engine room equipment as necessary. Observes pressure and temperature gauges, and alarms, and listens for sounds which indicate abnormal operating conditions. Makes regular, periodic inspection of all operating machinery to insure proper functioning. Maintains a log of operations on assigned watch. Installs, maintains, tests and repairs AC and DC electrical systems, equipment, components, converters, safety devices, wiring, controls switchboards and consoles. Utilizes test equipment, wiring diagrams and schematics to troubleshoot and make repairs. Inspects and services pilot house and engine room controls, gyrocompass, and steering, fire detection, ventilation, refrigeration, lighting, air-conditioning, emergency and communication systems.

Makes routine repairs to operating machinery during assigned watch. Supervises and/or performs the operation, routine repair and maintenance of all engine room equipment and assists Chief Engineer and Assistant Chief Engineer with major repairs.

Supervises and reviews work of 3rd Assistant and Junior Engineers by visual inspection of main engines, auxiliary engines and appurtenant equipment, to insure proper maintenance and functioning of all equipment. Instructs supervised personnel in safe work methods and in proper utilization of all safety equipment. Incumbent performs a variety of personnel management tasks such as approving leave for short periods, participating in performance evaluations, recommending disciplinary actions, adjusts informal complaints, etc. Provides equal employment opportunity for all employees supervised regardless of race, color, religion, sex, handicap, age or national origin; affords minorities and women full consideration in employment and personnel policies and practices. Performs other duties as assigned

SKILLS AND KNOWLEDGES

Must be licensed by U. S. Coast Guard for at least Second Assistant Engineer, Diesel, or motor vessels of appropriate horsepower. Must possess the ability to understand the principles of operation of an automated engine room monitoring system, the care and maintenance of that system, and operation of maintenance management system. Must be able to operate and maintain marine machinery and tools. Has a basic working skill of welding.

RESPONSIBILITY

Works under general supervision from oral and written instructions. Performs duties in accordance with established practices and pertinent regulations. Written instructions may be posted as to the nature and extent of repairs to be made, or concerning special precautionary measures to be taken while operating machinery. Responsible for proper and continuous operation of all engine room equipment while on watch. Work is subject to spot check. Overall performance is evaluated in terms of performance appraisal standards established by the supervisor.

WORKING CONDITIONS

Is exposed to abnormal heat, dirty and greasy equipment, and moving machinery. Is subject to burns by hot pipes or escaping steam. There is the constant hazard of boat traffic and in the event of collision, there is the danger of being thrown against or into moving equipment and danger of drowning if vessel takes water. Incumbent works regularly in areas where noise exceeds 80 decibels. Incumbent is exposed to the effects of paints, acids, and solvents.

PHYSICAL EFFORT

Incumbent is required to exert moderate to heavy physical effort in handling engine room equipment. Incumbent must possess color perception in order to perform troubleshooting and repair work on the full range of equipment.

Bmk. No. A-45

Third Assistant Engineer, WJ-4742-07

MAJOR DUTIES

Serves as 3rd Assistant Engineer on an automated, diesel-powered, seagoing hopper dredge, and is responsible for the proper and continuous operation of all engine room machinery during assigned watch. Incumbent is expected to perform all the following duties:

As required, stands regularly scheduled watches which includes leaving the engine room at prescribed intervals during the watch to conduct routine inspection of all engine spaces and equipment including dredge pumps, bow thruster, steering gear, and emergency generator area. Starts, stops and adjusts engine room equipment as necessary. Observes pressure and temperature gauges, and alarms, and listens for sounds which indicate abnormal operating conditions. Makes regular periodic inspections of all operating machinery to insure proper functioning. Maintains a log of operations on assigned watch.

Makes minor and routine repairs to operating machinery during assigned watch. Assists Chief Engineer and other senior engineers with major repairs to any equipment or machinery throughout the dredge.

Supervises and reviews work of Junior Engineers. Instructs personnel under supervision in safe work methods and proper utilization of all equipment, including safety devices.

When assigned, incumbent will be in charge of the Engine Department during tie-up periods. Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Incumbent must possess a U. S. Coast Guard license as 3rd Assistant Engineer, Diesel, for the appropriate horsepower. Must have the ability to understand the principles of operation of an automated engine room monitoring system, the care and maintenance of that system, and operation of the maintenance management system. Must be able to operate and maintain marine machinery and tools. Has a basic working skill of welding.

RESPONSIBILITY

Works under general supervision from oral and written instructions. Performs duties in accordance with established practices and pertinent regulations. Written instructions may be posted as to the nature and extent of repairs to be made or concerning special precautionary measures to be taken while operating machinery. Responsible for proper and continuous operation of all engine room equipment while on watch. Work is subject to spot check. Overall performance is evaluated in terms of performance appraisal standards established by supervisor.

WORKING CONDITIONS

Is exposed to abnormal heat, dirty and greasy equipment, and moving machinery. Is subject to burns by hot pipes or escaping steam. There is the constant hazard of boat traffic, and, in the event of collision, there is danger of being thrown against or into moving equipment; and danger of drowning if the vessel takes water. Incumbent works regularly in areas where noise exceeds 80 decibels. Incumbent is exposed to the effects of acids, solvents and paints.

PHYSICAL EFFORT

Incumbent is required to exert moderate to heavy physical effort in handling engine room equipment. Incumbent must possess color perception in order to perform troubleshooting and repair work on full range of equipment.

Bmk. No. A-50

Cook Steward, WJ-7404-04

MAJOR DUTIES

Serves as Cook-Steward in charge of the Galley Department operations on board a seagoing, automated hopper dredge. As such, is responsible for the overall planning and supervision of galley crew; and is responsible for the preparation and serving of appetizing and nourishing meals to the vessel's crew.

1. Plans, coordinates, and directs the activities of a small staff engaged in the preparation and serving of meals for the ship's crew. Subordinates work with a wide variety of foods, such as meats, poultry, seafood, vegetables, grains, fruit, etc., and follows menus and recipes in order to prepare bulk quantity meals for breakfast, lunch, supper, and special feedings. Cooks are also responsible for serving meals and maintaining galley, food storage, and messing areas in a clean and sanitary condition. Estimates the quantity of food required for each meal and plans for the utilization of leftovers to eliminate waste. Makes work schedules; prepares the menus; instructs and trains subordinates in the preparation of food items; and ensures the application of good cooking techniques. Provides technical advice or instruction to subordinates in accomplishing unusual cooking assignments or in resolving problems not covered by established practices.

2. Takes periodic inventory of subsistence supplies on hand, estimates requirements for future needs, and reports on stores needing replenishment, or prepares necessary requisitions and purchase orders. Keeps records of Galley Department operations, and compiles and prepares regular periodic reports. Makes cash collections for extra meals and lodgings furnished official visitors and guests, and prepares report for forwarding to District headquarters, together with money collected. Checks linens in and out for all members of the crew and prevents unauthorized removal of linens from the vessel. Assures that all crew members are properly supplied with linens.

Conducts personnel administration by assigning work to subordinates. Plans regular and emergency work requirements. Initiates or participates in review and improvement of work methods and structuring of positions. Evaluates results of work in terms of economy, simplicity, and accuracy. Establishes performance requirements and prepares regular performance appraisals. Periodically reviews job descriptions of subordinates for currency and accuracy. Counsels employees regarding conduct, leave, benefits, non-performance and initiates necessary disciplinary action. Performs a variety of personnel management tasks such as approving leave, rating performance, initiating personnel actions, and interviewing and selecting new employees; provides or makes provisions for training, settles employee grievances, recommends disciplinary actions, etc. Provides equal employment opportunity for all employees supervised regardless of race, color, religion, sex, handicap, age, or national origin; affords minorities and women full consideration in employment and personnel policies and practices.

Assures the galley and dining rooms are maintained in sanitary condition. Keeps employees abreast of and in compliance with pertinent safety regulations.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Incumbent is required to possess a U. S. Coast Guard Document with endorsement for Food Handler (F.H.). Must possess the ability to manage a crew of employees within the parameters of the regulations. Must possess the ability to plan menus that are dietetically proper and select menus that encompass the special requirement of some crewmen (i.e., diabetic, low salt, etc.). Must have the skills and experience to plan for and prepare a wide variety of foods for 30 to 60 persons. Position requires the ability to operate and maintain galley equipment. Has the ability to learn and use the procedures associated with living on a vessel such as firefighting, first aid, and use of life saving equipment.

RESPONSIBILITY

Works under the general administrative supervision of the Master or, during the absence of the Master, the Assistant Master. Work assignments include verbal discussions as to the type of meals desired. Incumbent has exceptionally wide latitude for exercising independent judgment and initiative for planning, executing, and accomplishing assignments. Consults with superior on matters requiring major deviation from established policies. Work is reviewed and evaluated in terms of effectiveness in managing the Galley Department.

WORKING CONDITIONS

Work is performed primarily in the galley where there is constant exposure to above average temperatures. Subject to cuts when working with power equipment or to burns when working near the range. Subject to falls when food is spilled on deck, or when the dredge is in rough water.

PHYSICAL EFFORT

Incumbent is required to exert moderate to heavy physical effort storing and handling galley supplies and materials. Must possess sufficient agility to climb ladders in all sea conditions.

Bmk. No. A-53

Substitute Cook-Steward, WJ-7404-01

MAJOR DUTIES

Serves as Substitute Cook-Steward in charge of Galley Department operations on board a sea-going hopper dredge. As such, is responsible for planning and supervision of galley and messing operations during the absence of supervisor; providing direction to the entire galley crew; and as a working cook, preparing individual food items and meals.

During the absence of the Cook-Steward plans, coordinates, and directs the activities of 3-10 subordinate employees engaged in the preparation and serving of meals for the crew.

Subordinates work with a wide variety of foods such as meats, poultry, seafood, vegetables, grains, fruit, etc. and follows menus and recipes in order to prepare bulk quantity meals for breakfast, lunch, supper, and special feedings. Cooks are also responsible for serving meals and maintaining galley, food storage, and messing areas in a clean and sanitary condition. Incumbent is responsible for serving meals and maintaining galley, food storage, and messing areas in a clean and sanitary condition. Incumbent is responsible for estimating the quantity of food required for each meal, issuing necessary supplies, and planning for the utilization of leftover food. As required, makes periodic inventory of subsistence supplies on hand, estimates requirements for future needs, and reports on stores needing replenishment or prepares necessary requisitions and purchase orders. Utilizing previously prepared schedules, makes work assignments or effects changes in schedules to meet workload requirements or unplanned situations. Provides technical advice or instruction to subordinates in accomplishing unusual cooking assignments or in resolving problems not covered by established practices. Spot checks cooking both in process and upon completion to ensure that food is properly prepared and appetizing; inspects kitchen and messing areas to ensure that they are clean and sanitary. Incumbent performs a variety of personnel management tasks such as approving leave for short periods, participating in performance evaluations, recommending disciplinary actions, adjusts informal complaints, etc. Provides equal employment opportunity for all employees supervised regardless of race, color, religion, sex, handicap, age, or national origin; affords minorities and women full consideration in employment and personnel policies and practices.

Serves as the senior Cook in the Galley Department, and as such prepares and cooks meals utilizing the full range of cooking techniques and procedures in the preparation of a wide variety of gravies, sauces, stews, meats, vegetables, etc. Follows menus ranging from simple easily prepared foods to new and complex recipes and multi-course meals. Generally accomplishes the preparation of the more difficult items on the menu or provides instructions or assistance to other cooks as required in the preparation of such dishes.

When assigned, incumbent remains aboard during tie-up periods. Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Incumbent is required to possess a U.S. Coast Guard Document with endorsement for Food Handler. Must have the skill and experience to plan for and prepare a wide variety of food for 30-60 persons. Position requires the ability to operate and maintain galley equipment. Must possess the ability to plan menus that are dietetically proper and select menus that encompass the special requirements of crewmen (i.e. low salt, diabetic, etc). Must possess the ability to manage a crew of employees within the parameters of the regulations. Has the ability to learn and use the procedures associated with living on a vessel such as firefighting, first aid, and use of life saving equipment.

RESPONSIBILITY

Works under the general supervision of the Cook-Steward; and in the absence of immediate superior, under the administrative supervision of the Master. The Cook-Steward establishes general Galley Department policies, practices, and work procedures and plans daily menus. Incumbent has considerable latitude for exercising independent judgment and initiative within the scope of established policies and procedures. Consults with superior on matters requiring major deviation from established practices. Work is reviewed and evaluated in terms of effectiveness in managing galley operations during the absence of the Cook- Steward and in terms of the adequacy with which individual cooking assignments are performed.

WORKING CONDITIONS

Work is performed primarily in the galley where there is constant exposure to above average temperatures. Subject to cuts when working with power equipment or to burns when working near the range. Subject to falls when food is spilled on deck, or when dredge is in rough water.

PHYSICAL DEMANDS

Incumbent is required to exert moderate to heavy physical effort storing and handling galley supplies and materials. Must possess sufficient agility to climb ladders in all sea conditions.

LADDER DIAGRAM OF FLOATING PLANT JOBS

PIPELINE DREDGE - SCHEDULE B

Series - 5784

4742

7404

GRADE	BN	DECK	BN	ENGINE	BN	GALLEY
XH-17	B-1	Master				
XH-16			B-12	Chief Engr		
XH-12	B-3	1st Mate	B-14	1st Asst Engr		
XH-09	B-5	2nd Mate	B-16	2nd Asst Engr		
XH-08	B-7	3rd Mate	B-18	3rd Asst Engr		
XH-06					B-21	Cook- Steward

**PIPELINE DREDGE
GRADE DIFFERENCES**

Bmk. No.	Title, Series, & Grade	Statement of Differences Between Grades
B-1	Master, PLD Class I, XH-5784-17	Scope of responsibility is greater than any one crew or department of the dredge. Includes long-range supervisory responsibilities for planning, work direction and administration over several crews on the dredge, each staffed with a supervisory position. Has 24-hour responsibility for all aspects of the dredge operation and maintenance.
B-12	Chief Engineer, PLD Class I, XH-4742-16	Scope of responsibility includes the three-shift work program of the dredge engine room and related mechanical, electrical-electronic equipment and systems. Involves the highest-level technical supervisory requirements for any crew/department on the dredge. Has 24-hour responsibility for engine room department work requirements.
B-3	First Mate, PLD Class I, XH-5784-12	Scope of responsibility includes the three-shift work program of the dredge deck department and related operation and maintenance requirements. Has 24-hour responsibility for deck department work requirements. Includes long and short-range planning, direction, coordination and administration of the work and staff of all three dredge deck department crews.
B-14	First Asst Engineer, PLD Class I, XH-4742-12	Serves in the absence of the Chief Engineer. Assists the Chief Engineer in his supervisory work planning, direction and administration responsibilities. Otherwise, has responsibility for engine room department work requirements with one shift/watch. Technically supervises and works with the engine room crew on the assigned shift.
B-5	Second Mate, PLD Class I, XH-5784-09	Has responsibility for deck department work requirements on one shift/watch. The difference between this job and the First Mate is that the First Mate has 24-hour responsibility for all crews and work of the deck department and the supervisory responsibilities of the First Mate are greater than those of the Second Mate.

B-16	Second Assistant Engineer, PLD Class I, XH-4742-09	Has responsibility for the engine room department work requirements on one shift/watch. Technically supervises and works with the engine room crew on the assigned shift. The difference between this job and the First Assistant Engineer job is that there is no requirement in this position to assist the Chief Engineer or to serve in his absence.
B-7	Third Mate, PLD Class I, XH-5784-08	Has responsibility for the deck department work requirements on one shift/watch. The difference between this job and that of the Second Mate is that the work of the Third Mate is subject to closer supervision by the First Mate, the job requires the development of progressively greater experience, and the incumbent is in line for promotion to the position of Second Mate.
B-18	Third Assistant Engineer, PLD Class I, XH-4742-08	Has responsibility for engine room department work requirements on one shift/watch. Technically supervises and works with the engine room crew on the assigned shift. The differences between this job and that of the Second Assistant Engineer is that work is subject to closer supervision by the Chief Engineer, the job requires the development of progressively greater experience, and the incumbent is in line for promotion to the position of Second Assistant Engineer.
B-21	Cook-Steward, XH-7404-06	Has responsibility for supervision of the galley crew and work requirements. Supervisory planning and administration requirements are limited.

SCHEDULE B BENCHMARK JOB DESCRIPTIONS

Bmk. No. B-01

Master PLD Class I, XH-5784-17

MAJOR DUTIES

Serves as Master of a Class I dustpan or cutterhead pipeline dredge (18" discharge and over) engaged in river channel maintenance and/or construction dredging. Is responsible for the vessel, machinery, tools, equipment and supplies, and attendant plant and vessels during the dredging and nondredging periods. Is on call 24 hours per day during the dredging season

1. Through subordinate supervisors or crew chief, directs the activities of a large crew of employees composed of engineers, electricians, machinists, pilots, mates, tender operators, levermen/deck equipment operators, pipelinemen, strikers, marine oilers, deckhands, cooks, food service workers, motor vehicle operators, other supporting trades and crafts positions, and clerical positions. Accomplishes supervision over assigned staff during dredging operations, during nondredging activities, and during layup.

a. Planning. Plans for vessel staffing, operating and subsistence supplies and materials, fuel requirements, and other comparable support requirements prior to the beginning of the dredging season. Participates with supervisor and his staff in planning for annual repair, maintenance, and modification requirements. Plans for the accomplishment of individual dredging operations at pre-determined sites by determining such matters as placement of anchors, disposal locations, angle of the pipeline, amount of pipeline, estimated time to complete the project, layout of shore connection, placement of shore pipelines, and monitoring of dredge material disposal areas. Plans weekly or monthly work schedules and sequence of operations for subordinates. Establishes deadlines and priorities on the basis of general work schedules and methods and policies established by higher levels of supervision. Determines the number of shifts to be worked, how they are to be set up and the assignment of subordinates to shifts. Determines how many assignments can be done concurrently, how many must be delayed, and the number and types of employees needed, considering skills, personnel, materials, and equipment available and required.

b. Work Direction. Selects workers and assigns tasks to be performed. Explains work requirements, methods, and procedures, instructs subordinates in new procedures and provides advice when problems arise. Reviews work in progress or on completion. Adjusts plans, assignments, and methods as necessary to accomplish the work as effectively and economically as feasible. Determines equipment, supplies, and maintenance required. Assures arrival of supplies and equipment at work site as needed. Coordinates work of unit with other units that may be involved including operation of survey vessels, dredge tenders, and other attendant plant.

c. Administration. Schedules and approves leave of subordinates. Recommends promotions or reassignments of subordinates, sets performance requirements, and makes formal and informal performance appraisals. Counsels employees on problems; adjusts informal complaints through discussion with employees and union representatives. Takes informal corrective action on conduct or performance problems. Identifies the need for and plans

necessary on-the-job training for subordinates. Initiates proposals for disciplinary action where needed. Promotes the participation of subordinates in programs such as the suggestion program, cost reduction program, etc. Maintains production reports and records and furnishes work status information to higher echelons. Periodically reviews job descriptions of subordinates for currency and accuracy; reports detailing of employees to jobs other than their own; initiates or participates in review and improvement of work methods, organizational features, and the structuring of positions to eliminate unnecessary ones and achieve optimum content in those remaining. Accomplishes supervisory functions in accordance with the provisions of the local EEO and affirmative action program. Studies the operations supervised to identify, correct, or report any unsafe condition or work practice that might cause injury or property damage and strives to eliminate all working hazards. Insures the provision of first aid and medical attention to injured workers. Conducts fire, lifeboat, and man overboard drills and is responsible for the safety training and safety of the entire crew 24 hours per day.

2. Checks progress of dredging operations, giving due consideration to the type of material being dredged; causes of lost time; river stages, current; wind; compliance with local, state, and Federal water pollution laws, regulations, and standards; and to a variety of other factors. Inspects for compliance with laws pertaining to navigation including proper display of signal lights, sounding of proper signals, and other vessel navigational requirements.

3. Upon completion of dredging operations, checks the results through inspection and sounding of the dredge area and provide reports to headquarters for dissemination to navigation interests concerning any changes to steering directions resulting from channel dredging operations.

4. Incumbent is responsible for the provision of suitable mess and quarters for the crew and accomplishment of other administrative details pertaining to the operation, maintenance, and repair of the dredge and attendant plant. As necessary stands a regular watch as a pilot during long moves of the dredge

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must possess a current U.S. Coast Guard license as a Master covering the type of vessel to which assigned and the reach of the river involved. Applies skill and knowledge of a Master, Pipeline Dredge, Class I. Applies knowledge of the navigational rules and regulations involved in vessel navigation and the characteristics of reaches of the river in which the dredge is operated.

Applies knowledge to read, understand and apply the information contained in plans, drawings, specifications, maps, charts, sketches, and other documents pertaining to the dredge, its

operation and the work to be accomplished. Applies knowledge of Federal, state, and local laws and regulations pertaining to water pollution and the placement of dredged material.

Applies knowledge of the characteristics and limitations of the dredge operated and its mechanical, electrical, electronics, and hydraulics systems in order to direct safe and efficient dredging operations and to make decisions concerning necessary maintenance and repairs.

Applies knowledge of safety rules, regulations, and procedures.

Applies knowledge of material, supplies, and equipment necessary for operation of the dredge and of the procurement and supply procedures and requirements necessary to obtain such items to provide timely and effective support of dredging operations.

RESPONSIBILITY

Works under general administrative direction. Work is frequently accomplished at remote locations allowing only for radio communication with the headquarters office. Is responsible and accountable for the care, maintenance, repair, and operation of the dredge and all attendant plants and the safety and well being of the dredge crew. Applies guides including oral and written directives, district regulations and navigational regulations. Receives assignments and instructions along with specifications, charts, and blueprints prior to dredging operation.

Determines from instructions and guides the dredge settings and personally directs the arrangements of the plant, anchorage, and setting up of the pipeline from dredge to disposal site area and setting the dredge in position to begin operations. Receives intermittent written and oral instructions in carrying out work assignments. Work is occasionally spot-checked during operation for compliance with policy, regulations, and accomplishment of results in accordance with initial instructions.

Completed work is inspected by supervisor's on-site representative for compliance with directives and accomplishment of objectives. Incumbent is responsible for determining when dredging operation should be halted due to hazardous conditions and taking necessary action to protect the plant, equipment, and personnel assigned.

PHYSICAL EFFORT

Work generally involves light physical effort.

WORKING CONDITIONS

Work is performed inside and outside subjecting the employee to varying climatic conditions. Hazards encountered include falling from pipelines, falling on slippery decks or climbing steep stairways, injury from moving machinery, and the possibility of drowning in case of accident.

Bmk. No. B-05

Second Mate PLD Class I, XH-5784-09

MAJOR DUTIES

Serves as a 2nd Mate on a Class I self-propelled cutterhead or dustpan pipeline dredge engaged in channel maintenance in the inland waters of the U.S. Stands a shift watch and supervises the work of a crew of 2-12 subordinates employed in any combination of occupations including tender operator, deck equipment operator, pipelineman, deckhand, welders, leverman, carpenter, winchman, etc. Exercises responsibility for the continued operation, maintenance, and safety of the dredge and attendant plant during the shift. Work activities directed during the assigned shift watch include any of the following: making and breaking up of tows for dredging moves; placement and movement of dredging anchors; lengthening, shortening and movement of the pipeline; operation of pipeline baffle plate; operation of winch and hoisting engines; transfer of and placement of shore pipeline from barge to bank and movement of such pipeline during or upon completion of work; maintaining and repairing pipeline and deck equipment; replacing cables, lines, sheaves, dustpan, cutterhead, rubber sleeves, etc.; general maintenance including cleaning, chipping surfaces, painting, minor woodwork, and metal repairs; cleaning suction or cutterheads; placing lights on piling and targets; placing dredging targets; taking and maintaining records of soundings; servicing deck equipment; loading, unloading, and movement of materials, equipment and supplies; etc. In this capacity, accomplishes the following:

1. Exercises supervisory responsibility over the deck crew on the assigned shift:
 - a. Planning. Participates with the 1st Mate in planning and laying out the work for the shift to which assigned and in accordance with such plans determines the specific operation and maintenance requirements during the shift and the sequence of work operations for members of the shift crew. Determines the crew members to perform specific work activities and the methods, procedures, and tools to use. Insures that tools, materials, and supplies are available, notifies 1st Mate to obtain replacement of necessary items and inspects supplies, materials, and equipment received for adequacy. Inspects all deck, auxiliary machinery, equipment, and systems during the shift to identify maintenance and repair requirements. Plans deadlines and priorities to accomplish required shift work activities and notifies supervisor when circumstances require changes in plans and priorities. Assists 1st Mate in making cost estimates and estimates of material and manhours required to accomplish repairs.
 - b. Work Direction. Works with and directs assigned crew. Designates crew members for various tasks and assigns work. Explains work requirements, methods and procedures to subordinates, instructs them in new procedures to be followed and assists them with problems which they encounter. Reviews work in progress and on completion to insure that it meets quality and quantity standards. Discusses changes in standard or prescribed procedures with supervisor. Makes minor adjustments in procedure and sequence of operations as necessary to accomplish the work effectively, safely, and economically. Assures that equipment, tools, and supplies are maintained and utilized properly.

c. Administration. Assists supervisor in determining shift assignments for crew members. Tentatively schedules leave and approves short periods of leave for subordinates. Recommends to supervisor performance requirements, promotion, and appraisals. Carries out subordinates' on-the-job training and reports the need for training to supervisor. Counsels employees on problems; adjusts informal complaints and refers those unresolved to supervisor. Takes informal corrective action on conduct and performance problems and resolves minor grievances. Reports need for more serious action or recommends resolution of more complex problems to supervisor. Promotes the participation of subordinates in suggestion program, cost reduction program, etc. Maintains dredge shift reports, records and logs as required. Participates in review of job descriptions of subordinates for currency and accuracy and recommends to supervisor any suggested changes; participates with supervisor in review and recommends improvements of work methods, organizational features and the structuring of positions to eliminate unnecessary ones and achieve optimum content in those remaining. Accomplishes supervisory requirements in accordance with the District EEO and Affirmative Action Programs.

d. As the supervisor of others, incumbent is responsible for the instruction and training of subordinates in the safe and efficient performance of their duties and for studying the operations under his supervision with a view to correcting or reporting for correction, any unsafe condition or unsafe work practice that might cause injury to employees, or other persons, or property damage. Assist in conducting fire, lifeboat, and man overboard drills. Insures that subordinates possess and use all available safety equipment.

2. Remains aware of approaching vessels and moves or directs the movement of the dredge and pipeline out of the lines of traffic. On dustpan dredges, operates the controls in the pilothouse to move the dredge or to drop back to start a new dredging cut and operates the anchor barge to anchor pipeline.

3. Coordinates the suction and discharge operation and is responsible for maintaining maximum efficiency in dredging operation.

4. Incumbent may be assigned to the maintenance and repair of floating plant or other essential duties during any layup period.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Applies a knowledge of navigational rules and regulations as evidenced by possession of a U.S. Coast Guard inland mates license. Applies a knowledge of dredge steam, steam-electronic, or diesel electric operations, sequence of work activities, the deck operations and maintenance requirements imposed. Applies a knowledge of how such operational characteristics impact

deck operation and maintenance requirements. Applies a knowledge of the operational characteristics and limitations of the deck equipment and machinery winches, tender operators, pipelines, anchor barges, shore pipes, deck equipment controls, cutterhead and suction equipment, pumping equipment, etc. Applies a knowledge of the requirements involved in placing dredging targets, taking and making reports of sounding and the impact of the work of other dredge crews on deck operations. Applies knowledge to read, understand and apply information contained in plans, drawings, specifications, maps, charts and sketches and other documents pertaining to dredge operation in order to plan and coordinate the deck shift requirements of the dredge. Applies a knowledge of material, supplies and equipment necessary to support deck operation and of the procurement and supply procedures and requirements necessary to obtain such items to provide timely and effective support of dredging operations.

RESPONSIBILITY

Works under the general supervision of the 1st Mate. Receives oral and written instructions and performs work according to established policies, procedures, practices, District regulations, marine navigation requirements, and shift plans, schedules, and priorities. Exercises initiative and judgement in independently executing the work requirements on the shift. Receives guidance when difficult situations occur or when changes in established plans are involved. Work is spot checked and periodically inspected to insure compliance with instruction and plans and for proficiency as determined from continuity of operations and propriety of maintenance and repairs.

WORKING CONDITIONS

Work is performed in the pilot house, on deck and in other locations of the vessel. Spends most of the time on the deck. Occasionally goes outside in all kinds of weather to attend to duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning is present in case of accident. There is danger from traffic hazards, particularly in foggy weather and at night

PHYSICAL EFFORT

Light to moderate physical effort is required for continuous standing and operating of various controls. Incumbent must have color and depth perception and be able to see in low visibility conditions in order to navigate a dredge.

Bmk. No. B-03

First Mate PLD Class I, XH-5784-12

MAJOR DUTIES

Is assigned as a 1st Mate aboard a Class I (18" discharge and over) pipeline dustpan or cutterhead dredge engaged in channel maintenance dredging in inland waterways in the U.S. Through subordinate mates, supervises the work of approximately 9-30 subordinates employed in any of several occupations such as 2nd Mate, Deck Equipment Operator, Leverman, Tender Operator, Pipelineman, Deckhand, etc., and assigned to three different shifts. Exercises 24-hour responsibility for complete operation of all deck, pipeline, dredging equipment, and supporting an attendant plant. Is responsible for typical work activity including all dredge deck operations and maintenance requirements including efficient operation of winding and hoisting engines which keep dredge on range and control rate of advance and which raise and lower the suction/cutter head; maintaining maximum efficiency in the suction and discharge operation; lengthening and shortening of pipeline; inspecting, maintaining, and repairing the dredge (except engineer room machinery and equipment); operating and maintaining pipeline and discharge of spoil in designated areas; maintaining and repair of decks, holds, and superstructure by cleaning, chipping, scraping, and painting; operating of anchor barge for anchoring pipeline; setting of anchors; placing and/or moving shore pipe; operation of winches; coordination of use of diesel tender in assembly, disassembly and movement of pipeline, placing lights on piling, placing targets, moving anchor barge and transporting personnel and supplies; and for the making and breaking up of tows or tying up plant; etc. In this capacity accomplishes the following:

1. Exercises supervisory responsibility over deck crews on three separate shifts.

a. Planning. With the assistance of the 2nd mates, plans and lays out the work for the three shifts and the operational steps to be taken. Periodically inspects all deck and auxiliary machinery, equipment and systems, and attendant plant to determine the condition, maintenance needs, and required operating repairs. Plans weekly and monthly work schedules, shift assignments and sequences of work operations for subordinates. Plans makeup and breakup of tows. Establishes deadlines and priorities on the basis of general work schedules, methods and policies established by the Master. Determines how many assignments can be accomplished concurrently. Insures that tools, materials and supplies necessary to accomplish the work are available. Makes cost estimates and estimates materials and manhours required to accomplish such repairs. Consults with Master relative to recommendation for major changes in operations and work sequences

b. Work Direction. Selects or participates with considerable weight in the selection of workers. Assigns individuals to shifts and through the 2nd mate on the shift, directs the work efforts of subordinates; explains work requirements, methods, and procedures; instructs subordinates in new work procedures; provides technical advice and guidance when problems arise; insures that all work orders are carried out; reviews work of shift crews and

makes periodic inspections of all completed work. Makes adjustments to plans, assignments, and methods as necessary so as to accomplish the work as effectively and economically as possible. Determines the tools, equipment, supplies, and maintenance required on the three shifts and takes action to assure the arrival of supplies, parts, and equipment as needed. Through 2nd mates, evaluates work in progress and assures that quality standards and quantity requirements are met. Coordinates the work of the deck crews with related or impacted work of other dredge crews.

c. Administration. Schedules and approves the leave of subordinates. Sets performance requirements and prepares performance standards and makes formal and informal performance appraisals. Counsels employees on problems referred by and adjusts informal complaints through discussion with employees, 2nd mates, and union representatives. Takes informal corrective action on conduct or performance problems and refers serious problems along with recommendations for disciplinary action to Master for resolution. Plans necessary on-the-job training and insures that such training is effectively and adequately carried out. Promotes the participation of subordinates in programs such as the suggestion program, cost reduction programs, etc. Makes oral reports to the Master concerning work performed. Compiles annual repair and maintenance lists and estimates the time and effort required to accomplish such work during the non-dredging season. Insures requisitioning of necessary materials, tools, parts, and accuracy; reports detailing of employees to jobs other than their own; initiates or participates in review and improvement of work methods, organizational features, and the structuring of positions to eliminate unnecessary ones. Assists Master in conducting fire, abandon ship, and man overboard drills. Accomplishes supervisory functions in accordance with organizational EEO and Affirmative Action programs.

d. As a supervisory employee, incumbent is responsible for instructing and training those supervised in the safe and efficient performance of their duties and studying operations directed with a view to correcting or reporting for correction, any unsafe condition or practice that may cause injury to employees, other persons, or property damage.

2. Is responsible for the storage, issue, and accountability of all expendable and nonexpendable tools, materials, supplies, and equipment.

3. May be assigned to the maintenance and repair of floating plant or other essential duties during any layup period.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Applies a knowledge of navigational rules and regulations as evidenced by possession of a U.S. Coast Guard inland mates license. Applies a knowledge of dredge steam, steam-electric, or diesel electric operations, sequence of work activities, the deck operations and

maintenance requirements imposed. Applies a knowledge of how such operational characteristics impact deck operation and maintenance requirements. Applies a knowledge of the operational characteristics and limitations of the deck equipment and machinery winches, tender operators, pipelines, anchor barges, shore pipes, deck equipment controls, cutterhead and suction equipment, pumping equipment, etc.

Applies a knowledge of equipment lubrication and maintenance requirements. Applies a knowledge of the requirements involved in placing dredging targets, taking and making reports of sounding and the impact of the work of other dredge crews on deck operations. Applies knowledge to read, understand and apply information contained in plans, drawings, specifications, maps, charts and sketches and other documents pertaining to dredge operation in order to plan and coordinate the deck shift requirements of the dredge. Applies a knowledge of material, supplies and equipment necessary to support deck operation and of the procurement and supply procedures and requirements necessary to obtain such items to provide timely and effective support of dredging operations.

RESPONSIBILITY

Works under the general supervision of the Master who outlines plans and objectives regarding areas to be dredged, movement of dredge to new locations and maintenance requirements.

Exercises own initiative and judgement in accomplishing objectives. Work is subject to review for propriety of planning decisions and judgement and for proficiency as determined from continuity of dredging operation. Performs assignments according to verbal instructions, written directives, District regulations, and navigation requirements.

WORKING CONDITIONS

Work is performed in the pilot house, on deck and in other locations of the vessel. Spends most of the time on the deck. Occasionally goes outside in all kinds of weather to attend to duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning is present in case of accident. There is danger from traffic hazards, particularly in foggy weather and at night.

PHYSICAL EFFORT

Light to moderate physical effort is required for continuous standing and operating of various controls. Incumbent must have color and depth perception and be able to see in low visibility conditions in order to navigate a dredge.

Bmk. No. B-07

Third Mate PLD Dredge Class I, XH-5784-08

MAJOR DUTIES

Is assigned as a 3rd mate aboard a Class I (18" discharge and over) pipeline dustpan or cutterhead dredge engaged in channel maintenance dredging in inland waters of the U.S. In the absence of a 2nd mate, serves in that capacity. Stands a shift watch and supervises the work of a crew of 2-12 subordinates employed in any combination of occupations including tender operator, deck equipment operator, pipelineman, deckhand, welder, leverman, carpenter, winchman, etc.

Exercises responsibility for the continual operation, maintenance and safety of the dredge and attendant plant during the shift. Work activities directed during the assigned shift watch include any of the following: making and breaking up of tows for dredging moves; placement and movement of dredging anchors; lengthening, shortening, and movement of the pipeline; operation of pipeline baffle plate; operation of winch and hoisting engines; transfer of and placement of shore pipeline from barge to bank and movement of such pipeline during or upon completion of work; maintaining and repairing pipeline and deck equipment; replacing cables, lines, sheaves, dustpan, cutterhead, rubber sleeves, etc.; general maintenance including cleaning, chipping surfaces, painting, minor woodwork, and metal repairs; cleaning suction or cutterheads; placing lights on piling and targets; placing dredging targets; taking and maintaining records of soundings; servicing deck equipment; loading, unloading, and movement of materials, equipment and supplies; etc. In this capacity, accomplishes the following:

1. Exercises supervisory responsibility over the deck crew on the assigned shift:

a. Planning. Participates with the 1st Mate in planning and laying out the work for the shift to which assigned and in accordance with such plans determines the specific operation and maintenance requirements during the shift and the sequence of work operations for members of the shift crew. Determines the crew members to perform specific work activities and the methods, procedures, and tools to use. Insures that tools, materials, and supplies are available, notifies 1st Mate to obtain replacement of necessary items and inspects supplies, materials, and equipment for adequacy. Inspects all deck, auxiliary machinery, equipment, and systems during the shift to identify maintenance and repair requirements. Plans deadlines and priorities to accomplish required shift work activities and notifies supervisor when circumstances require changes in plans and priorities. Assists 1st Mate in making cost estimates and estimates of material and manhours required to accomplish repairs.

c. Administration. Assists supervisor in determining shift assignments for crew members. Tentatively schedules leave and approves short periods of leave for subordinates. Recommends to supervisor performance requirements, promotion, reassignments, etc., prior to initiation, and makes informal performance appraisals. Carries out subordinates' on-the-job training and reports the need for training to supervisor. Counsels employees on problems;

adjusts informal complaints and refers those unresolved to supervisor. Takes informal corrective action on conduct and performance problems and resolves minor grievances. Reports need for more serious action or recommends resolution of more complex problems to supervisor. Promotes the participation of subordinates in suggestion program, cost reduction program, etc. Maintains dredge shift reports, records and logs as required. Participates in review of job description of subordinates for currency and accuracy and recommends to supervisor any suggested changes; participates with supervisor in review and recommends improvements of work methods, organizational features and the structuring of positions to eliminate unnecessary ones and achieve optimum content in those remaining.

Accomplishes supervisory requirements in accordance with the District EEO and Affirmative Action Programs.

d. Work Direction. Works with and directs assigned crew. Designates crew members for various tasks and assigns work. Explains work requirements, methods, and procedures to subordinates, instructs them in new procedures to be followed and assists them with problems which they encounter. Reviews work in progress and on completion to ensure that it meets quality and quantity standards. Discusses changes in standards or prescribed procedure with supervisor. Makes minor adjustments in procedure and sequence of operations as necessary to accomplish the work effectively, safely, and economically. Assures that equipment, tools, and supplies are maintained and utilized properly.

d. As the supervisor of others incumbent is responsible for the instruction and training of subordinates in the safe and efficient performance of their duties and for studying the operations under his/her supervision with a view to correcting or reporting for correction, any unsafe condition or unsafe work practice that might cause injury to employee, or other persons, or property damage. Assists in conducting fire, lifeboat, and man overboard drills. Ensures that subordinates possess and use all available safety equipment.

2. Remains aware of approaching vessels and moves or directs the movement of the dredge and pipeline out of the lines of traffic. On dustpan dredges, operates the controls in the pilothouse to move the dredge or to drop back to start a new dredging cut and operates the anchor barge to anchor pipeline.

3. Coordinates the suction and discharge operation and is responsible for maintaining maximum efficiency in dredging operation.

4. Incumbent may be assigned to the maintenance and repair of floating plant or other essential duties during any layup period.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Applies a knowledge of navigational rules and regulations as evidenced by possession of a

U.S. Coast Guard inland mates license. Applies a knowledge of dredge steam, steam-electric, or diesel electric operations, sequence of work activities the deck operations and maintenance requirements impose. Applies a knowledge of how such operational characteristics impact deck operation and maintenance requirements. Applies a knowledge of the operational characteristics and limitations of the deck equipment and machinery winches, tender operators, pipelines, anchor barges, shore

pipes, deck equipment controls, cutterhead and suction equipment, pumping equipment, etc.

Applies a knowledge of equipment lubrication and maintenance requirements. Applies a knowledge of the requirements involved in placing dredging targets, taking and making reports of sounding and the impact of the work of other dredge crews on deck operations. Applies knowledge to read, understand and apply information contained in plans, drawings, specifications, maps, charts and sketches and other documents pertaining to dredge operation in order to plan and coordinate the deck shift requirements of the dredge. Applies a knowledge of material, supplies and equipment necessary to support deck operation; and of the procurement and supply procedures and requirements necessary to obtain such items to provide timely and effective support of dredging operations.

RESPONSIBILITY

Works under the general supervision of the 1st Mate. Receives oral and written instructions and performs work according to established policies, procedure, practices, District regulations, marine navigation requirements, and shift plans, schedules, and priorities. Exercises initiative and judgment in independently executing the work requirements on the shift. Receives guidance when difficult situations occur or when changes in established plans are involved. Work is spot checked and periodically inspected to insure compliance with instruction and plans and for proficiency as determined from continuity of operations and propriety of maintenance and repairs.

PHYSICAL EFFORT

Light to moderate physical effort is required for continuous standing and operation of various controls. Incumbent must have color and depth perception and be able to see in low visibility conditions in order to navigate a dredge.

WORKING CONDITIONS

Work is performed in the pilot house, on deck and in other locations of the vessel. Spends most of the time on the deck. Occasionally goes outside in all kinds of weather to attend to duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning is present in case of accident. There is danger from traffic hazards, particularly in foggy weather and at night.

PHYSICAL EFFORT

Light to moderate physical effort is required for continuous standing and operation of various controls. Incumbent must have color and depth perception and be able to see in low visibility conditions in order to navigate a dredge.

Bmk. No. B-12

Chief Engineer PLD Class I, XH-4742-16

MAJOR DUTIES

Serves as Chief Engineer on a Class I pipeline dredge (18" discharge and over). The dredge is either a diesel-electric, steam, or steam-electric powered self-propelled cutterhead or dustpan dredge operating in inland waters of the U.S. Through subordinate assistant engineers, supervises the work of approximately 10-20 subordinates assigned to three shifts employed in a variety of trades and crafts occupations. Stands a regular watch in the engine room. Exercises 24-hour responsibility for the operation, maintenance, and repair of all engine room and associated machinery, refrigeration, plumbing, heating, and electric/electronic systems and attendant plant. In this capacity, accomplishes the following:

1. Exercises supervisory responsibility over the dredge engine room crew employed in any of a variety of trades occupations including assistant engineers, strikers, marine-oilers, fireman-water tenders, welders, machinists, marine electricians, and electronics mechanics.

- a. Planning. Periodically inspects all engine room and auxiliary machinery, equipment and systems, and attendant plant to determine the condition, maintenance needs, and required operating repairs. Plans weekly and monthly work schedules, shift assignments and sequences of work operations for subordinates. Establishes deadlines and priorities on the basis of general work schedules, methods and policies established by the Master. Determines work methods and procedures to be used; number and types of employees required; and tools, equipment, and materials required to accomplish the work. Determines how many assignments can be accomplished concurrently. Insures that tools, materials, and supplies necessary to accomplish the work available. Makes cost estimates and estimates materials and manhours required to accomplish such repairs. Consults with Master relative to recommendation for major operating repairs and overhauls and obtains required authority for accomplishment of the work. Provides support to the Master in compiling annual layup repair, maintenance, and modification requirements.

- b. Work Direction. Selects or participates with considerable weight in the selection of workers. Assigns individuals to shifts and through the assistant engineers on the shift, directs the work efforts of subordinates. Explains work requirements, methods, and procedures; instructs subordinates in new work procedures; and provides technical advice and guidance when problems arise. Through the first assistant engineer, reviews the work of shift crews and makes periodic inspections of all completed repairs. Makes adjustments, plans, assignments, and methods as necessary to accomplish the work as effectively and economically as possible. Determines the tools, equipment, supplies, and maintenance required on the three shifts and takes action to assure the arrival of supplies, parts, and equipment as needed. Through subordinate assistant engineers, evaluates work in progress and assures that quality standards and quantity requirements are met. Coordinates the work of the engine room with related or impacted work of other dredge crews. Personally directs repairs involving major

breakdown of equipment.

c. Administration. Schedules and approves the leave of subordinates. Sets performance requirements and prepares performance standards and makes formal and informal performance appraisals. Counsels employees on problems referred by assistant engineers and adjusts informal complaints through discussion with employees, assistant engineers, and union representatives. Takes informal corrective action on conduct or performance problems and refers serious problems along with recommendations for disciplinary action to Master for resolution. Plans necessary on- the-job training and insures that such training is effectively and adequately carried out. Promotes the participation of subordinates in programs such as the suggestion program, cost reduction programs, etc. Prepares and maintains engine room production reports and records such as engine room logs and reports reflecting work performed, repairs made, temperature and/or gage readings, and monthly reports to Headquarters office. Compiles annual repair and overhaul lists and estimates the time and effort required to accomplish such work during the non-dredging season. Requisitions all spare and replacement parts and materials. Periodically reviews job descriptions of subordinates for currency and accuracy; reports detailing of employees to jobs other than their own; initiates or participates in review and improvement of work methods, organizational features, and the structuring of positions to eliminate unnecessary ones. Accomplishes supervisory functions in accordance with organizational EEO and Affirmative Action programs.

d. As the supervisor of others is responsible for the instruction and training of subordinates in the safe and efficient performance of their duties and for studying the operation supervised with a view to correcting or reporting for correction any unsafe conditions or unsafe work practices that might cause injury to employees or persons or property damage.

2. Supervises, directs, and/or personally performs repair work of a highly technical nature during dredge operation. Inspects and diagnoses dredge engine, attendant equipment or plant, or related systems failures and determines the repairs necessary. Visually inspects the engine room, machinery and equipment, and electric and/or electronic systems to insure that they are maintained in a clean and orderly fashion. Furnishes information as to the status of work and compiles workload data pertinent to the impact of repairs on operational plans and requirements. Is responsible to the Master for the maintenance and security of all tools, supplies, and equipment issued to the engine room department.

3. Is responsible for preparing machinery and equipment for preservation during layup. Supervises all repair made to dredge mechanical and electrical equipment during annual layup repairs. Incumbent may be assigned to the maintenance and repair of floating plant or other essential duties during annual layup periods.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must hold a U.S. Coast Guard Chief Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. A knowledge of the dredge steam, steam electric, or diesel electric mechanical, and/or electronic equipment, systems, and auxiliary plant and machinery, and the related skill requirements to diagnose problems and malfunctions and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Applies the knowledge to understand how such equipment and systems operate individually or in combination and the ability to plan and lay out repair, replacement, maintenance, and modification plans and requirements ranging from those of a minor nature to those of extreme complexity. Applies a knowledge of the fuel and water treatments associated with the various equipment and systems.

Knowledge and ability to interpret and apply working drawings, sketches, diagrams, blueprints, and various information reflected in technical manuals. Applies knowledge of advanced shop math to accomplish computations pertinent to electricity and electronics, electronic equipment, air conditioning and heating, refrigeration and mechanical dimensions, tolerances, and voltages.

Applies skill and knowledge in the use of a variety of testing instruments including refrigeration gages and temperature testers in diagnosing problems and malfunctions, and a variety of measuring devices including feeler gages, vernier calipers, inside and outside calipers and micrometers, thread gages, dial indicators, screw pitch gages, protractors, dividers, composers, steel squares, clinometers, etc. Applies skill to accomplish work to tolerances of .001 inch.

Skill and knowledge in the use of lathes, shapers, drill press, milling machines, honing equipment, grinders, jig borers, jog grinders, power hacksaws, electric and acetylene welding and flame cutting processes, and a variety of electric and hand tools common to the trades involved. Applies a knowledge of the characteristics of a variety of metals and alloys such as stainless, monel, brass, bronze, babbit, silver, aluminum, mild and hardened steels, etc.

RESPONSIBILITY

Works under the general supervision of the dredge Master. Receives oral and written assignments including blueprints, drawings, and charts; and plans and accomplishes work in accordance with standard procedures, directives, regulations, U.S. Coast Guard regulations, and overall marine requirements. Receives no technical guidance in operation of engine room facilities and exercises independent judgment and initiative in connection with the operation and maintenance of all mechanical and electrical equipment. Work is subject to spot checks for proficiency of performance as determined from continuity of operation. Engine room facilities are subject to annual inspection by U.S. Coast Guard for compliance with marine safety regulations.

WORKING CONDITIONS

Work is performed inside and outside subjecting employee to varying climatic conditions,

abnormal noises, temperature, danger of burns, irritation from grease and oils, bruises, strains, danger from attending moving machinery, falling overboard, electrical shock, falls on slippery decks or steep stairways, possible drowning, and crankcase explosion.

PHYSICAL EFFORT

Incumbent performs work from ladders, scaffolding, and platforms and where the parts, equipment, or systems are in hard-to-reach places. Work requires the incumbent to stand, stoop, bend, kneel, climb and work in a tiring and uncomfortable position. Frequently lifts, carries, and sets up parts and equipment that weigh up to 40 pounds.

Bmk. No. B-14

First Assistant Engineer PLD Class I, XH-4742-12

MAJOR DUTIES

Serves as 1st Assistant Engineer on a Class I pipeline dredge (18" discharge and over). The dredge is either a diesel-electric, steam, or steam-electric powered self-propelled cutterhead or dustpan dredge operating in inland waters of the U.S. Serves as the principal assistant to the Chief Engineer in the operation, maintenance, and repair of all engine room and associated machinery, refrigeration, plumbing, heating, and electric/electronic systems and attendant plant. Is assigned as a shift engineer and stands a regular watch and is responsible for the engine room work activities during that shift. Notifies the Chief Engineer in case of major breakdown of equipment and in the absence of the Chief Engineer serves in that capacity.

In this capacity, accomplishes the following:

1. As principal assistant to the Chief Engineer and relief engineer, participates with the chief in his supervisory planning, work direction, and administration duties and responsibilities and insures that his orders are carried out by various work crews. Discusses feasibility of repairs and methods and procedures to be followed by crews on watch. Regularly assists Chief Engineer in planning work schedules, outlining repairs, making cost estimates, and preparing performance appraisals on employees on all shifts. Acts in the absence of Chief Engineer and is responsible for the effective and continuous operation of all mechanical and electrical equipment aboard the dredge and is on

24-hour call.

2. Exercises supervisory responsibility over the dredge engine room crew on a shift, employed in any of a variety of trades occupations including assistant engineer, strikers, marine-oilers, fireman- water tenders, welders, machinists, marine electricians, and electronics mechanics.

- a. Exercises shift watch responsibility for handling controls, operation and maintenance, and participating in the repairs of all engine room machinery and equipment including the main propelling engines, pumping engines, auxiliary pumps, machinery on the vessel and attendant plant and the electric/electronic systems. Maintains continuous operating efficiency to prevent damage to machinery. Makes regular and periodic inspections by visual and auditory means of all machinery to determine the operating condition and the need for maintenance and repairs. Makes minor adjustments and emergency repairs on own initiative and reports major defects to the Chief Engineer. Accomplishes repairs such as replacing bearings, castings, etc.; repairing fuel lines; grinding valves; replacing cylinders, pistons, and shears in auxiliary pumps and machinery; and removing and replacing complete assemblies. Assists in making major repairs and overhauls during layup. Assists in painting equipment and keeping the engine room clean.

b. Operates controls to start, stop, reverse, and regulate the speed of propelling engines on signal from the pilothouse. Operates dredging pumps and machinery according to signals from the mate (on dustpan dredges) or the leverman (on cutterhead dredges). Controls the operation of heating, refrigeration, and plumbing systems by manipulating necessary winches, throttles, and switches. Checks and controls the quantity of fuel oil, water, etc., furnished for proper operation of the dredge machinery. Observes gages such as pressure gages, vacuum gages, fuel oil gages, tachometers, pyrometers, etc., to determine the proper functioning of machinery. Makes inspections to check oil levels, motor generators, gearboxes, generator temperatures, fuel levels, etc. Checks and controls the operation of heating, refrigeration, plumbing, and water supply systems for the dredge noting any unusual or abnormal conditions and determines the causes and remedial action necessary. Prepares reports of fuel oil and lubrication consumption and records readings of the gages during the watch.

c. Supervises and directs the shift crew in oiling, cleaning, painting, making adjustments and repairs, and keeping the engine room clean. Instructs and trains subordinates in procedures and methods and observes their work for accuracy and compliance with instructions. Lays out the work and instructs subordinates on unusual or difficult work and inspects operations and completed work. Trains subordinates and regularly inspects their work. Orients new employees and conducts exit interviews with employees who leave the service. Provides input to the Chief Engineer concerning subordinates' performance appraisals. Reports disciplinary problems to the Chief Engineer for resolution. Prepares shift reports reflecting the work activities during the shift and maintains an engine room log of activities. As a supervisor of others, instructs and trains subordinates in the safe and efficient performance of their duties and studies the operations directed with a view to correcting or reporting for correction any unsafe condition or practice that might cause injury to employees or persons or property damage.

3. During layup periods may be assigned to other essential work in the District depending on the needs of the organization, individual qualifications, and ability of the employees involved and effective skills utilization. Is also subject to assignment where needed during high water emergencies.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Is required to possess a U.S. Coast Guard Chief and 1st Assistant Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. A knowledge of the dredge steam, steam electric, or diesel electric mechanical, hydraulic, electrical, and/or electronic equipment systems, and auxiliary plant and machinery, and the related skill requirements to diagnose problems and malfunctions and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Applies the knowledge to understand how such equipment and systems operate individually or in combination and the ability to plan

and lay out repair, replacement, maintenance, and modification plans and requirements ranging from those of a minor nature to those of extreme complexity. Applies a knowledge of the fuel and water treatments associated with the various equipment and systems.

Knowledge and ability to interpret and apply working drawings, sketches, diagrams, blueprints, and various information reflected in technical manuals. Applies a knowledge of advanced shop math to accomplish computations pertinent to electricity and electronics, electrical equipment, air conditioning and heating, refrigeration and mechanical dimensions, tolerances, and voltages.

Applies skill and knowledge in the use of a variety of testing instruments including refrigeration gages and temperature testers in diagnosing problems and malfunctions, and a variety of measuring devices including feeler gages, vernier calipers, inside and outside calipers and micrometers, thread gages, dial indicators, screw pitch gages, protractors, dividers, composers, steel squares, clinometers, etc. Applies skill to accomplish work to tolerances of .001 inch.

Skill and knowledge in the use of lathes, shapers, drill press, milling machines, honing equipment, grinders, jig borers, jog grinders, power hacksaws, electric and acetylene welding and flame cutting processes, and a variety of electric and hand tools common to the trades involved. Applies a knowledge of the characteristics of a variety of metals and alloys such as stainless steel, monel, brass, bronze, babbit, silver, aluminum, mild and hardened steels, etc.

RESPONSIBILITY

Works under the general supervision of the Chief Engineer who outlines work schedules and plans for repair work to be accomplished. Recommends and participates changing in work plans to prevent delays, shutdowns, or damage or to increase efficiency. Accomplishes and directs minor adjustments and repairs on own initiative and reports major problems and malfunctions to the Chief Engineer and participates with him in determining the action to be taken. Supervises the crew and personally makes major repairs as specified by the Chief Engineer and accomplishes such work under his general supervision. Supervisor is on call at all times to provide guidance and assistance. Work is spot checked during operation and periodically given a more detailed inspection for operational efficiency. Is in technical charge of the engine room during his shift and when serving as Chief Engineer. Work is guided by written and oral instructions; operational and repair manuals; drawings, wiring diagrams, and sketches; and standard marine engine room practices. Is responsible for insuring that job requirements and engine room work activities comply with established safety procedures and regulations.

WORKING CONDITIONS

Work is performed inside and outside subjecting employee to varying climatic conditions, abnormal noises, temperature, danger of burns, irritation from grease and oils, bruises,

strains, danger from attending moving machinery, falling overboard, electrical shock, falls on slippery decks or steep stairways, possible drowning, and crankcase explosion.

PHYSICAL EFFORT

Incumbent performs work from ladders, scaffolding, and platforms and where the parts, equipment, or systems are in hard-to-reach places. Work requires the incumbent to stand, stoop, bend, kneel, climb and work in a tiring and uncomfortable position. Frequently lifts, carries, and sets up parts and equipment that weigh up to 40 pounds.

Bmk. No. B-16

Second Assistant Engineer PLD Class I, XH-4742-09

MAJOR DUTIES

Serves as a 2nd Assistant Engineer on a Class I pipeline dredge (18" discharge and over). The dredge is either a diesel-electric, steam, or steam-electric powered self-propelled cutterhead or dustpan dredge operating in inland waters of the U.S. Stands a shift watch and supervises the work of the crew on the shift composed of employees in any of several trade occupations including striker, marine oiler, fireman-watertender, electrician, electronics mechanic, machinist, and welder. Exercises responsibility for the operation, maintenance, and repair of all engine room and associated machinery, refrigeration, plumbing, heating, and electric/electronic systems and attendant plant. In this capacity, accomplishes the following:

1. Exercises shift watch responsibility for handling controls, operation and maintenance, and participating in the repairs of all engine room machinery and equipment including the main propelling engines, pumping engines, auxiliary pumps, machinery on the vessel and attendant plant and the electric/electronic systems. Maintains continuous operating efficiency to prevent damage to machinery. Makes regular and periodic inspections by visual and auditory means of all machinery to determine the operating condition and the need for maintenance and repairs. Makes minor adjustments and emergency repairs on own initiative and reports major defects to the Chief Engineer. Accomplishes repairs such as replacing bearings, casings, etc.; repairing fuel lines; grinding valves; replacing cylinders, pistons, and shears in auxiliary pumps and machinery; and removing and replacing complete assemblies. Assists in making major repairs and overhauls during layup. Assists in painting equipment and keeping the engine room clean.
2. Operates controls to start, stop, reverse, and regulate the speed of propelling engines on signal from the pilothouse. Operates dredging pumps and machinery according to signals from the mate (on dustpan dredges) or the leverman (on cutterhead dredges). Controls the operation of heating, refrigeration, and plumbing systems by manipulating necessary winches, throttles, and switches. Checks and controls the quantity of fuel oil, water, etc., furnished for proper operation of the dredge machinery. Observes gages such as pressure gages, vacuum gages, fuel oil gages, tachometers, pyrometers, etc., to determine the proper functioning of machinery. Makes inspections to check oil levels, motor generators, gear boxes, generator temperatures, fuel levels, etc. Checks and controls the operation of heating, refrigeration, plumbing, and water supply systems for the dredge noting any unusual or abnormal conditions and determines the causes and remedial action necessary. Prepares reports of fuel oil and lubrication consumption and records readings of the gages during the watch.
3. Supervises and directs the shift crew in oiling, cleaning, painting, making adjustments and repairs, and keeping the engine room clean. Instructs and trains subordinates in procedures and methods and observes their work for accuracy and compliance with instructions. Lays out

the work and instructs subordinates on unusual or difficult work and inspects operations and completed work. Trains subordinates and regularly inspects their work. Orients new employees and conducts exit interviews with employees who leave the service. Provides input to the Chief Engineer concerning subordinates' performance appraisals. Reports disciplinary problems to the Chief Engineer for resolution. Prepares shift reports reflecting the work activities during the shift and maintains an engine room log of activities. As a supervisor of others, instructs and trains subordinates in the safe and efficient performance of their duties and studies the operations directed with a view to correcting or reporting for correction any unsafe condition or practice that might cause injury to employees or persons or property damage.

4. During layup periods may be assigned to other essential work in the District depending on the needs of the organization, individual qualifications, and ability of the employees involved and effective skills utilization. Is also subject to assignment where needed during high water emergencies.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must hold a U.S. Coast Guard 2nd Assistant Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. A knowledge of the dredge steam, steam electric, or diesel electric mechanical, hydraulic, electrical, and/or electronic equipment, systems, and auxiliary plant and machinery, and the related skill requirements to diagnose problems and malfunctions; and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Applies the knowledge to understand how such equipment and systems operate individually or in combination and the ability to lay out repair, replacement, maintenance, and modification plans and requirements ranging from those of a minor nature to those of extreme complexity. Applies a knowledge of the fuel and water treatments associated with the various equipment and systems.

Knowledge and ability to interpret and supply working drawings, sketches, diagrams, blueprints, and various information reflected in technical manuals. Applies a knowledge of advanced shop math to accomplish computations pertinent to electricity and electronics, electrical equipment, air conditioning and heating, refrigeration and mechanical dimensions, tolerances, and voltages.

Applies skill and knowledge in the use of a variety of testing instruments including refrigeration gages and temperature testers in diagnosing problems and malfunction, and a variety of measuring devices including feeler gages, vernier calipers, inside and outside calipers and micrometers, thread gages, dial indicators, screw pitch gages, protractors, dividers, composers, steel squares, clinometers, etc. Applies skill to accomplish work to tolerances of .001 inch.

Skill and knowledge in the use of lathes, shapers, drill press, milling machines, honing equipment, grinders, jig borers, jig grinders, power hacksaws, electric and acetylene welding and flame cutting processes, and a variety of electric and hand tools common to the trades involved. Applies a knowledge of the characteristics of a variety of metals and alloys such as stainless steel, monel, brass, bronze, babbitt, silver, aluminum, mild and hardened steels, etc.

RESPONSIBILITY

Works under the general supervision of the Chief or 1st Assistant Engineer who provides oral and written instructions outlining work schedules and plans for repair work to be accomplished. Recommends changes to work plans to prevent delays, shutdowns, or damage or to increase efficiency. Accomplishes and directs minor adjustments and repairs on own initiative and reports major problems and malfunctions to the Chief Engineer along with recommendations for the action to be taken. Supervises the crew and personally makes major repairs as specified by the Chief Engineer and accomplishes such work under his close supervision. Supervisor is on call at all times to provide guidance and assistance. Work is spot checked during operation and periodically given a more detailed inspection for operational efficiency. Is in technical charge of the engine room during his shift. Work is guided by written and oral instructions; operational and repair manuals; drawings, wiring diagrams, and sketches; and standard marine engine room practices. Is responsible for insuring that job requirements and engine room work activities on his shift comply with established safety procedures and regulations.

WORKING CONDITIONS

Work is performed inside and outside subjecting employee to varying climatic conditions, abnormal noises, temperature, danger of burns, irritation from grease and oils, bruises, strains, dangers involved in attending moving machinery, possible drowning from falling overboard, electrical shock, falls on slippery decks or steep stairways, and crankcase explosion.

PHYSICAL EFFORT

Incumbent performs work from ladders, scaffolding, and platforms and where the parts, equipment, or systems are in hard-to-reach places. Work requires the incumbent to stand, stoop, bend, kneel, climb and work in a tiring and uncomfortable position. Frequently lifts, carries, and sets up parts and equipment that weigh up to 40 pounds.

Bmk. No. B-18

Third Assistant Engineer PLD Class I, XH-4742-08

MAJOR DUTIES

Serves as a 3rd Assistant Engineer on a Class I pipeline dredge (18" discharge and over). The dredge is either a diesel-electric, steam, or steam-electric powered self-propelled cutterhead or dustpan dredge operating in inland waters of the U.S. Stands a shift watch and supervises the work of the crew on the shift composed of employees in any of several trade occupations including striker, marine oiler, fireman watertender, electrician, electronic mechanic, machinist, and welder. Exercises responsibility for the operation, maintenance, and repair of all engine room and associated machinery, refrigeration, plumbing, heating, and electric/electronic systems and attendant plant. In this capacity, accomplishes the following in a training capacity:

1. Exercises shift watch responsibility for handling controls, operation and maintenance, and participating in the routine repairs of all engine room machinery and equipment including the main propelling engines, pumping engines, auxiliary pumps, machinery on the vessel and attendant plant and the electric/electronic systems. Maintains continuous operating efficiency to prevent damage to machinery. Makes regular and periodic inspections by visual and auditory means of all machinery to determine the operating condition and the need for maintenance and repairs. Makes minor adjustments and routine repairs on own initiative and reports major defects to the Chief Engineer. Assists in making nonroutine operating repairs and major repairs and overhauls during layup. Assists in painting equipment and keeping the engine room clean.
2. Operates controls to start, stop, reverse, and regulate the speed of propelling engines on signal from the pilothouse. Operates dredging pumps and machinery according to signals from the mate (on dustpan dredges) or the leverman (on cutterhead dredges). Controls the operation of heating, refrigeration, and plumbing systems by manipulating necessary winches, throttles, and switches. Checks and controls the quantity of fuel oil, water, etc., to determine the proper operation of the dredge machinery. Observes gages such as pressure gages, vacuum gages, fuel oil gages, tachometers, pyrometers, etc., to determine the proper functioning of machinery. Makes inspections to check oil levels, motor generators, gearboxes, generator temperatures, fuel levels, etc. Checks and controls the operation of heating, refrigeration, plumbing, and water supply systems for the dredge noting any unusual or abnormal conditions and determines the causes and remedial action necessary. Prepares reports of fuel oil and lubrication consumption and records readings of the gages during the watch.
3. Supervises and directs the shift crew in oiling, cleaning, painting, making adjustments and repairs, and keeping the engine room clean. Instructs and trains subordinates in procedures and methods and observes their work for accuracy and compliance with instructions. Lays out the work in accordance with plans furnished by the Chief Engineer, instructs subordinates,

inspects operations and completed work. Trains subordinates and regularly inspects their work. Orients new employees. Provides input to the Chief Engineer concerning subordinates' performance appraisals. Reports disciplinary problems to the Chief Engineer for resolution. Prepares shift reports reflecting the work activities during the shift and maintains an engine room log of activities. As a supervisor of others, instructs and trains subordinates in the safe and efficient performance of their duties and studies the operations directed with a view to correcting or reporting for correction any unsafe condition or practice that might cause injury to employees or persons or property damage.

4. During layup periods may be assigned to other essential work in the District depending on the needs of the organization, individual qualifications, and ability of the employees involved and effective skills utilization. Is also subject to assignment where needed during high water emergencies.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must hold a U.S. Coast Guard 3rd Assistant Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. A knowledge of the dredge steam, steam electric, or diesel electric mechanical, hydraulic, electrical, and/or electronic equipment systems, and auxiliary plant and machinery, and the related skill requirements to supervise and participate in the routine repair and maintenance and assist the Chief Engineer in nonroutine repairs and modifications. Applies the knowledge to understand how such equipment and systems operate individually or in combination. Trains in engine room operations and repairs to develop the knowledge and skill to lay out repair, replacement, maintenance, and modification plans and requirements ranging from those of a minor nature to those of extreme complexity. Applies a knowledge of the fuel and water treatments associated with the various equipment and systems. Knowledge and ability to interpret and apply working drawings, sketches, diagrams, blueprints, and various information reflected in technical manuals. Applies a knowledge of shop math to accomplish routine computations pertinent to electricity and electronics, electrical equipment, air conditioning and heating, refrigeration and mechanical dimensions, tolerances, and voltages. Applies skill and knowledge in the use of a variety of testing instruments including refrigeration gages and temperature testers in diagnosing problems and malfunctions, and a variety of measuring devices including feeler gages, vernier calipers, inside and outside calipers and micrometers, thread gages, dial indicators, screw pitch gages, protractors, dividers, compasses, steel squares, clinometers, etc. Is in training to develop skill to accomplish work to tolerances of .001 inch.

Skill and knowledge in the use of lathes, shapers, drill press, milling machines, honing equipment, grinders, jig borers, jig grinders, power hacksaws, electric and acetylene welding and flame cutting processes, and a variety of electric and hand tools common to the trades involved. Applies a knowledge of the characteristics of a variety of metals and alloys such as

stainless steel, monel, brass, bronze, babbitt, silver, aluminum, mild and hardened steels, etc.

RESPONSIBILITY

Works under the close supervision of the Chief or 1st Assistant Engineer who provides oral and written instructions detailing work schedules and plans for operation, maintenance, and repair work to be accomplished. Accomplishes and directs minor routine adjustments and repairs and reports problems and malfunctions to the Chief Engineer. Supervises the crew and personally makes routine repairs as specified by the Chief Engineer and accomplishes such work under his close supervision. Supervisor is on call at all times to provide guidance and assistance. Work is observed during operation and periodically given a more detailed inspection for operational efficiency, on-the-job skill and knowledge development, effectiveness of training and training purposes. Work is guided by written and oral instructions; operational and repair manuals; drawings, wiring diagrams, and sketches; and standard marine engine room practices. Is responsible for insuring that job requirements comply with established safety procedures and regulations.

WORKING CONDITIONS

Work is performed inside and outside subjecting employee to varying climatic conditions, abnormal noises, temperature, danger of burns, irritation from grease and oils, bruises, strains, dangers involved in attending moving machinery, possible drowning from falling overboard, electrical shock, falls on slippery decks or steep stairways, and crankcase explosion

PHYSICAL EFFORT

Incumbent performs work from ladders, scaffolding, and platforms and where the parts, equipment, or systems are in hard-to-reach places. Work requires the incumbent to stand, stoop, bend, kneel, climb and work in a tiring and uncomfortable position. Frequently lifts, carries, and sets up parts and equipment that weigh up to 40 pounds

Bmk. No. B-21

Cook-Steward, XH-7404-06

MAJOR DUTIES

Is in direct charge of the galley and mess hall and is responsible for the preparation and serving of meals for a large crew in accordance with standard operating procedures. Personally participates in and supervises a crew of cooks and mess attendants in cooking, preparing, and serving meals including meats, fish, soups, poultry, vegetables, fruits, salads, breads, cokes, and desserts; and storage of commodities. In addition, supervises subordinates in cleaning the galley, dining areas, and crew quarters. Within this framework accomplishes the following:

1. Planning. Plans three meals daily. Makes inventories of subsistence supplies available, determines subsistence needs periodically and informs the Master who arranges for requisitioning. Plans distribution of work using step-by-step procedures or accepted work practices. Keeps supervisor informed regarding progress or status of assignments. Clears with supervisor if significant deviation in work procedures is necessary. As required estimates time, equipment, material, and personnel needs. Notifies supervisor of needs and equipment failures. Recommends to supervisor work schedules of employees and changes in work methods or procedures with a view to reducing cost and simplifying operation within assigned organization.
2. Work Direction. Assigns tasks or features of work to subordinates giving instruction, technical guidance, and demonstration during progress of work. Helps on difficult quantity measurements, changing of recipes, and sets up work. Follows up on delays in equipment repairs and decides whether malfunctioning equipment can be repaired. Reports major breakdowns and nonroutine delays to supervisor for action to prevent spoilage of food or delay in the preparation of meals. Makes progressive and final inspection of completed work for compliance with instructions, established work practices, and quality. Observes work in progress for purpose of locating potential and actual problems; makes adjustment in plans, methods, and procedures of day-to-day operations to resolve nonrecurring problems or to anticipate and avoid potential problems. Inspects completed work and work in progress to assure quality control. As requested, furnishes opinion as to reasons for slow downs and possible changes in procedures and methods to increase efficiency and reduce costs. Remains alert to possibilities for improving operations and reducing costs and brings to attention of supervisor. Inspects the galley, mess halls, refrigerators, and storage areas to insure they are maintained in a sanitary and orderly condition and that all dishes and utensils are washed and the galley and mess equipment is maintained in good operating condition. Supervises the storage of foodstuffs to prevent spoilage or waste.
3. Administration. Issues safety equipment and insures its proper use, insures that injury cases report to dispensary, and enforces safety rules. Estimates and requisitions supplies. As applicable maintains records of work orders, materials, and costs involved, etc. Furnishes recommendations to supervisor as requested regarding work records, qualifications, etc., of subordinates being considered for selection for vacant positions, promotions or reassignments. Interprets rules and regulations for subordinates and enforces adherence.

Considers and adjusts informal complaints from subordinates and refers more serious problems to superior with recommendations for resolution. Informs superior of his position regarding formal appeals. Identifies and recommend provision of employees' services needs. Recommends leave schedules; identifies leave abuses; recommends personnel actions. Makes informal appraisal of performance of subordinates. Recommends disciplinary actions and commendations. Suggests ways for improvement of subordinate's performance. Places performance improvement plans into effect after approval of supervisor. Trains new subordinates; gives on-the-job instruction; and identifies individual training needs. Carries out supervisory responsibilities in accordance with the provision of the District EEO and Affirmative Action Program.

4. Supervisory. As a supervisor of others, is responsible for the instruction and training of subordinates in the safe and efficient performance of their duties and for studying the operation under his supervision with a view to correcting or reporting for correction any unsafe work practice.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Incumbent is required to possess a U. S. Coast Guard Document with endorsement for Food Handler. Must possess the ability to manage a crew of employees within the parameters of the regulations. Must possess the ability to plan menus that are dietetically proper and select menus which encompass some special requirements, (i.e., diabetic; low salt, etc.). Must have the skills and experience to plan for and prepare a wide variety of foods for 30 to 60 persons. Applies the skill and knowledge to operate and maintain all galley equipment.

RESPONSIBILITY

Works under very general administrative supervision. The planning and preparation of meals is left almost entirely to the discretion of the incumbent, subject only to special requests from the Master, and the only limitations are that the food be appetizing and nourishing and that subsistence allowances are not exceeded. Supervisor relies on incumbent for accomplishment of activities, operations, or projects assigned his group including the meeting of quality standards, production quotas, and time deadlines. Guides include written and oral instructions, specific time requirements, and established methods and procedures. Work is subject to spot check during performance and upon completion for conformance to instructions, prescribed procedures and the meeting of quality and quantity standards as prescribed.

WORKING CONDITIONS

Work is performed primarily in the galley where there is constant exposure to above average temperatures. Subject to cuts when working with power equipment or to burns when working near the range. Subject to falls when food is spilled on deck, or when the dredge is in rough water.

PHYSICAL EFFORT

Incumbent is required to exert moderate to heavy physical effort storing and handling galley supplies and materials.

SURVEY BOAT POSITION CLASSIFICATION GUIDANCE

a. CLASSIFICATION OF SURVEY BOAT OPERATOR POSITIONS IN THE U.S. ARMY CORPS OF ENGINEERS

1. Survey boat operators are allocated to the OPM Small Craft Operator Series, WG-5786, as they meet the series definition. However, since U.S. Army Corps of Engineers (USACE) floating plant positions are set aside from the Federal Wage System, they are evaluated by classification standards developed and approved by the U.S. Army. Special floating plant pay designators were established by OPM on 12 Jun 92 as follows:

XF – Floating Plant (Other than Hopper Dredge) Schedule–Nonsupervisory—Federal Wage System. Code is for use by the Department of the Army only.

XG – Floating Plant (Other than Hopper Dredge) Schedule—Leader--Federal Wage System. Code is for use by the Department of the Army only.

XH – Floating Plant (Other than Hopper Dredge) Schedule—Supervisory—Federal Wage System. Code is for use by the Department of the Army only.

2. Operators of survey boats may be classified by the Department of the Army Manual of Evaluation Standards (DAMES) as Small Craft Operator, XF-5786, or by the Ladder Diagram (LD), as Small Craft Operator, XH-5786, depending on assigned work. Both benchmarks may

3. The following guidance is provided to guide you in determining which standard is appropriate for evaluation based on the type of vessel and the nature of work performed.

b. TOWBOAT/TENDER/SURVEY BOAT DESCRIPTIONS

The type of vessel is an important factor for determining the proper title, series, grade and pay plan for floating plant positions. The type of vessel typically represents the level of complexity, skill and possibly licensing requirement to operate the vessel and to determine the job requirements for positions assigned to the particular vessel. Below is a description of the typical towboat, tender, and survey boats in the U. S. Army Corps of Engineers floating plant fleet.

1. *Very large towboats.* This is the largest class of towboats; typically they are 110 ft or over in length, have more than one engine, and generally have 2000+ hp. Vessels operate on major waterways, in open and unprotected waters. Vessels serve as prime movers (over long distances) for major items of non-self-propelled floating plant (i.e., dredges, mat sinking and revetment plant, derrickboats, etc.); extra large tows of fuel, material, and special purpose barges; and self-propelled floating plant such as dredges and other towing vessels. In addition to the primary purpose of towing, they also conduct channel patrol and reconnaissance operations. Vessels operate 24 hours a day on a watchstanding system; crew is large (typically over 20) and is organized into separate deck, engine, and galley departments, and there are supervisors to head major departments. Reports to a section or branch chief who is located in the district office.

2. *Large towboats.* These vessels are over 65 ft but under 110 ft in length, have more than one engine, generally over 1000 hp. Vessels typically work on major inland waterways. They serve as the prime mover assigned to large construction and maintenance units; transport tows of large special purpose plant such as work shops, quarterboats, floating cranes, and supply and equipment barges to/from and around worksites. In addition, may make up and push large tows (up to 5000 tons) of supply and material barges from depots to worksites. Vessels typically operate 24 hours a day on a watchstanding system. Crew is generally smaller (approximately 10-15 employees) and structured similar to a very large towboat. Reports to a supervisor located in the district office or a field office.

3. *Medium towboats.* These vessels are typically 50-65ft, have more than one engine, up to about 1000 hp. They serve as the prime mover assigned to small construction and maintenance units, towing rock barges, fuel barges, crane barges, other construction equipment and crew. May also conduct marking and patrolling and navigation channel inspections on vessels that may carry up to 65 passengers. Tows are generally 1-6 barges. Vessels typically operate one shift and usually do not have a crew assigned for operating the vessel. Serves as the team leader over the maintenance crew typically made up of equipment operators and laborers. Reports to a supervisor located in a field office.

4. *Medium tenders (a).* These vessels are generally under 65 ft but over 45 ft in length, have more than one engine, usually well over 500 hp. They usually operate on inland rivers and waterways. Typically, these tenders operate in direct support to dredges, revetment, or maintenance and repair units where they assist towboats in moving major items of floating plant to or about worksites; may independently shift smaller items of plant and equipment around the worksite. Also, they support the work unit's activities by transporting supply and material barges between depot and worksites; make up and push tows up to 3000 tons. Normally, vessels work same schedule as the work unit serviced, which generally includes multiple watch (over 8 hr) operations. Crew is generally small (i.e., 6-10 employees) and loosely divided into engine and deck functions. Reports to the on-site construction superintendent, dredge officer, lockmaster, etc.

5. *Medium tenders (b).* These vessels are generally under 65 ft but over 45 ft in length, typically more than one engine, with over 300 hp. This type of tender operates on inland rivers and waterways. This is a general purpose tender which typically works out of an equipment pool or depot, although some may provide direct support to a field unit. These vessels are used for local channel patrol or reconnaissance work, picket duty, or to make up and transport supply and material barges and other equipment tows (usually not over 2500 tons) around district waterways. They also provide assistance in moving plant around the worksite if supporting field unit. Vessel operation may be single or multi-watch depending on the work situation. Crew is small (i.e., 2-6) depending upon the number of shifts worked. Operators perform routine vessel maintenance and repair work. Reports to the on-site construction superintendent, depot/equipment pool, hired labor unit, dredge officer, etc.

6. *Survey Boats (a).* These vessels are generally under 65' but may range up to 110'. If the vessel is a high-speed cabin cruiser, it also serves as an inspection boat carrying VIPs. It also

serves as a tender assisting other floating plants and delivering supplies and subsistence, when required. May require an engineer, depending on the vessel. Reports to the head of the equipment pool section, chief of the surveying section with on-site direction provided by the survey party chief, or construction superintendent. These are the survey boats that are evaluated by the Ladder Diagram.

7. *Survey Boats (b)*. These vessels range in size from 40' – 65'. They are used for conducting hydrographic surveys, and may be used for channel inspections, and transporting VIPs on inspection trips. These vessels may or may not be equipped for passengers and have a small galley, but does not require a crew. Reports to the chief of the surveying section with on-site direction provided by the survey party chief. These are the survey boats that are evaluated by the DAMES.

c. Application of Classification Standards. Towboat, tender and survey boat positions are classified using the Department of the Army Manual of Evaluation Standards (DAMES) and the Ladder Diagram (LD). The additional guidance is provided to further supplement instructions for classifying these positions using the DAMES and Ladder Diagram.

1. Department of Army Manual Evaluation Standard (DAMES):

a) Nature of the work:

Survey boats typically range in size from 23 feet to 65 feet in length and carry an array of electronic and other equipment used to conduct hydrographic and reconnaissance surveys of rivers, harbors and waterways. They are used for transporting personnel and materials to and from floating plant (dredges, mat sinking units, etc.) or survey sites and for the purpose of inspecting current and proposed construction sites and disposal areas. They are equipped for locating wrecks and obstructions with electronic equipment such as side-scan sonar and magnetometers.

Inspection trips are usually conducted during daylight hours, but may involve remaining out overnight. A high degree of skill is required to operate in swift or shallow water to make hydrographic surveys, place channel markers or gauges and maneuver in traffic-congested areas. Work requires familiarity with channel locations and markers in the areas worked and knowledge of navigation rules for operating boats in traffic in the waterways traveled.

The operator is responsible for the operation and maintenance of the vessel and is required to make minor repairs to such equipment as diesel engines, generators, air compressors and auxiliary equipment aboard the vessel. The operator assists shop personnel during periods of major overhaul. The operator may direct the work of a deckhand or engineer if assigned to the vessel.

b) Grading Criteria:

Survey boat operator work is evaluated by the DAMES and classified as Small Craft Operator, XF-5786-10, if the duties, responsibilities and vessel characteristics match the benchmark for the XF-10 level. Some vessels are significantly smaller and/or work in protected

waterways or lakes. A reduction of one or two grades is appropriate for these vessels. One grade may be added for vessels where the physical demands are higher than those described in the XF-10 benchmark. Whenever the duties performed do not match the benchmark job description, the Auxiliary Standard to the DAMES is used to evaluate the position.

2. LADDER DIAGRAM:

a) Survey boat operators that perform other duties on a regular and recurring basis in addition to surveying work are evaluated by the LD. There are two benchmarks in the LD that describe these additional duties: 1) serve as tenders towing other floating plant or 2) operate high speed cabin cruisers transporting high-ranking personnel on inspection tours and providing meals and living quarters.

1. Vessels that also serve as a tender:

Survey boats that tow other floating plant on a regular and recurring basis in addition to the surveying duties described above under DAMES are evaluated using the Ladder Diagram and are classified as Small Craft Operator, XH-5786-07.

2. Vessels that are high speed cabin cruisers transporting delegations on regular and special inspection tours.

Survey boats that are high-speed cabin cruisers approximately 63 feet in length that transport high-ranking officers, civilian engineers, and official delegations, including members of Congress and influential persons, on regular and special inspection tours are also evaluated using the LD. Operators of these vessels provide for the general welfare and comfort of passengers, including the furnishing of meals and living quarters. The operator requisitions all necessary supplies for the operation of the boat and for serving of meals to personnel aboard on inspection trips. These survey boats are classified as Small Craft Operator, XH-5786-07.

b) In summary survey boats that perform: 1) hydrographic and reconnaissance surveys of rivers, harbors, and waterways; 2) transport material and supplies to and from floating plant or survey sites; and 3) transport personnel for the purpose of inspecting works of construction and miscellaneous sites of proposed construction, are evaluated by the DAMES. Survey boats that also serve as tenders towing other floating plant or are high-speed cabin cruisers transporting high-ranking personnel on inspection tours, and providing meals and living quarters are evaluated by the Ladder Diagram.

LADDER DIAGRAM OF FLOATING PLANT JOBS
TOWBOATS, TUGS, TENDERS & DERRICKBOATS- Schedule C

Series indicated in parentheses

GRADE	BN	DECK	BN	ENGINE	BN	STEWARD
XH-16	C-01	Master, Towboat (5784)				
XH-15			C-21	Chief Engineer, Towboat (4742)		
XH-14	C-02	Pilot (5784)				
XH-13	C-03	Master, Tug, Class I (5782)				
XH-12			C-22	Chief Engineer, Tug, Class I (4742)		
XH-11	C-04	First Mate, Towboat (5784)	C-23	First Assistant Engineer, Towboat (4742)		
XH-10	C-05	Master, Derrickboat (5725)				
XH-09	C-06	Mate, Tug, Class I (5782)	C-24	Assistant Engineer, Tug, Class I (4742)		
XH-08	C-07	Operator, Derrickboat (5725)	C-25	Second Assistant Engineer, Towboat (4742)		
XH-08	C-08	Second Mate, Towboat (5784)				
XH-08	C-09	Master, Tug, Class II (5782)				
XH-07	C-10	Master, Tender (5784)	C-26	Engineer, Derrickboat (4742)		
XH-07	C-11	Small Craft Operator (5786)	C-27	Third Assistant Engineer, Towboat (4742)		
XH-07	C-12	Small Craft Operator (5786)	C-28	Chief Engineer, Tug, Class II (4742)		
XH-07	C-13	Third Mate, Towboat (5784)				
XH-04	C-14	Mate, Tug, Class II (5782)	C-29	Assistant Engineer, Tug, Class II (4742)		
XH-03					C-31	Cook (7404)

SURVEY BOAT POSITION CLASSIFICATION GUIDANCE

**BOATS, TUGS, TENDERS,
SMALL CRAFT OPERATORS, AND DERRICKBOATS
LADDER DIAGRAM GRADE DIFFERENCES**

Title, Series & Grade	Statement of Differences Between Grades
Master, Towboat XH-5784-16	Vessel is large (110 ft.) and crews operate 24-hours/day. Scope of responsibility is greater than any one crew or department of the towboat. Includes long-range supervisory responsibilities for planning, work direction and administration over several crews on the towboat, each staffed with a supervisory position. Has 24-hour responsibility for all aspects of towboat operation and maintenance.
Chief Engineer, Towboat XH-4742-15	Scope of responsibility includes the three-shift work program of the towboat engine room and related mechanical, electrical-electronic equipment and systems. Involves the highest level technical supervisory requirements for any crew/department on the towboat. Has 24-hour responsibility for engine-room department work requirements.
Pilot, XH-5784-14	Has responsibility for operating a towboat or self-propelled dredge headed by vessel Master. Keeps a vessel log.
Master, Tug, Class I XH-5784-13	Vessel is 65' or over. Operates vessel in both open areas and in congested and restricted areas. Scope of responsibility is greater than any one crew or department of the tugboat. Includes long-range supervisory responsibilities for planning, work direction and administration over several crews on the tugboat, each staffed with a crew chief.
Chief Engineer, Tug, Class I, XH-4742-12	Has responsibility for engine room department work requirements for more than one shift/watch. Technically directs and works with the engine room crew.
1 st Mate, Towboat XH-5784-11	Scope of responsibility includes the three-shift work program of the towboat deck department and related operation and maintenance requirements. Has 24-hour responsibility for deck department work requirements. Includes long and short-range planning, direction, coordination and administration of the work and staff of all three dredge deck department crews.
1 st Asst Engineer, Towboat XH-4742-11	Serves in the absence of the Chief Engineer. Assists the Chief Engineer in his supervisory work planning, direction and administration responsibilities. Otherwise, has responsibility for the engine-room department work requirements on one shift/watch. Technically directs and works with the engine-room crew on the assigned shift.
Master, Derrickboat XH-5725-10	Directs and assigns crew in work to be performed. Also operates derrickboat.
Mate, Tug, Class I XH-5784-09	Has responsibility for deck department work requirements for one shift/watch. Technically directs and works with the deck department crew.

Title, Series & Grade	Statement of Differences Between Grades
Asst Engineer, Tug, Class I XH-4742-09	Has responsibility for engine-room department work requirements for one shift/watch. Directs and works with the engine room crew on the assigned shift.
Operator, Derrickboat XH-5725-08	Responsible for operating the derrickboat and performing routine maintenance repair work.
2 nd Asst Engr, Towboat XH-4742-08	Has responsibility for engine-room department work requirements on one shift/watch. Directs and works with the engine room crew on the assigned shift. Is in training for higher grade Engineer.
2 nd Mate, Towboat XH-5784-08	Has responsibility for the deck department work requirements on one shift/watch.
Master, Tug, Class II XH-5784-08	Has complete responsibility for the crew of the vessel (under 65'). Technically supervises subordinate crew.
Tender Operator XH-5784-07	Serves as the sole operator of a diesel tender (under 65') or directs a complement of one or more subordinate operators. May direct one or more deckhands or other lower-grade personnel.
Engineer, Derrickboat XH-4742-07	Operates and maintains stationery engines and equipment on a derrickboat.
Small Craft Operator XH-5786-07	Operates a survey tender (under 65') during all phases of hydrographic survey work. When required, operates survey tender in towing other floating plant. Directs subordinate crew as assigned.
3 rd Asst Engr, Towboat XH-4742-07	Has responsibility for engine room department work requirements on one shift/watch. Is in training for higher grade engineer.
Small Craft Operator XH-5786-07	Operates 63' cabin cruiser during regular and special waterway inspection tours.
Chief Engr, Tug, Class II XH-4742-07	Serves as engineer for vessel. Operates vessel in the absence of the Master.
3 rd Mate, Towboat XH-5784-07	Has responsibility for the deck department on one shift/watch.
Mate, Tug, Class II XH-5784-06	Has responsibility for the deck department, directing the work of deckhands. Also pilots the tug.
Asst Eng, Tug, Class II	Has responsibility for the engine department on one shift/watch.

MAJOR DUTIES

Serves as Master of a large (over 100 feet in length) diesel-powered twin screw towboat with a total of 2,000 hp or more. The towboat is typically engaged in a variety of operations on inland waterways of the U.S. including towing of plant and equipment; making special and other inspection trips; conducting channel patrol operations to locate and mark channels; establishing and relocating aids to navigation; and similar operations. Is responsible for the efficient operation, safety, and security of the vessel, its crew, passengers, vessel machinery, equipment, tools, and supplies, and barges and cargo in tow. Is on call 24 hours/day during periods of vessel operation. In this capacity, performs the following:

1. Through subordinate supervisors/crew chiefs, supervises and directs the activities of a crew of 9-30 personnel assigned to vessel departments or crews (engine room, deck crew, galley, etc.) employed as engineers, pilots, mates, strikers, marine oilers, deckhands, cooks, food service workers, other supporting trades and crafts positions, and clerical support positions.

a. Planning. Plans for vessel staffing, operating supplies and materials, subsistence needs, fuel requirements, and other comparable support requirements prior to the beginning of the work season. Participates with supervisor and his staff in planning for annual repair, maintenance, and modification requirements. In collaboration with subordinate crew chiefs, plans weekly or monthly work schedules and sequence of operations for subordinates. Establishes deadlines and priorities on the basis of general work schedules and methods and policies established by higher levels of supervision. Determines the number of shifts to be worked, how they are to be set up, and the assignment of subordinates to shifts. Determines how many assignments can be done concurrently, how many must be delayed, and the number and types of employees needed, considering skills, personnel, materials, and equipment available and required.

b. Work Direction. Selects workers and, through subordinate crew chiefs, assigns tasks to be performed. Explains work requirements, methods, and procedures; instructs subordinates in new procedures; and provides advice when problems arise. Reviews work in progress or on completion. Adjusts plans, assignments, and methods as necessary to accomplish the work as effectively and economically as feasible. Approves the equipment, supply, and maintenance requirements recommended by crew chiefs. Assures arrival of supplies and equipment at work site as needed. Coordinates work of the vessel with other units that may be involved, such as river construction units.

c. Administration. Exercises approval authority for leave schedules and requests referred by crew chiefs. Recommends promotions or reassignments of subordinates. Sets performance requirements for vessel crew chiefs and reviews requirements they establish for their subordinates, and approves formal performance appraisals. Reviews personnel actions initiated

by subordinate crew chiefs and acts on personnel problems referred by them. Identifies the need for and plans necessary on-the-job training for subordinates. Initiates proposals for disciplinary action where needed. Promotes the participation of subordinates in programs such as the suggestion program, cost reduction program, etc. Prepares, maintains, and submits in a timely manner operation and production reports and logs, and records and furnishes work status information to higher echelons. Periodically reviews job descriptions of subordinates for currency and accuracy; reports detailing of employees to jobs other than their own; and initiates or participates in review and improvement of work methods, organizational features, and the structuring of positions to eliminate unnecessary ones and achieve optimum content in those remaining. Accomplishes supervisory functions in accordance with the provisions of the local EEO and Affirmative Action programs.

2. Directs the vessel operations. Exercises independent judgment in determining if weather and navigation conditions are suitable for operation of the vessel. Instructs and issues orders to pilots when special river channel conditions arise. As required, stands a regular pilot's watch. Reports the progress of vessel operations, indicating causes of lost time, river stages, current, wind, etc. Inspects the vessel and its operations for compliance with laws pertaining to the navigation including proper display of signal lights, sounding of proper signals, and other navigational requirements. Identifies navigational hazards and radios reports to headquarters for dissemination to navigation interests concerning any changes to steering directions. Vessel operations typically include the following:

a. The Master is responsible for the making up and breaking up of tows for long towing operations (approximately 200 or more miles) and the landing and disposing of the same at the destination. Tows typically consist of six or more barges including many pieces of floating plant and equipment; barges; quarterboats; supply and warehouse barges; office barges; water purification plant barges; fuel, gasoline and oil barges; material barges loaded with concrete mattress, sand, gravel, rock, piling, etc.; as well as all types of construction plant and equipment barges.

b. Directs the vessel in channel patrol operations over extensive stretches of inland waterway (200 or more miles). Sounds navigable channels; determines sufficiency of channel depth to support commercial traffic and sets buoys outlining the navigable channel; and removes and disposes snags, logs, and other obstructions to navigation. Drafts or directs the drafting of informal navigation channel reports, reflecting soundings made, channel conditions, navigation channel changes, and other pertinent data and information. Similarly, furnishes Masters and Pilots of other vessels with the latest information on channel conditions, as necessary.

c. Directs vessel operations of comparable scope, complexity, and difficulty.

3. Incumbent is responsible and accountable for all property assigned to the vessel. Conducts inventories to ensure that all property is accounted for. Periodically recommends the

condemnation of obsolete, worn out, and unserviceable property and equipment. Inspects safety, navigational, fire, and life-saving equipment to determine that equipment is in good serviceable condition and for compliance at all times with all laws pertaining to the operation and navigation of the boat. Studies the operations supervised to identify, correct, or report any unsafe condition or work practice that might cause injury or property damage and medical attention to injured workers. Conducts fire, lifeboat, and man-overboard drills and is responsible for the safety training and safety of the entire crew, plant, equipment, and tow on 24-hour per day basis.

Performs other duties as required and assigned during operation and layup periods.

SKILLS AND KNOWLEDGES

--Must possess a current U.S. Coast Guard license as a Master covering the type, class, horsepower, and size of vessel to which assigned and the waters in which the boat operates. Applies skill and knowledge of a Master and the navigational rules and regulations involved in vessel navigation, and the characteristics of the waters in which the vessel is operated.

--Applies knowledge to read, understand, and apply the information contained in plans, drawings, maps, charts, sketches, and other documents pertaining to the motor vessel operation and the work to be accomplished.

--Applies knowledge of the characteristics and limitations of the motor vessel operated and its mechanical, electrical, electronic, and hydraulic systems in order to direct safe and efficient operations and to make decisions concerning necessary maintenance and repairs. Applies a knowledge of safety rules, regulations, and procedures.

--Applies a knowledge of material, supplies, and equipment necessary for operation of the motor vessel and of the procurement and supply procedures and requirements necessary to obtain such items to provide timely and effective support of operations.

RESPONSIBILITY

Works under the supervision of the Head, Equipment Pool Section, or other competent authority. Supervisor issues operational orders and oral and written instructions regarding work assignments. Supervisor also holds discussions with the incumbent regarding any special or inspection trips, or any unusual events, which may arise.

During towing operations, contact with the headquarters office is accomplished through radio communication. Is responsible and accountable for the care, maintenance, repair, and operation of the motor vessel and its tows and the safety and well-being of the crew. Applies guides including oral and written directives, river maps and charts, District regulations, and navigational

regulations. Receives assignments and instructions prior to vessel operation. Receives intermittent written and oral instructions in carrying out work assignments. Work is occasionally spot-checked during operation through supervisory visits for compliance with policy, regulations, and accomplishment of results in accordance with initial instructions. Completed work is reviewed through review of operational reports and logs for compliance with directives when vessel operation should be halted due to hazardous conditions and taking necessary action to protect the vessel, equipment, and personnel assigned.

PHYSICAL EFFORT

Work generally involves light physical effort. Extensive standing and walking may be necessary while on watch.

WORKING CONDITIONS

Work is primarily performed inside in an enclosed pilot house but also requires work outside of the pilot house, subjecting the incumbent to varying climatic conditions. Hazards include occasional danger of falling overboard, falls on slippery decks or in climbing steep stairways, and injury from moving machinery. A life jacket is worn at all times while on deck. The incumbent is subject to hazards of heavy river traffic at night and during foggy weather.

**MASTER, TOWBOAT
XH-5784-16
EVALUATION STATEMENT**

1. REFERENCES:

a. OPM, Definitions of Trades and Labor Job Families and Occupations, Riverboat Operating Series, WG-5784, August 2001

b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Subject position serves as Master of a large (over 100 feet in length) diesel-powered twin screw towboat with a total of 2,000 hp or more. The towboat typically operates on inland rivers and waterways, performing a variety of operations such as: towing of plant, equipment and supplies; making special or waterway inspection trips; conducting channel patrol operations to locate and mark channels; relocating aids to navigation; and similar operations. The work requires knowledge of the river currents, stages, obstructions, navigation locks and dams, and the handling and operation of large vessels or tows on rivers. Position is allocated to the Riverboat Operating, WG-5784, series.

Since there are no published job grading standards nor specified titles for the WG-5784 series, fabrication of a local job title is allowed consistent with private industry practices. These vessels are considered towboats as they serve as prime movers (over long distances) for major items of non-self-propelled floating plant (i.e., dredges, mat sinking and revetment plant, derrickboats, etc.); extra large tows of fuel, material, and special purpose barges; and self-propelled floating plant such as dredges and other towing vessels. The towboat operation requires that the master possess a Coast Guard Masters license for the inland waterways on which the towboat is operated. The absence of the requirement for a Master's license precludes classification as Master, Towboat. Position is descriptively titled Master, Towboat, in keeping with prevailing maritime titling practices .

3. GRADE DETERMINATION:

This job represents the highest level and scope of responsibility and accountability on the towboat encompassing the vessel, barges and floating plant in tow, machinery, equipment, tools, supplies and staff. It includes 24 hour responsibility for all aspects of the towboat operation and maintenance; involves working with freedom from technical supervision; involves serving as

master of a large towboat which, as a minimum, is 100' in length, and has a minimum total propelling engine horsepower of 2,000 hp.,

and

Includes supervisory responsibilities over at least three subordinate crews (Engine Room, Deck and Galley); each of the three crews is supervised by a crew chief position; and total vessel staffing falls in the 9-30 range,

and

The Master's job includes **all** of the following:

(a) Long towing operations involving approximately 200 or more miles per trip along the inland waterways, large tows of six or more barges or comparable items of floating plant, and waterways with swift currents and/or heavy river traffic.

and

(b) Channel patrol operations over extensive lengths of the inland waterways (200 or more miles) to place or reset buoys; sound channel depths; remove and dispose of snags, logs or other obstructions to navigation; and draft navigation channel reports furnishing the Masters and Pilots of federal and commercial vessels with the latest information on channel conditions and suggestions on how to operate vessels to navigate certain hazardous reaches of rivers.

and

(c) Making special and other inspection trips transporting high ranking officers, civilian engineers, and official delegations.

Position is not considered as complex as either the WJ-16 Master, Hopper Dredge, or the XH-17 Master, Pipeline Dredge. In terms of the ranking of the Ladder Diagram, XH-16 is considered the appropriate grade for subject position.

4. FINAL DETERMINATION: Master, Towboat, XH-5784-16

SUPPLEMENTAL INSTRUCTIONS

The existence of each of the following elements represents a basis for grade reductions:

(1) The size of the towboat and the total horsepower of the propelling engines is less than that characteristic of the XH-16 Master.

(2) Supervisory responsibilities and accountability is significantly less than that characteristic of the XH-16 Master and/or the requirement for 24-hour responsibility is absent.

(3) Towing operations involve short trips (significantly less than 200 miles) involving small tows of one or two barges, do not require vessel operation on a shift basis, and do not involve responsibility for operation of the vessel in swift currents or under comparable navigational conditions or in waterways with heavy river traffic.

The Master, Tug, Class I, XH-5782-13 benchmark is useful for cross-comparison of vessel characteristics and working conditions that are less than that of the XH-16 level.

Pilot

Bmk. No. C-02

XH-5784-14

MAJOR DUTIES

Serves as a pilot on large twin screw towboats (over 100 feet in length with over 2,000 hp), self-propelled dredges, patrol boats, and other similar classes of vessels operating in inland waterways of the United States. Pilot requirements are typically made difficult by swift currents and/or heavy vessel traffic in the waterway.

1. Stands a pilot's watch with the responsibility for the complete operation of the vessel and safety of the plant and personnel while on watch. Personally operates controls governing navigation of the vessel and its tow. Steers the vessel from the pilot house using pilot house controls for proper speed and direction considering factors such as river currents, direction and velocity of wind, depth of water, size of tow, and capacity and maneuverability of vessel. Directs the making and breaking of tows from the pilothouse or bridge. Is required to land vessel and/or tows in close quarters of a harbor or alongside other floating plant.
2. Exercises complete responsibility for the safety of the vessel and its tow, and crew when on duty. Exercises the authority and responsibility to tie the vessel and its tow to the bank or moorings as necessitated by extremely adverse weather conditions, poor visibility, or other conditions which would endanger the safety of the vessel, tow, and crew. Is responsible for immediately reporting any unmarked or improperly marked obstructions or hazards to navigation, defective aids to navigation, oil spills, and any violation of navigational regulations.
3. Keeps a log of the movements of the vessel and its tow during the watch, and records navigation data such as soundings, nonfunctioning of lights, locations of buoys off station, and prepares steering directions, etc. Notifies supervisors and other pilots of unusual conditions or difficulties encountered in navigation of vessel.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Applies a knowledge of the requirements of the navigation rules and regulations. Must possess a current Master's license covering the size of vessel operated and the reaches of the inland river(s) or portions(s) of the waterway on which the vessel is operated.

Maintains and applies a current knowledge of present and predicted river stages and remains knowledgeable of practices and district requirements covering safety, firefighting, and life saving.

RESPONSIBILITY

Vessel piloting assignments are performed under general supervision of Master who is stationed on the vessel. Receives oral or written instructions (sailing orders) pertaining to plant, equipment, materials, and supplies to be moved or other missions for which vessel is utilized. Exercises technical knowledge and judgment related to the navigation of the vessel. Work is reviewed for conformity with established practices and regulations, adequacy of skill in maneuvering vessel, and propriety of judgment.

Guidelines include oral and written instructions, district standard operating procedures and regulations, directives, river/waterways maps and charts, and marine regulations issued by the U.S. Coast Guard.

PHYSICAL EFFORT

The work of this position is sedentary in nature. Close hand and eye coordination is required when operating controls to maneuver vessel and tows in traffic and in confined areas. Extensive standing and walking may be necessary while standing watch.

WORKING CONDITIONS

Work is primarily performed inside in an enclosed pilothouse but also requires work outside of the pilothouse, subjecting the incumbent to varying climatic conditions. Hazards include occasional danger of falling overboard, falls on slippery decks or in climbing steep stairways, and injury from moving machinery. A life jacket is worn at all times when on deck. The incumbent is subject to hazards of heavy river traffic at night and during foggy weather.

PILOT, XH-5784-14
EVALUATION STATEMENT

1. REFERENCES:

- a. OPM, Handbook of Occupational Groups and Families, Riverboat Operating Series, WG-5784, August 2001
- b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Subject position serves as a pilot on large twin screw towboats (over 100 feet in length with over 2,000 hp), self-propelled dredges, patrol boats, and other similar classes of vessels operating in inland waterways of the United States. Pilot requirements are typically made difficult by swift currents and/or heavy vessel traffic in the waterway. The work includes steering the boat, standing watch, setting and maintaining speed and course, determining position using navigational aids, and coordinating activities of members of the crew. The work requires knowledge of river currents, stages, obstructions, navigation locks and dams, and the handling and operation of large vessels or tows on rivers. Position is allocated to the Riverboat Operating Series, WG-5784.

Since there are no published job grading standards nor specified titles for the WG-5784 series, fabrication of a local job title consistent with private industry practices is allowed. These positions originally required a First Class Pilot's license. The U.S. Coast Guard no longer has a separate pilot's license, but includes this work in the Master's license. Position is descriptively titled Pilot, in keeping with prevailing maritime titling practices.

3. GRADE DETERMINATION:

This benchmark represents the highest level established for pilots on dredges and towboats. Requirements for the XH-14 grade level include:

- a. The large size of the dredge or towing vessel and its tow and the large size of the crew necessitates the exercise of substantial authority, responsibility and accountability for the safe and efficient navigation of the vessel and its tow to insure the safety of human life, the protection of substantial Federal resources, and the effective accomplishment of vessel mission activities.

b. On a recurring basis the Pilot must navigate the dredge or the vessel and its tows in inland waterways with swift currents and/or heavy waterway/river traffic. Such conditions make piloting assignments extremely difficult.

c. Assignments require that on a regular and recurring basis, the Pilot is subject to call 24 hours/day in all types of weather conditions.

The pilot is ranked three levels below the Master, Pipeline Dredge, Class I, XH-5784-17, and two levels below the Master, Towboat, XH-5784-16.

4. FINAL DETERMINATION: Pilot, XH-5784-14

SUPPLEMENTAL INSTRUCTIONS

The existence of each of the following elements represents a basis for grade reductions:

a. The smaller size of the dredge or vessel and its tow and the smaller size of the crew requires substantially less authority, responsibility and accountability than that reflected in this Benchmark.

b. The inland waterways involved do not have strong currents nor heavy river traffic.

Both of these criteria will result in a lower grade for the Master of the vessel, and will therefore result in a lower grade for the Pilot. No criteria is provided for higher level pilot positions since this Benchmark represents the highest level provided for pilot assignments.

MAJOR DUTIES

Serves as Master of a large tugboat over 65 feet in length, displacing up to 500 gross tons, and up to a total 2000 horsepower, with assigned crew. The crew consists of mates, engineers, deckhands, etc. Vessels of this type typically operate rivers, channels or harbor areas, where they tend a variety of floating plant engaged in harbor/channel/waterway maintenance. Operating conditions typically include maneuvering in abnormally heavy boat traffic, including avoiding moving and moored vessels, combating strong winds, tides and current, etc.

1. Receiving orders or assignments, performs duties to pilot the tugboat and towing a variety of non-self-propelled craft such as: dredge SCOWS, sweep rafts, catamarans, pump barges, derrick barges, etc. used for harbor/channel maintenance. Sets and removes anchors of plant, and ties up and/or anchors barges in storage when not in use. Transports personnel, supplies, and equipment to and from working plant, insuring safety during transport.

2. Sets course of the ship, using navigational aids. Steers and navigates vessel through the restricted and heavily used harbors and channels and connecting waterways. Observes general weather conditions, uses forecasts and other appropriate indicators to determine when it is safe to travel.

3. Plans, directs and coordinates the work activities of assigned crew members. Establishes deadlines and priorities, explains procedures and work methods, reviews work in progress or upon completion and evaluates work performance.

4. Conducts safety meetings and necessary life saving drills for the adequate protection of the crew. Maintains proper marine equipment aboard the vessel, such as: lights, fire, lifesaving, and first aid equipment. Requisitions, maintains and controls all necessary mess and maintenance supplies, equipment, tools, fuel, parts, as well as accountable property assigned to the vessel. Maintains daily log of operating, submits required operations and administrative reports.

5. Responsible for proper mechanical repairs and maintenance of the vessel, including minor repairs, painting, and housekeeping functions. Recommends the nature and extent of alterations and repairs, both mechanical and general, to be made during winter lay-up. Supervises and checks the work performed, and coordinates the repair work with estimates and approved budgets.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Knowledge of navigation rules and regulations required by the U.S. Coast Guard, for waters in which the vessel operates. Must have a current U.S. Coast Guard Master's license appropriate to the size and use of the assigned vessel.

--Ability to navigate and maneuver the vessel to required work locations, and conduct vessel handling or towing in a safe and efficient manner under diverse weather, channel, traffic, and maneuvering conditions.

--Skill in the operation of engine and steering controls as well as the use of auxiliary equipment such as generators, winches, pumps, and other related items. Must be able to perform most routine operator-type maintenance and repairs.

--Knowledge of basic lifesaving and emergency first aid including launching of life rafts, use of survival suits, PFD s and work vest. Knowledge of immediate action required for severe bleeding, hypothermia, electrical shock and other life threatening situations.

--Knowledge of fire fighting, including classes of fires, fire fighting systems, equipment, and fire prevention, to include handling of dangerous materials and fuel.

--Knowledge of the characteristics and limitations of the vessel operated and its mechanical, electrical, electronic, and hydraulic systems in order to direct the safe and efficient operations and make decisions concerning necessary maintenance and repairs.

RESPONSIBILITY

Works under the administrative direction of the supervisor, who provides verbal instructions in the operation of the tug and in tending floating plant. Receives instruction as to time of movement, location to which plant is to be moved, manner which plant is to be moved, the manner of movement within the work area and points of pick-up and delivery of personnel and supplies. Responsible for performing work according to directives, district regulations and navigational rules. Has complete charge of the vessel. Notifies supervisor of any breakdowns, adverse weather conditions, or any matters likely to cause delay in operations. Work is occasionally spot-checked through supervisory visits for compliance with policy, regulations; and accomplishment of assigned objectives.

PHYSICAL EFFORT

Light physical effort is required while standing watch and operating the wheel and other controls. Somewhat greater effort is required in accomplishing housekeeping and general maintenance work. Occasional heavy effort is required in making and breaking tows, loading supplies and equipment, and accomplishing some repair work. Close hand and eye coordination is required when operating controls to maneuver vessel and tows in traffic and in confined areas. Extensive standing and walking may be necessary while standing watch.

WORKING CONDITIONS

Incumbent works predominately in an enclosed wheelhouse, but is also subject to working out on deck for brief periods in all types of weather conditions. Employee is exposed to injury from falls due to slippery decks and erratic movements of the vessel, and to the possibility of falling overboard. A life jacket is worn at all times when on deck. Operators are also exposed to a moderate degree of noise and vibration from the engines, and to greater noise levels and to soil from grease and other chemical substances when servicing or making minor mechanical repairs to engines and equipment.

**MASTER, TUG, CLASS I
XH-5782-13
EVALUATION STATEMENT**

1. REFERENCES:

- a. OPM, Handbook of Occupational Groups and Families, WG-5782 series, Ship Operating, August 2001
- b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Subject position serves as Master of a tugboat greater than 65 feet in length, with assigned crew, usually engaged in tending and supplying floating plant construction and maintenance units and collecting drift, wreckage and debris. Vessels of this type typically operate in rivers, channels or harbor areas, where they tend a variety of floating plant engaged in harbor/channel/waterway maintenance. Vessel operation may be single or multi-watch depending on the work situation. Position is descriptively titled Master, Tug, Class I, consistent with maritime industry practices.

This position exceeds the XH-08 benchmark for the Master, Tug, Class II, which operates a smaller tugboat than the Tug, Class I resulting in less complex work assignments, and has a smaller crew complement. This position does not meet the Master, Towboat, XH-5784-16 level where the vessel is significantly larger, the crew is much larger, and the vessel operates three shifts .

NOTES ON USING THIS BENCHMARK

In grading Master, Tug, Class I positions, there are several job characteristics which can be used as a basis for comparing work situations with the benchmark job. One ranking factor can be the physical characteristics of the vessel (i.e., length, horsepower, crew size). Significant differences from these parameters which impact upon the skill or licensing requirements of the operator, and which are clearly reflected in the work performed by the vessel, could be used to help support a higher or lower grade level for the operator. Other criteria which may be considered in ranking Master, Tug, Class I jobs are factors such as the size and types of tows transported, channel and weather conditions under which the vessel operates, nature of assignments, etc. Therefore, local work situations which regularly require transport of significantly larger tows or which are limited only to much smaller tows could use this difference as a factor in support of a different grade level. Similarly, vessels which regularly work on open waters or in severely restricted channels which make navigation or maneuvering difficult, or which are required to operate regardless of the severity of weather or sea conditions could use these differences as partial justification for higher grades.

MAJOR DUTIES

Serves as First Mate aboard a Class IV diesel towboat engaged in towing, river inspection, and channel marking operations. Stands a regular watch, but is on call at all times. Supervises the work of deck crew. Duties require a U.S. Coast Guard inland mates license.

1. Stands a regular watch and supervises the deck crew engaged in making up and breaking up tows, general housekeeping, and various deck work as follows:
 - a. Fastens, lashes or otherwise secures floating plant with cable, rope, ratchets, etc., to ensure safe towing or mooring.
 - b. Checks tow en route, tightening, loosening and adjusting lashings as required.
 - c. Places, cleans and inspects running, search and mooring lights.
 - d. Inspects and de-waters bilge leakage. Repairs, when possible en route, or notifies Master of condition.
 - e. Operates deck equipment such as winches and capstans to secure tow, move or hoist heavy items.
 - f. Splices lines, makes slings and rigs, loads and unloads supplies; helps repair crews; and chips, paints, sweeps, and washes down decks and bulkheads.
2. Personally signals Master or Pilot on watch or maintains radio contact during the making up and breaking up of tows. Notifies Master or Pilot when tow is secure and/or ready to get under way. Enforces safety regulations and instructs crew on both safe work procedures and work practices peculiar to floating plant. Conducts fire, lifeboat and man-overboard drills. Requisitions and insures needed supply of rope, paint, soap, tools, ratchets, safety equipment, etc.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Applies knowledge of navigational rules and regulations as evidenced by possession of a U.S. Coast Guard inland mates license. Applies knowledge of towboat operations, sequence of work activities, the deck operations and maintenance requirements imposed. Applies knowledge of how such operational characteristics impact deck operation and maintenance requirements.

Applies knowledge of the operational characteristics and limitations of the deck equipment and machinery winches, deck equipment controls, etc. Applies knowledge of equipment lubrication and maintenance requirements. Applies knowledge of material, supplies and equipment necessary to support deck operation and of the procurement and supply procedures and requirements necessary to obtain such items to provide timely and effective support of towing operations.

RESPONSIBILITY

Works under the general supervision of the Master, who verbally lays out the work to be accomplished and spot-checks work in progress and/or after completion for compliance with instructions. Supervisor relies on incumbent to carry out assignments on own initiative in accordance with established practices.

PHYSICAL EFFORT

Work requires walking, bending, reaching, and standing for long periods. Moderate lifting is required in loading supplies.

WORKING CONDITIONS

Work is performed in the pilot house, on deck and in other locations of the vessel. Spends most of the time on the deck. Occasionally goes outside in all kinds of weather to attend to duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning is present in case of accident; therefore, life jackets are required at all times while on board. There is danger from traffic hazards, particularly in foggy weather and at night.

**FIRST MATE, TOWBOAT
XH-5784-11
EVALUATION STATEMENT**

1. REFERENCES:

- c. OPM, Handbook of Occupational Groups and Families, WG-5782 series, Ship Operating, August 2001
- b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Subject position serves as First Mate aboard a very large (over 110 feet in length) diesel towboat engaged in towing, river inspection, and channel marking operations. Stands a regular watch, but is on call at all times. Supervises the work of deck crew. Duties require a U.S. Coast Guard inland mates license. This work meets the series definition for the Riverboat Operating Series, WG-5784, which includes jobs involved in operating riverboats, towboats, with tows, self-propelled dredges and other similar craft, often larger than 55 meters (180 feet) in length engaged in transporting passengers and freight, moving non self-propelled vessels and floating plant, making hydrographic surveys, dredging and maintaining waterways, etc. The work includes steering the boat, standing watch, setting and maintaining speed and course, determining position using navigational aids, and coordinating activities of members of the crew. The work requires knowledge of river currents, stages, obstructions, navigation locks and dams, and the handling and operation of large vessels or tows on rivers. Position is descriptively titled First Mate, in keeping with prevailing maritime titling practices.

3. GRADE DETERMINATION:

Licensed floating plant positions are ranked based on private industry practices. The Mate is graded 5 levels below the Master. Since the Master of a 110 foot or greater towboat is graded at the XH-16 level, subject position is graded at the XH-11 level.

4. FINAL DETERMINATION: First Mate, Towboat, XH-5784-11.

NOTES ON USING THIS BENCHMARK

The grade of the First Mate is dependent on the grade of the Master. Refer to the notes on the Master, Towboat, Benchmark No. C-01. Once the grade of the Master is determined, the First Mate is graded five levels below the Master. If the Master is graded lower than the XH-16 level, the grade of the Mate is graded lower accordingly.

MAJOR DUTIES

Serves as Master of a derrickboat engaged in channel maintenance, marine construction, and hoisting services. Directs and is responsible for the proper maintenance, operation, administration, and safety of the vessel.

1. Supervises or directs and coordinates the activities of the crew in sweeping and probing waterways for rocks and obstructions; removing debris and wrecks; building and repairing docks, dikes, and revetments; placement and pickup of pipelines, pontoons, and anchors for mooring barge setup; driving piles; and loading equipment to and from other vessels. Works from plans or field notes showing location and extent of work to be performed. Locates area; makes necessary arrangements for accomplishing the work. Uses electronic positioning equipment for locating obstructions and for checking locations as work progresses.

Places vessel in position and directs the placement of anchors and fastening of lines, the operation of deck winches, and the anchoring of the boat.

2. Prepares detailed daily and monthly reports of operations. Requisitions fuel and other supplies and equipment. Trains new employees. Conducts fire, lifeboat, and man-overboard drills. Selects personnel, maintains discipline, recommends personnel actions and schedules leave.

3. Directs or performs the operation of hoisting and swinging engines on derrickboat engaged in removing obstructions and shoals in navigation channels. The incumbent or operator moves levers controlling the raising and lowering of the boom, the horizontal movement of the boom or the horizontal movement of the cab and boom, the height of the hoisting line, and the opening and closing of the bucket attachments. Maneuvers barge by using current and spuds, by casting and pulling with boom and bucket, or by signaling pilot to maneuver the barge. Makes heavy lifts to and from docks, other vessels, and from underwater areas. Operates clamshell buckets, rock hooks, orange peels, and grapples used in digging, lifting, and depositing dredged materials (such as rocks, sand, clay and snags). Deposits materials removed on to deck of derrickboat or on dump scow. Deck loads are later removed to disposal areas. Lifts driven piling and core rock from old existing structures and drives new piling and places new core material.

4. While operating the crane, exercises caution, applies strict safety standards to avoid accidents (such as snapping hoist cables or spilling hoisted loads) and is responsible for the safety of crew members around the crane and hoisting areas. Performs routine maintenance and repair work such as replacing work on broken engine parts, valves, cables, etc., and personally makes the more difficult slings and riggings. Directs members of the crew in performing preventive

maintenance and in making emergency repairs to equipment. Maintains daily progress records used in the preparation and submission of daily and weekly reports.

5. Supervises all repairs to house, hull, machinery and equipment, including major repair work on cables, sheaves, buckets, spuds, general cleaning and painting.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Must be able to follow oral and written instructions. Ability to read and interpret charts and to plan and plot courses to and from work locations on rivers and other waterways.

--Must have basic knowledge of navigation and a thorough knowledge of seamanship and equipment as evidence by possession of appropriate barge supervisor's license issued by the U.S. Coast Guard.

--Must have sufficient skill in boat handling to be able to operate the derrickboat safely under diverse weather, channel, traffic, and maneuvering conditions. Skill in the operation of engine and steering controls as well as the use of auxiliary equipment such as generators, winches, pumps, and other related items. Must be able to perform most routine operator-type maintenance and repairs.

RESPONSIBILITY

Incumbent receives orders or general instructions from the supervisor in charge of the work unit in terms of objectives to be achieved. Responsible for operations, maintenance, and repair of vessel and for safety of vessel and crew. Assesses weather and marine conditions and adapts operations accordingly, and assures that rules of the road and other required maritime practices are followed. Work is reviewed and evaluated in terms of the incumbent's effectiveness in the accomplishment of assignments, the maintenance and upkeep of the vessel, safety, the performance of administrative responsibilities and the direction of subordinates.

PHYSICAL EFFORT

Moderate physical effort is normally required in steering the vessel, walking, and climbing. Somewhat greater effort is required in accomplishing housekeeping and general maintenance work. Close hand and eye coordination is required when operating controls to maneuver vessel in traffic, in confined areas, and during derrick operations.

WORKING CONDITIONS

Work is performed both inside and outside aboard floating plant in all types of weather. There is danger of drowning due to accident or storm (and particularly due to improper lifting or handling of heavy objects which may cause the derrick to overturn). There is further danger of injury due to blasting operations. Is subject to cuts, bruises, sprains, and broken bones. The possibility of falling or slipping on wet or icy decks, ladders, etc., is always present. Although hazards involved are less than those of subordinate jobs because of supervisory functions, there is still exposure to unpleasant noise, heat, and fumes produced by the engine. Is exposed to dirt and grease when making minor repairs to vessel and machinery.

**MASTER, DERRICKBOAT
XH-5725-10
EVALUATION STATEMENT**

1. REFERENCES:

- a. OPM, JGS, Crane Operating, WG-5725, July 1999
- b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Subject position serves as Master of a derrickboat engaged in channel maintenance, marine construction, and hoisting services. Directs and is responsible for the proper maintenance, operation, administration, and safety of the vessel. Subject position directs and/or serves as an operator of a diesel or diesel-electric derrick or crane aboard a derrick barge or crane barge engaged in channel maintenance and hoisting services. The series that is closest to meeting describing this type of work is the Crane Operating Series, WG-5725. The series definition and the work described in the WG-5725 address land-based crane operating work. Subject position is descriptively titled Master, Derrickboat, to distinguish it from land based crane operating work and in keeping with prevailing maritime titling practices.

3. GRADE DETERMINATION:

Subject position performs the highest graded work aboard a derrickboat. In addition to operating the derrick or crane aboard the derrick barge, this position directs the crew assigned to the derrickboat. This includes directing the placement of the derrickboat in position, the placement of anchors and fastening of lines, the operation of deck winches and the anchoring of the boat, and preparing time sheets, daily work logs, inventories, etc. This position was placed on the Ladder Diagram in 1953 and paid from the supervisory pay schedule as the WS-10 level most closely matched the salaries of Derrickboat Masters at the time.

4. FINAL DETERMINATION: Master, Derrickboat, XH-5725-10

NOTES ON USING THIS BENCHMARK

If the duties, responsibilities and grade of the Master, Derrickboat, as well as the derrick barge characteristics, are significantly greater or less than this benchmark, the grade of the Master, Derrickboat may be graded higher or lower as well.

MAJOR DUTIES

Serves as Mate aboard a tugboat over 65 feet in length, 600-2000 horsepower, engaged in tending and supplying floating plant construction and maintenance units, setting and dropping buoys and ranges, and collecting drift, wreckage, and debris. Stands a regular watch, but is on call at all times. Alternates with the Master in operating the tug, and is in complete charge during assigned watch. Assumes full duties, responsibility, and authority in absence of Master. Supervises the work of deck crew. Duties require a U.S. Coast Guard inland mates license.

1. Directs and/or works with crew of 7-10 employees performing construction and maintenance duties such as slinging, rigging and tying lines fast to wrecks, nets, pilings, and buoys; tending drift collection nets, setting and dropping buoys, and ranges; dropping and operating drag and sweep bars; operating cranes or hoisting gear, etc. Assures the performance of all repair and maintenance outside the engine room and associated machinery to include cleaning and oiling deck machinery, renewing and replacing ropes, and other forms of general maintenance work to ship's gear and rigging. Ensures vessel is prepared to sail at the scheduled time, is seaworthy, properly crewed and fitted to accomplish assigned mission.

2. Navigates the vessel during assigned watch. Pilots and steers vessels by pilothouse controls. Maneuvers in abnormally heavy traffic including avoiding moving and moored vessels, combating strong winds, tides and currents. Follows navigation rules and regulations at various harbors, waterways, and on the open lakes. Observes weather conditions, forecasts, barometer, wind velocity, and other weather indicators to determine suitability for operation. Maintains daily pilothouse log of operations and other required records.

3. Enforces safety regulations and instructs crew on both safe work procedures and work practices peculiar to floating plant. Conducts fire, lifeboat and man-overboard drills. Requisitions and insures needed supply of rope, paint, soap, tools, ratchets, safety equipment, etc. Inspects major hull, house and equipment repairs and/or installations made in shipyards during annual and/or semi-annual overhauls, and reports results to the project engineer.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Applies knowledge of navigational rules and regulations as evidenced by possession of an appropriate U.S. Coast Guard Mates license. Applies knowledge of tugboat operations, sequence

of work activities, the deck operations and maintenance requirements imposed. Applies knowledge of how such operational characteristics impact deck operation and maintenance requirements.

--Applies knowledge of the operational characteristics and limitations of the deck equipment and machinery winches, deck equipment controls, etc. Applies knowledge of equipment lubrication and maintenance requirements. Applies knowledge of material, supplies and equipment necessary to support deck operation and of the procurement and supply procedures and requirements necessary to obtain such items to provide timely and effective support of towing operations.

RESPONSIBILITY

Works under the general supervision of the Master, who verbally lays out the work to be accomplished. Work is normally reviewed after completion for compliance with instructions. Supervisor relies on incumbent to carry out assignments on own initiative in accordance with established marine navigation rules and regulations and application of operational practices and techniques as associated with waterway and floating plant maintenance.

PHYSICAL EFFORT

Work requires walking up and down stairs and ladders, bending, reaching, and standing for long periods. Moderate lifting is required in loading supplies, operating crane and winch controls, and performing miscellaneous duties on deck.

WORKING CONDITIONS

Work is performed in the pilot house, on deck and in other locations of the vessel. Occasionally goes outside in all kinds of weather to attend to duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning is present in case of accident; therefore, life jackets are required at all times while on board. There is danger from traffic hazards, particularly in foggy weather and at night.

**MATE, TUG, CLASS I
XH-5784-09
EVALUATION STATEMENT**

1. REFERENCES:

- d. OPM, Handbook of Occupational Groups and Families, WG-5782 series, Ship Operating, August 2001
- b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Serves as Mate aboard a tugboat over 65 feet in length, 600-2000 horsepower, engaged in tending and supplying floating plant construction and maintenance units, setting and dropping buoys and ranges, and collecting drift, wreckage, and debris. Stands a regular watch, but is on call at all times. Alternates with the Master in operating the tug, and is in complete charge during assigned watch. Assumes full duties, responsibility, and authority in absence of Master. Supervises the work of deck crew. Duties require a U.S. Coast Guard mates license.

This work meets the series definition for the Ship Operating Series, WG-5782, which includes jobs involved in operating ships, tugboats, seagoing dredges, fishing vessels, or other similar vessels, often greater than 55 meters (180 feet) in length, engaged in transporting passengers and freight, towing or assisting the maneuvering of large vessels, making hydrographic and oceanographic surveys, drilling or probing subaqueous holes, conducting fishing operations, etc. The work includes navigating the ship, standing watch, setting and maintaining speed and course, using navigational aids and devices to compute position, and coordinating the activities of members of the crew. The work requires knowledge of the handling and operation of large vessels offshore or in the Great Lakes and/or large vessels under tow. Position is descriptively titled Mate, Tug, Class I, in keeping with prevailing maritime titling practices.

3. GRADE DETERMINATION:

Licensed floating plant positions are ranked based on private industry practices. The Mate is ranked 4 grade levels below the Master, Tug, Class I. Since the Master of a tugboat that is greater than 65 feet in length is graded at the XH-13 level, subject position is graded at the XH-09 level.

4. FINAL DETERMINATION: Mate, Tug, Class I, XH-5782-09

NOTES ON USING THIS BENCHMARK

The grade of the Mate is dependent on the grade of the Master. Refer to the notes on the Master, Tug, Class I, XH-5782-13, Bmk. No. C-03. Once the grade of the Master is determined, the Mate is graded four levels below the Master. If the Master is graded lower or higher than the XH-13 level, the grade of the Mate is graded higher or lower accordingly.

MAJOR DUTIES

Serves as an operator of a diesel or diesel-electric derrick or crane aboard a derrick barge or crane barge engaged in channel maintenance and hoisting services. The derrickboats have a displacement of up to 1000 tons, have load capacities up to 135 tons, and have boom lengths range up to 135 feet.

1. Operates levers controlling the raising and lowering of the boom, the horizontal movement of the boom or the horizontal movement of the cab and boom, the height of the hoisting line, and the opening and closing of the bucket attachments. Maneuvers barge by using current and spuds, by casting and pulling with boom and bucket, or by signaling pilot to maneuver the barge. Makes heavy lifts to and from docks, other vessels, and from underwater areas. Operates clamshell buckets, rock hooks, orange peels, and grapples used in digging, lifting, and depositing dredged materials (such as rocks, sand, clay and snags). Deposits materials removed on to deck of derrickboat or on dump scow. Deck loads are later removed to disposal areas. Lifts driven piling and core rock from old existing structures and drives new piling and places new core material.

2. While operating the crane, exercises caution, applies strict safety standards to avoid accidents (such as snapping hoist cables or spilling hoisted loads) and is responsible for the safety of crew members around the crane and hoisting areas. Performs maintenance and inspection of the plant before start of work. Inspects cables for wear, replacing those which are worn or frayed and directs lubrication of hoisting machinery as necessary.

3. Performs routine maintenance and repair work such as replacing work on broken engine parts, valves, cables, etc., and personally makes the more difficult slings and riggings. Directs members of the crew in performing preventive maintenance and in making emergency repairs to equipment. Maintains daily progress records used in the preparation and submission of daily and weekly reports.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Knowledge of vessel stability, ballasting, watertight integrity, construction and damage control. Knowledge of barge handling, including anchoring, mooring, positioning and towing.

RESPONSIBILITY

Receives oral work assignments to be accomplished from the barge master or supervisor. Work is evaluated in terms of efficient and economical operations as well as compliance with applicable instructions. Responsible for exercising knowledge of the derrickboat's capacities and limitations, checking rigging, estimating loads and distance, etc., in order to avoid capsizing the boat, injuring employees, damaging other plants and to obtain desired results. Performs work in accordance with regulations, plans, specifications, safety directives and various operating manuals. Responsible for the safety of the ground crew or other employees working in the area.

PHYSICAL EFFORT

Work requires walking, bending, reaching, standing for prolonged periods turning or moving hands, arms, feet and legs to direct or assist in operations on deck or below. Moderate physical effort is normally required in accomplishing tasks. Incumbent is subject to physical strain from swaying or jarring movements of the derrickboat.

WORKING CONDITIONS

Work is performed both inside and outside aboard floating plant in all types of weather. There is danger of drowning due to accident or storm (and particularly due to improper lifting or handling of heavy objects which may cause the derrick to overturn). There is further danger of injury due to blasting operations. Is subject to cuts, bruises, sprains, and broken bones. The possibility of falling or slipping on wet or icy decks, ladders, etc., is always present. Is exposed to dirt and grease when making repairs to vessel and machinery.

**OPERATOR, DERRICKBOAT
XH-5725-08
EVALUATION STATEMENT**

1. REFERENCES:

- e. OPM, JGS, Crane Operating, WG-5725, July 1999
- f. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Subject position serves as an operator of a diesel or diesel-electric derrick or crane aboard a derrick barge or crane barge engaged in channel maintenance and hoisting services. The series that is closest to meeting describing this type of work is the Crane Operating Series, WG-5725. The series definition and the work described in the WG-5725 address land-based crane operating work. Subject position is descriptively titled Operator, Derrickboat, to distinguish it from land based crane operating work and in keeping with prevailing maritime titling practices.

2. GRADE DETERMINATION:

Derrickboats are equipped with orange peel and clam shell buckets, slings, hooks, and shackles. Operators install, maintain and repair mechanical and structural features of navigation locks and dams, loading and unloading heavy equipment and materials to and from barges; maintaining channels by dredging shoals, removing snags, rocks, submerged vessels and other obstructions; driving wood and steel piling by using diesel pile-driving hammers and attachments. The operator maneuvers boat by using current and spuds, by casting and pulling with boom and bucket, or by signaling pilot of towboat, tender or tugboat to maneuver boat. The operator must compensate for the shifting of the barge on the water while under load and must assure the safety of crew members on the barge.

This work exceeds that of the Engineer, Derrickboat, XH-07, as the engineer is responsible for the stationery engines and equipment on the derrickboat, but does not have the added responsibility of operating the derrick or crane. This work does not meet the Master, Derrickboat, XH-10, level as the operator does not also have the responsibility for supervising the crew assigned to the derrickboat.

NOTES ON USING THIS BENCHMARK

Licensed floating plant positions are ranked based on private industry practices. The Derrickboat Operator is ranked two grades below the Master, Derrickboat. If the duties, responsibilities and grade of the Master, Tug, Class I, as well as the derrickbarge characteristics, are significantly greater or less than this benchmark, the grade of the Derrickboat Operator may be graded higher or lower as well.

MAJOR DUTIES

Serves as Second Mate aboard a large diesel towboat (over 100 feet in length) engaged in towing, river inspection, and channel marking operations. Stands a regular watch, but is on call at all times. Supervises the work of deck crew. Duties require a U.S. Coast Guard inland mates license.

1. Stands a regular watch and supervises the deck crew engaged in making up and breaking up tows, general housekeeping, and various deck work as follows:

- g. Fastens, lashes or otherwise secures floating plant with cable, rope, ratchets, etc., to ensure safe towing or mooring.
- h. Checks tow en route, tightening, loosening and adjusting lashings as required.
- i. Places, cleans and inspects running, search and mooring lights.
- j. Inspects and de-waters bilge leakage. Repairs, when possible en route, or notifies Master of condition.
- k. Operates deck equipment such as winches and capstans to secure tow, move or hoist heavy items.
- l. Splices lines, makes slings and rigs, loads and unloads supplies; helps repair crews; and chips, paints, sweeps, and washes down decks and bulkheads.

2. Personally signals Master or Pilot on watch or maintains radio contact during the making up and breaking up of tows. Notifies Master or Pilot when tow is secure and/or ready to get under way. Enforces safety regulations and instructs crew on both safe work procedures and work practices peculiar to floating plant. Conducts fire, lifeboat and man-overboard drills. Requisitions and insures needed supply of rope, paint, soap, tools, ratchets, safety equipment, etc.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Applies knowledge of navigational rules and regulations as evidenced by possession of a U.S. Coast Guard inland mates license. Applies knowledge of towboat operations, sequence of work activities, the deck operations and maintenance requirements imposed. Applies knowledge of how such operational characteristics impact deck operation and maintenance requirements.

Applies knowledge of the operational characteristics and limitations of the deck equipment and machinery winches, deck equipment controls, etc. Applies knowledge of equipment lubrication and maintenance requirements. Applies knowledge of material, supplies and equipment necessary to support deck operation and of the procurement and supply procedures and requirements necessary to obtain such items to provide timely and effective support of towing operations.

RESPONSIBILITY

Works under the general supervision of the Master, who verbally lays out the work to be accomplished and spot-checks work in progress and/or after completion for compliance with instructions. Supervisor relies on incumbent to carry out assignments on own initiative in accordance with established practices.

PHYSICAL EFFORT

Work requires walking, bending, reaching, and standing for long periods. Moderate lifting is required in loading supplies.

WORKING CONDITIONS

Work is performed in the pilothouse, on deck and in other locations of the vessel. Spends most of the time on the deck. Occasionally goes outside in all kinds of weather to attend to duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning is present in case of accident. Life jackets are required at all times while on deck. There is danger from traffic hazards, particularly in foggy weather and at night.

**SECOND MATE, TOWBOAT
XH-5784-08
EVALUATION STATEMENT**

1. REFERENCES:

- g. OPM, Handbook of Occupational Groups and Families, WG-5782 series, Ship Operating, August 2001
- b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Subject position serves as Second Mate aboard a very large (over 100 feet in length) diesel towboat engaged in towing, river inspection, and channel marking operations. Stands a regular watch, but is on call at all times. Supervises the work of deck crew. Duties require a U.S. Coast Guard inland mates license. This work meets the series definition for the Riverboat Operating Series, WG-5784, which includes jobs involved in operating riverboats, towboats, with tows, self-propelled dredges and other similar craft, often larger than 55 meters (180 feet) in length engaged in transporting passengers and freight, moving non self-propelled vessels and floating plant, making hydrographic surveys, dredging and maintaining waterways, etc. The work includes steering the boat, standing watch, setting and maintaining speed and course, determining position using navigational aids, and coordinating activities of members of the crew. The work requires knowledge of river currents, stages, obstructions, navigation locks and dams, and the handling and operation of large vessels or tows on rivers. Position is descriptively titled First Mate, in keeping with prevailing maritime titling practices.

3. GRADE DETERMINATION:

The First Mate is ranked 5 grade levels below the Master; the Second Mate is ranked 8 grade levels below the Master. Since the Master of a 100 foot or greater towboat is graded at the XH-16 level, subject position is graded at the XH-08 level.

4. FINAL DETERMINATION: Second Mate, Towboat, XH-5784-08.

NOTES ON USING THIS BENCHMARK

The grade of the Second Mate is dependent on the grade of the Master. Refer to the notes on the Master, Towboat, Benchmark No. C-01. Once the grade of the Master is determined, the Second Mate is ranked eight grades below the Master and three grades below the First Mate. If the Master is graded lower than the XH-16 level, the grade of the Second Mate is graded lower accordingly.

MAJOR DUTIES

Serves as Master of a tugboat less than 65 feet in length), with assigned crew, usually engaged in tending and supplying floating plant. Vessels of this type typically operate rivers, channels or harbor areas, where they tend a variety of floating plant engaged in harbor/channel/waterway maintenance.

1. Receiving orders or assignments, performs duties to pilot the tugboat and towing a variety of non-self-propelled craft such as: dredge SCOWS, sweep rafts, catamarans, pump barges, derrick barges, etc. used for harbor/channel maintenance. Sets and removes anchors of plant, and ties up and/or anchors barges in storage when not in use. Transports personnel, supplies, and equipment to and from working plant, insuring safety during transport.

2. Sets course of the ship, using navigational aids. Steers and navigates vessel through the restricted and heavily used harbors and channels and connecting waterways. Observes general weather conditions, uses forecasts and other appropriate indicators to determine when it is safe to travel.

3. Plans, directs and coordinates the work activities of assigned crew members. Establish deadlines and priorities, explains procedures and work methods, reviews work in progress, awards, promotion, transfer and discharge; provides crew training as required.

4. Conducts safety meetings and necessary life saving drills for the adequate protection of the crew. Maintains proper marine equipment aboard the vessel, such as: lights, fire, lifesaving, and first aid equipment. Requisitions, maintains and controls all necessary mess and maintenance supplies, equipment, tools, fuel, parts, as well as accountable property assigned to the vessel. Maintains daily log of operating, submits required operations and administrative reports.

5. Responsible for proper mechanical repairs and maintenance of the vessel, including minor repairs, painting, and housekeeping functions. Recommends the nature and extent of alterations and repairs, both mechanical and general, to be made during winter lay-up. Supervises and checks the work performed, and coordinates the repair work with estimates and approved budgets.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Knowledge of navigation rules and regulations required by the U.S. Coast Guard, for waters in which the vessel operates. Must have a current U.S. Coast Guard Master's license appropriate to the size and use of the assigned vessel.

--Ability to navigate and maneuver the vessel to required work locations, and conduct vessel handling or towing in a safe and efficient manner under diverse weather, channel, traffic, and maneuvering conditions. Skill in the operation of engine and steering controls as well as the use of auxiliary equipment such as generators, winches, pumps, and other related items.

--Knowledge of basic lifesaving and emergency first aid including launching of life rafts, use of survival suits, PFD s and work vest. Knowledge of immediate action required for severe bleeding, hypothermia, electrical shock and other life threatening situations. Knowledge of fire fighting, including classes of fires, fire fighting systems, equipment, and fire prevention, to include handling of dangerous materials and fuel.

--Knowledge of the characteristics and limitations of the vessel operated and its mechanical, electrical, electronic, and hydraulic systems in order to direct the safe and efficient operations and to make decisions concerning necessary maintenance and repairs. Must be able to perform most routine operator-type maintenance and repairs.

RESPONSIBILITY

Works under the administrative direction of the supervisor, who provides verbal instructions in the operation of the tug and in tending floating plant. Receives instruction as to time of movement, location to which plant is to be moved, manner which plant is to be moved, the manner of movement within the work area and points of pick-up and delivery of personnel and supplies. Responsible for performing work according to directives, district regulations and navigational rules. Has complete charge of the vessel. Notifies supervisor of any breakdowns, adverse weather conditions, or any matters likely to cause delay in operations. Work is occasionally spot-checked through supervisory visits for compliance with policy, regulations; and accomplishment of assigned objectives.

PHYSICAL EFFORT

Light physical effort is required while standing watch and operating the wheel and other controls. Somewhat greater effort is required in accomplishing housekeeping and general maintenance work. Occasional heavy effort is required in making and breaking tows, loading supplies and equipment, and accomplishing some repair work. Close hand and eye coordination is required when operating controls to maneuver vessel and tows in traffic and in confined areas. Extensive standing and walking may be necessary while standing watch.

WORKING CONDITIONS

Incumbent works predominately in an enclosed wheelhouse, but is also subject to working out on deck for brief periods in all types of weather conditions. Employee is exposed to injury from falls due to slippery decks and erratic movements of the vessel, and to the possibility of falling overboard. A life jacket is worn at all times when on deck. Operators are also exposed to a moderate degree of noise and vibration from the engines, and to greater noise levels and to soil from grease and other chemical substances when servicing or making minor mechanical repairs to engines and equipment.

MASTER, TUG, CLASS II
XH-5782-08
EVALUATION STATEMENT

3. REFERENCES:

- h. OPM, Handbook of Occupational Groups and Families, WG-5782 series, Ship Operating, August 2001
- i. U.S. Army Corps of Engineers Ladder Diagram, 1953

4. SERIES AND TITLE DETERMINATION:

Subject position serves as Master of a tugboat less than 65 feet in length), with assigned crew, usually engaged in tending and supplying floating plant. Vessels of this type typically operate rivers, channels or harbor areas, where they tend a variety of floating plant engaged in harbor/channel/waterway maintenance. Vessel operation may be single or multi-watch depending on the work situation. Crew is small (i.e., 2-6) depending on the number of shifts worked. Position is allocated to the Ship Operating Series, WG-5782, and descriptively titled Master, Tug, Class II, in keeping with prevailing maritime practices.

3. GRADE DETERMINATION:

This position exceeds the XH-07 benchmark for the Master, Tender, which works with closer supervision than the Tug Master does. The Tug Master has complete responsibility for and technically supervises the crew of the vessel. This position does not meet the XH-09 level (e.g., 2nd Mate, Pipeline Dredge, Class I, or Mate, Tug, Class I) as these positions have a larger crew and are subordinate to the Master of a much larger vessel (over 65 feet).

NOTES ON USING THIS BENCHMARK

In grading Tug Master positions, there are several job characteristics which can be used as a basis for comparing work situations with the benchmark job. One ranking factor can be the physical characteristics of the vessel (i.e., length, horsepower, and crew size). Significant differences from these parameters which impact upon the skill or licensing requirements of the operator, and which are clearly reflected in the work performed by the vessel, could be used to help support a higher or lower grade level for the operator. Other criteria which may be considered in ranking Tug Master jobs are factors such as the size and types of tows transported, channel and weather conditions under which the vessel operates, nature of assignments, etc. Therefore, local work situations which regularly require transport of significantly larger tows or which are limited only to much smaller tows could use this difference as a factor in support of a different grade level. Similarly, vessels which regularly work on open waters or in severely restricted channels which make navigation or maneuvering difficult, or which are required to operate regardless of the severity of weather or sea conditions could use these differences as partial justification for higher grades.

MAJOR DUTIES

Serves as operator of a tender (generally under 65 ft., single or multi-screwed, diesel powered, and rated at over 500 h.p.). Vessels of this type typically operate on inland rivers and waterways where they work either in close proximity and support to larger floating plant such as pipeline dredges, revetment plant, construction maintenance units, etc., or in a district's equipment pool from which they operate to provide long and short-range transport for supply and material barges (tows are usually 500 tons or less) between depots and worksites. Incumbent may be assigned to serve either as the sole operator on tenders which are used in single shift operations, or as the operator-in-charge over one or more lower graded operators on vessels engaged in multi-shift (more than 8 hours) operations.

1. Pilots the tender and controls the operation of engines by means of pilot house controls. Performs such activities as (a) adding and removing floating pontoon lines, setting and lifting dredge or plant anchors, and putting pontoon barges on range; (b) towing barges and other floating plant up to and including 500 tons on both short- and long-range tows; (c) shifting, moving, and spotting plant on location; and (d) transporting personnel, supplies and equipment. Plans and directs the day-to-day operation of the vessel and directs the activities of assigned crew members.

2. Prepares detailed daily and monthly reports of operations. Requisitions fuel and other supplies and equipment. Where subordinate operators and/or deckhands are assigned to the vessel, trains new employees; conducts fire, lifeboat, and man-overboard drills.

3. Maintains boat and engines in operating condition. Troubleshoots and takes corrective action by making minor operating repairs. Keeps boat in clean and orderly condition. Cares for property, including required fire protection, safety, and first aid equipment necessary for maintenance and operation of the boat.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Must be able to follow oral and written instructions. Ability to read and interpret charts and to plan and plot courses to and from work locations on rivers and other waterways.

--Must have sufficient skill in boat handling to be able to operate the tender and tows safely under diverse weather, channel, traffic, and maneuvering conditions. Skill in the operation of engine and steering controls as well as the use of auxiliary equipment such as generators,

winches, pumps, and other related items. Must be able to perform most routine operator-type maintenance and repairs.

--Must have basic knowledge of navigation and a thorough knowledge of seamanship and equipment as evidenced by possession of U.S. Coast Guard Master's license appropriate to the size and use of the assigned vessel. Must be able to obtain a district boat operator's permit.

RESPONSIBILITY

Depending upon the work situation, incumbent receives orders or general instructions from either the supervisor in charge of the work unit (dredge master or maintenance foreman) or from the chief of the equipment pool. Supervisory controls range from work which may be accomplished in the immediate vicinity and under close technical direction, to activities which require following only general administrative directions covering the scheduling and logistics of the trip. Incumbent is directly responsible for the operation and safety of the vessel. Assesses weather and marine conditions and adapts operations accordingly, and assures that rules of the road and other required maritime practices are followed. Work is reviewed and evaluated in terms of incumbent's effectiveness in the accomplishment of assignments, the maintenance and upkeep of the vessel, safety, the performance of administrative responsibilities and the direction of subordinates.

PHYSICAL EFFORT

Light physical effort is required while standing watch and operating the wheel and other controls. Somewhat greater effort is required in accomplishing housekeeping and general maintenance work. Occasional heavy effort is required in making and breaking tows, loading supplies and equipment, and accomplishing some repair work. Close hand and eye coordination is required when operating controls to maneuver vessel and tows in traffic and in confined areas. Extensive standing and walking may be necessary while standing watch.

WORKING CONDITIONS

Incumbent works predominately in an enclosed wheelhouse, but is also subject to working out on deck for brief periods in all types of weather conditions. Employee is exposed to injury from falls due to slippery decks and erratic movements of the vessel, and to the possibility of falling overboard. A life jacket is worn at all times when on deck. Operators are also exposed to a moderate degree of noise and vibration from the engines, and to greater noise levels and to soil from grease and other chemical substances when servicing or making minor mechanical repairs to engines and equipment.

MASTER, TENDER

XH-5784-07

EVALUATION STATEMENT

1. REFERENCES:

- a. OPM, Handbook of Occupational Groups and Families, August 2001
- b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Subject position serves as operator of a tender (generally under 65 feet). Vessels typically operate on inland rivers and waterways providing support to larger floating plant or providing long and short-range transport for supply and material barges between depots and worksites. The work requires knowledge of the effects of river conditions on the steering and handling of vessels and tows, and the ability to negotiate tows through navigation locks. While the size of the vessels operated are smaller than those which are typical of the series, the nature of the skills required and the environment in which the work is performed clearly indicate that classification to the WG-5784 series is proper.

Since there are no published job grading standards nor specified titles for the WG-5784 series, fabrication of a local job title is allowed. Subject position operates vessels which serves as tenders to larger plant. A Master's license is required; therefore, the title of Master, Tender, is considered appropriate.

3. GRADE DETERMINATION:

Subject position is the master of a tender that is generally under 65 feet but over 45 feet in length, typically more than one engine, with over 300 horsepower. This type of tender operates on inland rivers and waterways. This is a general purpose tender which typically works out of an equipment pool or depot, although some may provide direct support to a field unit. These vessels are used for local channel patrol or reconnaissance work, picket duty, or to make up and transport supply and material barges and other equipment tows (usually not over 2500 tons) around district waterways. They also provide assistance in moving plant around the worksite if supporting a field unit. Vessel operation may be single or multi-watch depending on the work situation. Crew is small (i.e., 2-6) depending on the number of shifts worked. Operators perform routine vessel maintenance and repair work. Reports to the on-site construction superintendent, depot/equipment pool, hired labor unit, dredge officer, etc.

While these vessels perform many tasks similar to those of the towboats described elsewhere in the Ladder Diagram, tenders do not operate with the independence of towboats. These vessels are used for local channel patrol or reconnaissance work, picket duty, or to make up and transport supply and material barges and other equipment tows (usually not over 2500 tons) around district waterways. They also provide assistance in moving plant around the worksite if supporting a field unit.

The Master, Tender, benchmark job is allocated to the XH-07 grade level. The XH-5784-07 level is the lowest level for an operator in charge of a floating plant vessel. It exceeds the XH-06 benchmark for the Mate, Tug, Class II, which is subordinate to the operator in charge of the vessel. It does not meet the Master, Tug, Class II, XH-5784-08 level, as the Master, Tender, is under the general supervision of the on-site construction superintendent, depot/equipment pool, hired labor unit, dredge officer, etc., who provide instructions as to the specific objectives to be met. In contrast, the Tug Master receives administrative supervision.

NOTES ON USING THIS BENCHMARK:

In grading Tender Operator positions, there are several job characteristics which can be used as a basis for comparing work situations with the benchmark job. One ranking factor can be the physical characteristics of the vessel (i.e., length, horsepower, crew size). Significant differences from these parameters which impact upon the skill or licensing requirements of the operator, and which are clearly reflected in the work performed by the vessel, could be used to help support a higher or lower grade level for the operator. Other criteria which may be considered in ranking Tender Operator jobs are factors such as the size and types of tows transported, channel and weather conditions under which the vessel operates, nature of assignments, etc. Therefore, local work situations which regularly require transport of significantly larger tows or which are limited only to much smaller tows could use this difference as a factor in support of a different grade level. Similarly, vessels which regularly work on open waters or in severely restricted channels which make navigation or maneuvering difficult, or which are required to operate regardless of the severity of weather or sea conditions could use these differences as partial justification for higher grades. Tenders which are regularly used for other special purposes besides the transport of tows (i.e., as picket boats, for drilling, etc.) where additional, different, or greater skills are required should be reviewed to assess the grade level impact of this work.

MAJOR DUTIES

Serves as operator of a diesel-powered survey tender approximately 60' to 65' in length. Vessels of this type operate on inland rivers and waterways, in large bay areas, and in open ocean waters, in support of hydrographic survey work and when performing dragging operations in locating wrecks and other obstructions to navigation. Serves as a tender in towing other floating plant and when delivering supplies and subsistence, as required. Directs the work of assigned crew members.

1. Pilots the survey boat and controls operation of engines by means of pilothouse controls. During hydrographic surveys, skillfully controls the travel of the boat and steers accurately by channel ranges or compass, with due allowances for wind, tide, and cross currents, and maintains constant alertness for floating obstacles that would damage the boat and equipment during operations. Places temporary channel markers, ranges, and gages as required.
2. Operates survey tender in towing other floating plant and delivering supplies and subsistence, when required.
3. Plans and directs the day-to-day operation of the vessel and directs the activities of assigned crew members. Prepares detailed daily and monthly reports of operations. Requisitions fuel and other supplies and equipment. Where subordinate operators and/or deckhands are assigned to the vessel, trains new employees; conducts fire, lifeboat, and man-overboard drills; and selects personnel, maintains discipline, recommends personnel actions and schedules leave.
4. Maintains boat and engines in operating condition. Trouble-shoots and takes corrective action by making minor operating repairs. Keeps boat in clean and orderly condition. Cares for property, including required fire protection, safety, and first aid equipment necessary for maintenance and operation of the boat.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Must be able to follow oral and written instructions. Ability to read and interpret charts, and to plan and plot courses to and from work locations and during surveying operations.

--Must have sufficient skill in boat handling to be able to operate the vessel safely under diverse weather, channel, traffic, and maneuvering conditions. Skill in the operation of engine and

steering controls as well as the use of auxiliary equipment such as generators, pumps, winches, and other related items. Must be able to perform most routine operator-type maintenance and repairs.

--Must have basic knowledge of navigation and a thorough knowledge of seamanship and equipment as evidence by possession of U.S. Coast Guard boat operator's license appropriate to the size and use of the assigned vessel. Must be able to obtain a district boat operator's permit.

RESPONSIBILITY

Incumbent works under the general supervision of the chief of the work unit. Supervisory controls range from work under the close supervision of the chief of the survey party to activities which require following only general administrative directions covering the scheduling and logistics of the trip. Incumbent is directly responsible for the operation and safety of the vessel. Assesses weather and marine conditions and adapts operations accordingly, and assures that rules of the road and other required maritime practices are followed. Work is reviewed and evaluated in terms of incumbent's effectiveness in the accomplishment of assignments, the maintenance and upkeep of the vessel, safety, the performance of administrative responsibilities and the direction of subordinates.

PHYSICAL EFFORT

Light physical effort is required while standing watch and operating the wheel and other controls. Somewhat greater effort is required in accomplishing housekeeping and general maintenance work. Occasional heavy effort is required in making and breaking tows, loading supplies and equipment, and accomplishing some repair work. Close hand and eye coordination is required when operating controls to maneuver vessel and tows in traffic and in confined areas. Extensive standing and walking may be necessary while standing watch.

WORKING CONDITIONS

Incumbent works predominately in an enclosed wheelhouse, but is also subject to working out on deck for brief periods in all types of weather conditions. Employee is exposed to injury from falls due to slipper decks and erratic movements of the vessel, and to the possibility of falling overboard. A life jacket is worn at all times when on deck. Operators are also exposed to a moderate degree of noise and vibration from the engines, and to greater noise levels and to soil from grease and other chemical substances when servicing or making minor mechanical repairs to engines and equipment.

**SMALL CRAFT OPERATOR
XH-5786-07
EVALUATION STATEMENT**

1. REFERENCES:

- a. OPM, PCS, Small Craft Operator Series, WG-5786, September 1986.
- b. U.S. Army Corps of Engineers, Ladder Diagram, 1953

2. SERIES DETERMINATION:

Subject position operates survey tenders for the primary purpose of conducting hydrographic surveys of rivers, harbors, bay areas and oceans. Work requires the ability to steer and navigate vessels generally under 180 feet in length, operate the engines, and make operating repairs to the engines and the vessel itself. This work is covered by the Small Craft Operator, WG-5786, series. Position is titled Small Craft Operator.

3. GRADE DETERMINATION:

The grading of operators of survey boats is based upon several factors; e.g., size of the vessel, location of vessel operations, operating conditions, etc. In the Corps of Engineers, survey boats range in size from approximately 16 feet to over 65 feet. Survey boats that perform hydrographic and reconnaissance surveys of rivers, harbors, and waterways and transport material and supplies to and from floating plant are evaluated by the Department of the Army Manual of Evaluation Standards (DAMES). Survey boats that also serve as tenders towing other floating plant or are high speed cabin cruisers transporting high-ranking personnel on inspection tours and provide meals and living quarters are evaluated by the Ladder Diagram. Therefore, subject position is evaluated by the Ladder Diagram.

The XH-5786-07 level is the lowest level for an operator in charge of a floating plant vessel. It exceeds the XH-06 benchmark for the Mate, Tug, Class II, which is subordinate to the operator in charge of the vessel. It does not meet the Master, Tug, Class II, XH-5784-08 level, as the survey boat operator is under the general supervision of the on-board survey party chief who provides instructions as to the locations at which the work is to be performed. In contrast, the Tug Master receives administrative supervision from a supervisor who is not on board the vessel.

MAJOR DUTIES

Serves as operator of a gasoline-powered twin-screw high speed cabin cruiser approximately 60' to 65' in length and powered by two motors of approximately 630 horsepower each. Vessels of this type transport high-ranking officials on regular and special inspection tours on waterways throughout the district. Furnishes meals and living quarters for the general welfare and comfort of passengers. Directs the work of assigned crew members.

1. Lays out course to assigned destination. Pilots the survey boat and controls operation of engines by means of pilothouse controls. During inspection tours, skillfully controls the travel of the boat and steers accurately visually or by compass, with due allowances for wind, tide, and cross currents, and maintains constant alertness for floating obstacles that would damage the boat and equipment during operations.
2. Transports high ranking officers, civilian engineers, and official delegations, including members of Congress and influential personages, on regular and special inspection tours of waterways throughout the district. Provides for the general welfare and comfort of passengers, including the furnishing of meals and living quarters. Keeps boat and living quarters in clean and orderly condition.
3. Plans and directs the day-to-day operation of the vessel and directs the activities of assigned crew members. Prepares detailed daily and monthly reports of operations. Requisitions fuel and other supplies and equipment. Where subordinate operators and/or deckhands are assigned to the vessel, trains new employees; conducts fire, lifeboat, and man-overboard drills.
4. Maintains boat and engines in operating condition. Trouble-shoots and takes corrective action by making minor operating repairs. Keeps boat in clean and orderly condition. May assist in the making of overhaul and major repairs to hull and engines. Cares for property, including required fire protection, safety, and first aid equipment necessary for maintenance and operation of the boat.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Must be able to follow oral and written instructions. Ability to read and interpret charts, and to plan and plot courses to and from work locations and during surveying operations.

--Must have knowledge of basic rules of the road. Must have sufficient skill in boat handling to be able to operate the vessel safely under diverse weather, channel, traffic, and maneuvering conditions. Skill in the operation of engine, steering controls, and electrical equipment as well as the use of auxiliary equipment such as generators, pumps, winches, and other related items. Must be able to perform most routine operator-type maintenance and repairs.

--Ability to lay out courses to assigned destinations, avoiding shoals and other hazards and using navigational aids, landmarks, speed of boat, etc. Ability to interpret charts of local area to determine shallow channels, shore conformation, buoys, beacons, and landmark and plot positions of own and intruder vessels. Ability to load and maneuver cabin cruiser independently in situations of storm, reduced visibility, icing, and commercial and small craft traffic. Ability to explain and enforce safety regulations among passengers. Skill in the use of safety equipment such as life jackets, fire extinguishers and emergency signals.

--Must have basic knowledge of navigation and a thorough knowledge of seamanship and equipment as evidence by possession of U.S. Coast Guard boat operator's license appropriate to the size and use of the assigned vessel. Must be able to obtain a district boat operator's permit.

--Must have personnel management and supervisory skills.

RESPONSIBILITY

Incumbent works under the general supervision of the chief of the work unit, who provides verbal outlines and instructions covering the scheduling and logistics of the trip. Incumbent is directly responsible for the operation and safety of the vessel. Assesses weather and marine conditions and adapts operations accordingly, and assures that rules of the road and other required maritime practices are followed. Work is reviewed and evaluated in terms of incumbent's effectiveness in the accomplishment of assignments, the maintenance and upkeep of the vessel, safety, the performance of administrative responsibilities and the direction of subordinates.

PHYSICAL EFFORT

Light physical effort is required while standing watch and operating the wheel and other controls. Somewhat greater effort is required in accomplishing housekeeping and general

maintenance work. Occasional heavy effort is required in making and breaking tows, loading supplies and equipment, and accomplishing some repair work. Close hand and eye coordination is required when operating controls to maneuver vessel and tows in traffic and in confined areas. Extensive standing and walking may be necessary while standing watch.

WORKING CONDITIONS

Incumbent works predominately in an enclosed wheelhouse, but is also subject to working out on deck for brief periods in all types of weather conditions. Employee is exposed to injury from falls due to slippery decks and erratic movements of the vessel, and to the possibility of falling overboard. A life jacket is worn at all times when on deck. Operators are also exposed to a moderate degree of noise and vibration from the engines, and to greater noise levels and to soil from grease and other chemical substances when servicing or making minor mechanical repairs to engines and equipment.

**SMALL CRAFT OPERATOR
XH-5786-07
EVALUATION STATEMENT**

2. REFERENCES:

- c. OPM, PCS, Small Craft Operator Series, WG-5786, September 1986.
- d. U.S. Army Corps of Engineers, Ladder Diagram, 1953

2. SERIES DETERMINATION:

Subject position operates a high-speed cabin cruiser for the primary purpose of transporting high-ranking officials on regular and special inspection tours on waterways throughout the district. Work requires the ability to steer and navigate vessels generally under 180 feet in length, operate the engines, and make operating repairs to the engines and the vessel itself. This work is covered by the Small Craft Operator, WG-5786, series. Position is titled Small Craft Operator.

3. GRADE DETERMINATION:

The grading of operators of survey boats is based upon several factors; e.g., size of the vessel, location of vessel operations, operating conditions, etc. In the Corps of Engineers, survey boats range in size from approximately 16 feet to over 65 feet. Survey boats that perform hydrographic and reconnaissance surveys of rivers, harbors, and waterways and transport material and supplies to and from floating plant are evaluated by the Department of the Army Manual of Evaluation Standards (DAMES). Survey boats that also serve as tenders towing other floating plant or are high speed cabin cruisers transporting high-ranking personnel on inspection tours and provide meals and living quarters are evaluated by the Ladder Diagram. Therefore, subject position is evaluated by the Ladder Diagram.

The XH-5786-07 level is the lowest level for an operator in charge of a floating plant vessel. It exceeds the XH-06 benchmark for the Mate, Tug, Class II, which is subordinate to the operator in charge of the vessel. It does not meet the Master, Tug, Class II, XH-5784-08 level, as the survey boat operator is under the general supervision of the on-board survey party chief who provides instructions as to the locations at which the work is to be performed. In contrast, the Tug Master receives administrative supervision from a supervisor who is not on board the vessel.

MAJOR DUTIES

Serves as Third Mate aboard a large diesel towboat (over 100 feet in length) engaged in towing, river inspection, and channel marking operations. Stands a regular watch, but is on call at all times. Supervises the work of deck crew. Duties require a U.S. Coast Guard inland mates license.

1. Stands a regular watch and supervises the deck crew engaged in making up and breaking up tows, general housekeeping, and various deck work as follows:
 - m. Fastens, lashes or otherwise secures floating plant with cable, rope, ratchets, etc., to ensure safe towing or mooring.
 - n. Checks tow en route, tightening, loosening and adjusting lashings as required.
 - o. Places, cleans and inspects running, search and mooring lights.
 - p. Inspects and de-waters bilge leakage. Repairs, when possible en route, or notifies Master of condition.
 - q. Operates deck equipment such as winches and capstans to secure tow, move or hoist heavy items.
 - r. Splices lines, makes slings and rigs, loads and unloads supplies; helps repair crews; and chips, paints, sweeps, and washes down decks and bulkheads.
2. Personally signals Master or Pilot on watch or maintains radio contact during the making up and breaking up of tows. Notifies Master or Pilot when tow is secure and/or ready to get under way. Enforces safety regulations and instructs crew on both safe work procedures and work practices peculiar to floating plant. Conducts fire, lifeboat and man-overboard drills. Requisitions and insures needed supply of rope, paint, soap, tools, ratchets, safety equipment, etc.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Applies knowledge of navigational rules and regulations as evidenced by possession of a U.S. Coast Guard inland mates license. Applies knowledge of towboat operations, sequence of work activities, the deck operations and maintenance requirements imposed. Applies knowledge of how such operational characteristics impact deck operation and maintenance requirements.

Applies knowledge of the operational characteristics and limitations of the deck equipment and machinery winches, deck equipment controls, etc. Applies knowledge of equipment lubrication and maintenance requirements. Applies knowledge of material, supplies and equipment necessary to support deck operation and of the procurement and supply procedures and requirements necessary to obtain such items to provide timely and effective support of towing operations.

RESPONSIBILITY

Works under the general supervision of the Master, who verbally lays out the work to be accomplished and spot-checks work in progress and/or after completion for compliance with instructions. Supervisor relies on incumbent to carry out assignments on own initiative in accordance with established practices.

PHYSICAL EFFORT

Work requires walking, bending, reaching, and standing for long periods. Moderate lifting is required in loading supplies.

WORKING CONDITIONS

Work is performed in the pilothouse, on deck and in other locations of the vessel. Spends most of the time on the deck. Occasionally goes outside in all kinds of weather to attend to duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning is present in case of accident. Life jackets are required at all times while on deck. There is danger from traffic hazards, particularly in foggy weather and at night.

**THIRD MATE, TOWBOAT
XH-5784-08
EVALUATION STATEMENT**

1. REFERENCES:

- j. OPM, Handbook of Occupational Groups and Families, WG-5782 series, Ship Operating, August 2001
- b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Subject position serves as Third Mate aboard a very large (over 100 feet in length) diesel towboat engaged in towing, river inspection, and channel marking operations. Stands a regular watch, but is on call at all times. Supervises the work of deck crew. Duties require a U.S. Coast Guard inland mates license. This work meets the series definition for the Riverboat Operating Series, WG-5784, which includes jobs involved in operating riverboats, towboats, with tows, self-propelled dredges and other similar craft, often larger than 55 meters (180 feet) in length engaged in transporting passengers and freight, moving non self-propelled vessels and floating plant, making hydrographic surveys, dredging and maintaining waterways, etc. The work includes steering the boat, standing watch, setting and maintaining speed and course, determining position using navigational aids, and coordinating activities of members of the crew. The work requires knowledge of river currents, stages, obstructions, navigation locks and dams, and the handling and operation of large vessels or tows on rivers. Position is descriptively titled First Mate, in keeping with prevailing maritime titling practices.

3. GRADE DETERMINATION:

The First Mate is ranked 5 grade levels below the Master; the Second Mate is ranked 8 grade levels below the Master; and the Third Mate is ranked 9 grade levels below the Master. Since the Master of a 100 foot or greater towboat is graded at the XH-16 level, subject position is graded at the XH-07 level.

4. FINAL DETERMINATION: Third Mate, Towboat, XH-5784-08.

NOTES ON USING THIS BENCHMARK

The grade of the Third Mate is dependent on the grade of the Master. Refer to the notes on the Master, Towboat, Benchmark No. C-01. Once the grade of the Master is determined, the Third Mate is ranked nine grades below the Master; four grades below the First Mate; and one grade below the Second Mate. If the Master is graded lower than the XH-16 level, the grade of the Third Mate is graded lower accordingly.

MAJOR DUTIES

Serves as Mate of a tugboat less than 65 feet in length) usually engaged in tending and supplying floating plant. Vessels of this type typically operate rivers, channels or harbor areas, where they tend a variety of floating plant engaged in harbor/channel/waterway maintenance. NOTE: This job is required only when the tug operates on a two-shift basis.

1. Pilots the tugboat and tows a variety of non-self-propelled craft such as: dredge SCOWS, sweep rafts, catamarans, pump barges, derrick barges, etc. used for harbor/channel maintenance. Sets and removes anchors of plant, and ties up and/or anchors barges in storage when not in use. Transports personnel, supplies, and equipment to and from working plant, insuring safety during transport. Directs the work of assigned deckhands.

2. Sets course of the ship, using navigational aids. Steers and navigates vessel through the restricted and heavily used harbors and channels and connecting waterways. Observes general weather conditions, uses forecasts and other appropriate indicators to determine when it is safe to travel.

4. Assures the care and safety of the tug and plant in tow during the watch.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Knowledge of navigation rules and regulations required by the U.S. Coast Guard, for waters in which the vessel operates. Must have a current U.S. Coast Guard Mate's license appropriate to the size and use of the assigned vessel.

--Ability to navigate and maneuver the vessel to required work locations, and conduct vessel handling or towing in a safe and efficient manner under diverse weather, channel, traffic, and maneuvering conditions. Skill in the operation of engine and steering controls as well as the use of auxiliary equipment such as generators, winches, pumps, and other related items.

--Knowledge of basic lifesaving and emergency first aid including launching of life rafts, use of survival suits, PFDs and work vest. Knowledge of immediate action required for severe bleeding, hypothermia, electrical shock and other life threatening situations. Knowledge of fire

fighting, including classes of fires, fire fighting systems, equipment, and fire prevention, to include handling of dangerous materials and fuel.

--Knowledge of the characteristics and limitations of the vessel operated and its mechanical, electrical, electronic, and hydraulic systems in order to direct the safe and efficient operations. Must be able to perform most routine operator-type maintenance and repairs.

RESPONSIBILITY

Works under the administrative direction of the Master, who provides oral and written instructions in the operation and maintenance of the tug and in tending floating plant. Responsible for performing work according to directives, district regulations and navigational rules. Notifies supervisor of any breakdowns, adverse weather conditions, or any matters likely to cause delay in operations. Work is normally reviewed after completion for compliance with instructions.

PHYSICAL EFFORT

Light physical effort is required while standing watch and operating the wheel and other controls. Somewhat greater effort is required in accomplishing housekeeping and general maintenance work. Occasional heavy effort is required in making and breaking tows, loading supplies and equipment, and accomplishing some repair work. Close hand and eye coordination is required when operating controls to maneuver vessel and tows in traffic and in confined areas. Extensive standing and walking may be necessary while standing watch.

WORKING CONDITIONS

Incumbent works predominately in an enclosed wheelhouse, but is also subject to working out on deck for brief periods in all types of weather conditions. Employee is exposed to injury from falls due to slippery decks and erratic movements of the vessel, and to the possibility of falling overboard. A life jacket is worn at all times when on deck. Operators are also exposed to a moderate degree of noise and vibration from the engines, and to greater noise levels and to soil from grease and other chemical substances when servicing or making minor mechanical repairs to engines and equipment.

**MATE, TUG, CLASS II
XH-5782-06
EVALUATION STATEMENT**

5. REFERENCES:

- k. OPM, Handbook of Occupational Groups and Families, WG-5782 series, Ship Operating, August 2001
- l. U.S. Army Corps of Engineers Ladder Diagram, 1953

6. SERIES AND TITLE DETERMINATION:

Subject position serves as Master of a tugboat less than 65 feet in length), with assigned crew, usually engaged in tending and supplying floating plant. Vessels of this type typically operate rivers, channels or harbor areas, where they tend a variety of floating plant engaged in harbor/channel/waterway maintenance. Vessel operation may be single or multi-watch depending on the work situation. Crew is small (i.e., 2-6) depending on the number of shifts worked. Position is allocated to the Ship Operating Series, WG-5782, and descriptively titled Master, Tug, Class II, in keeping with prevailing maritime practices.

3. GRADE DETERMINATION:

Licensed floating plant positions are ranked based on prevailing maritime titling practices. The Mate is ranked 4 grade levels below the Master, Tug, Class II. Since the Master of a tugboat that is less than 65 feet in length is graded at the XH-08 level, subject position is graded at the XH-4 level.

4. FINAL DETERMINATION: Mate, Tug, Class II, XH-5782-06

NOTES ON USING THIS BENCHMARK

The grade of the Mate is dependent on the grade of the Master. Refer to the notes on the Master, Tug, Class II, XH-5782-08, Bmk. No. C-07. Once the grade of the Master is determined, the Mate is graded two levels below the Master. (On larger vessels, Mates are five grades below the Master.) If the Master is graded lower or higher than the XH-08 level, the grade of the Mate is graded higher or lower accordingly.

MAJOR DUTIES

Serves as Chief Engineer on a large (over 100 feet in length) diesel-powered twin screw towboat with a total horsepower of 2,000 hp or more operating in the inland waters of the United States. Supervises a subordinate staff of 2-12 employees assigned to separate shifts during vessel operations and employed as assistant engineer, striker, and/or marine-oiler. Stands a regular watch in the engine room. Exercises 24-hour responsibility for the operation, maintenance, and repair of all engine room and associated machinery, refrigeration, plumbing, heating, and hydraulic/electric/electronic systems.

1. Exercises supervisory responsibility over the engine room crew employed in several trades occupations including assistant engineers, strikers, and marine-oilers. Accomplishes the following supervisory duties and responsibilities:

a. Planning. Periodically inspects all engine room and auxiliary machinery, equipment, and systems to determine the condition, maintenance needs, and required operating repairs. Plans detailed work schedules, shift assignments, and sequences of work operations for subordinates. Establishes deadlines and priorities on the basis of general work schedules, methods, and policies established by the Master. Determines work methods and procedures to be used; number and types of employees required; and tools, equipment, and materials required to accomplish the work. Determines how many assignments can be accomplished concurrently. Ensures that tools, materials, and supplies necessary to accomplish the work are available. Makes cost estimates and estimates materials and man-hours required to accomplish repairs. Consults with Master relative to recommendation for major operating repairs, and overhauls and obtains required authority for accomplishment of the work. Provides support to the Master in compiling annual lay-up repair, maintenance, and modification requirements.

b. Work Direction. Participates with considerable weight in the selection of workers. Assigns individuals to shifts and through the assistant engineers on the shift, directs the work efforts of subordinates. Explains work requirements, methods, and procedures; instructs subordinates in new work procedures; and provides technical advice and guidance when problems arise. Through the assistant engineers, reviews the work of shift crews and makes periodic inspections of all completed repairs. Makes adjustments, plans, assignments, and methods as necessary to accomplish the work as effectively and economically as possible. Determines the tools, equipment, supplies, and maintenance required on the shifts and takes action to assure the arrival of supplies, parts, and equipment as needed. Through subordinate assistant engineers, evaluates work in progress and assures that quality standards and quantity requirements are met. Coordinates the work of the engine room with related or impacted work of other towboat crews. Personally directs repairs involving major breakdown of equipment.

c. Administration. Schedules and approves leave of subordinates. Sets performance requirements and prepares performance appraisals. Counsels employees on problems and adjusts

informal complaints through discussion with employees, assistant engineers, and union representatives. Takes informal corrective action on conduct or performance problems and refers serious problems along with recommendations for disciplinary action to Master for resolution. Plans necessary on-the-job training and ensures that such training is effectively and adequately carried out. Promotes the participation of subordinates in programs such as the suggestion program, cost reduction program, etc. Periodically reviews job descriptions of subordinates for currency and accuracy; reports detailing of employees to jobs other than their own; initiates or participates in review and improvement of work methods, organizational features, and the structuring of positions to eliminate unnecessary ones. Accomplishes supervisory functions in accordance with organization EEO and Affirmative Action programs.

2. Prepares and maintains engine room production reports and records such as engine room logs and reports reflecting work performed, repairs made, temperature and/or gage readings, and monthly reports to Headquarters office. Compiles annual repair and overhaul lists and estimates the time and effort required to accomplish such work during the non-towing season.

Requisitions all spare and replacement parts and materials. Instructs and trains subordinates in the safe and efficient performance of their duties and studies the operations supervised with a view to correcting or reporting for correction any unsafe conditions or unsafe work practices that might cause injury to employees or persons or property damage.

3. Supervises, directs, and/or personally performs repair work of a highly technical nature. Inspects and diagnoses engine problems and determines the repairs necessary. Visually inspects the engine room, machinery and equipment, and electric and/or electronic systems to ensure that they are maintained in a clean and orderly fashion. Furnishes information as to the status of work and compiles workload data pertinent to the impact of repairs on operations plans and requirements. Maintains and secures all tools, supplies, and equipment issued to the engine room department.

3. Prepares machinery and equipment for preservation during lay-up. Supervises all repairs made to vessel mechanical and electrical equipment during annual lay-up repairs. Incumbent may be assigned to the maintenance and repair of floating plant or other essential duties during annual lay-up periods.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Must hold a U.S. Coast Guard Chief Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned.

--A knowledge of the vessel diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledge and skill requirements to

diagnose problems and malfunctions and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Applies the knowledge to understand how such equipment and systems operate individually or in combination and the ability to plan and lay out repair, replacement, maintenance, and modification plans and requirements ranging from those of a minor nature to those of extreme complexity. Applies a knowledge of the fuel, water, and waste treatments associated with the various equipment and systems.

--Knowledge and ability to interpret and apply working drawings, sketches, diagrams, blueprints, and various information in technical manuals. Applies knowledge of advanced shop math to accomplish computations pertinent to electricity and electronics, electronic equipment, air conditioning and heating, refrigeration and mechanical dimensions, tolerances and voltages. Applies skill and knowledge in the use of a variety of testing instruments including refrigeration gages, ammeters, ohmmeters, and temperature testers in diagnosing problems and malfunctions, and a variety of measuring devices including feeler gages, vernier calipers, inside and outside calipers and micrometers, thread gages, dial indicators, screw pitch gages, protractors, dividers, composers, steel squares, clinometers, etc. Applies skill to accomplish work to tolerances of .001 inch.

--Knowledge of the uses of lathes, shapers, and milling machines to understand the processes necessary for certain repairs. Knowledge and skill in the use of drill press, honing equipment, grinders, jig borers, jig grinders, power hacksaws, electric and acetylene welding and flame cutting processes, and a variety of electric and hand tools common to the trades involved. Applies a knowledge of the characteristics of a variety of metals and alloys such as stainless, monel, brass, bronze, babbitt, silver, aluminum, mild and hardened steels, etc.

RESPONSIBILITY

Works under the general supervision of the Master. Receives oral and written assignments including blueprints, drawings, and charts. Plans and accomplishes work in accordance with standard procedures, directives, regulations, U.S. Coast Guard regulations, and overall marine requirements. Receives no technical guidance or technical supervision in operation and repair of engine room facilities and exercises independent judgment and initiative in connection with the operation and maintenance of all mechanical and electrical equipment. Work is subject to spot checks for proficiency of performance as determined from continuity of operation. Engine room facilities are subject to periodic inspections by U.S. Coast Guard for compliance with marine safety regulations.

WORKING CONDITIONS

Work is performed inside and outside subjecting employee to varying climatic conditions, abnormal noises, temperature, danger of burns, irritation from grease and oils, bruises, strains, danger from attending moving machinery, falling overboard, electrical shock, falls on slippery decks or steep stairways, possible drowning, and crankcase explosion. Life jackets are worn at all times while on deck.

PHYSICAL EFFORT

Incumbent performs work from ladders, scaffolding, and platforms and where the parts, equipment, or systems are in hard-to-reach places. Work requires the incumbent to stand, stoop, bend, kneel, crawl, climb, and work in a tiring and uncomfortable position. Frequently lifts, carries, and sets up parts and equipment that weighs up to 40 pounds.

**CHIEF ENGINEER, TOWBOAT
XH-4742-15
EVALUATION STATEMENT**

1. REFERENCES:

- a. OPM, JGS, Utility Systems Repairer-Operator Series, WG-4742, July 1993
- b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Position serves a Chief Engineer on a large (over 100 feet in length) diesel-powered twin screw towboat with a total horsepower of 2,000 hp or more. Employee supervises a staff of 2-12 employees assigned to separate shifts during vessel operations and employed as assistant engineer, striker, and/or marine-oiler. Duties require knowledge of the vessel diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledge and skill requirements to diagnose problems and malfunctions and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Employee must hold a U.S. Coast Guard Chief Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. Position is allocated to the WG-4742 series. Position is titled Chief Engineer, Towboat, in keeping with prevailing maritime titling practices. The absence of the requirement for a Chief Engineer's license precludes classification as Chief Engineer, Towboat.

3. GRADE DETERMINATION:

This benchmark reflects the highest level of technical engine room and overall vessel mechanical and electrical repair expertise and requires an expert knowledge of the problem diagnosis, modification and repair of diesel, mechanical, hydraulic, electrical/electronic equipment, systems, and auxiliary plant and machinery. Requirements at this level include:

- (1) Work is not subject to technical supervision and includes responsibility for all engine room operation, maintenance and repair functions on a 24-hour basis.
- (2) The large size and horsepower of the towboat, the volume, scope and variety of the machinery, equipment and systems which must be maintained, repaired or modified involves

substantial complexities and requires that the incumbent possess expert mechanical, hydraulic, electric/electronic diagnostic repair knowledge and skills.

(3) The Engine Room maintenance, repair and modification requirements necessitate that the Chief Engineer exercise supervisory responsibilities for a subordinate staff of 2-12 employees assigned to separate shifts with each shift being supervised by a crew chief.

The grade of the Chief Engineer is ranked one grade level below that of the Master.

NOTES ON USING THIS BENCHMARK

Vessels that are significantly smaller in size, horsepower, volume and complexity of machinery, equipment, electrical/electronic systems requires significantly lesser diagnostic, repair, modification and maintenance skills, knowledges and work requirements. The Master of these types of vessels are graded lower than the XH-16 level. Once the grade of the Master is determined, the Chief Engineer is ranked one grade level below the Master.

No criteria is provided for a higher ranking since XH-15 represents the maximum level to which a Chief Engineer on a towboat may be assigned.

MAJOR DUTIES

Serves as Chief Engineer on a diesel-powered tugboat that is over 65' in length, has engines with 600-900 horsepower, and displaces approximately 100-200 tons. The vessel is engaged in tending and supplying floating plant construction and maintenance units, and in collecting drift, wreckage, and debris. Exercises responsibility for the operation, maintenance, and repair of all engine room and associated machinery, refrigeration, plumbing, heating, and hydraulic/electric/electronic systems.

1. Operates engines and other machinery such as bilge, fire and fuel pumps, high pressure air compressors, air tanks, hot water heating systems, capstan engines, the electrical system and other auxiliary power engines powering machinery, winch, lights, heating plant, etc. Is responsible for having engine in readiness for accomplishing directions received from the Master.
2. Tends and services all vessel equipment and maintains the engine room in a clean and orderly condition. Inspects electrical wiring, lights and motors, and makes repairs or replacements where needed. Cleans bilges. Inspects and tests air and fuel tanks, gauges and safety valves. Repacks stuffing box on propeller shaft and aligns shaft. Assures compliance with safety requirements in maintenance as well as operations of all plant. Furnishes information as to the status of work and compiles workload data pertinent to the impact of repairs on operations plans and requirements. Maintains and secures all tools, supplies, and equipment issued to the engine room department.
3. Prepares machinery and equipment for preservation during lay-up. Discusses with the tug master the nature and extent of vessel and equipment repairs and/or alterations to be accomplished during the off-season lay-up. Supervises all repairs made to vessel mechanical and electrical equipment during annual lay-up repairs. Incumbent may be assigned to the maintenance and repair of floating plant or other essential duties during annual lay-up periods.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Must hold a U.S. Coast Guard Chief Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned.--A knowledge of the vessel diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledge and skill requirements to diagnose problems and malfunctions and supervise and participate in the repair,

replacement, and modification of such machinery, engines, and systems. Applies the knowledge to understand how such equipment and systems operate individually or in combination and the ability to plan and lay out repair, replacement, maintenance, and modification plans and requirements ranging from those of a minor nature to those of extreme complexity. Applies knowledge of the fuel, water, and waste treatments associated with the various equipment and systems.

--Knowledge and ability to interpret and apply working drawings, sketches, diagrams, blueprints, and other information reflected in technical manuals. Applies knowledge of advanced shop math to accomplish computations pertinent to electricity and electronics, electronic equipment, air conditioning and heating, refrigeration and mechanical dimensions, tolerances and voltages. Applies skill and knowledge in the use of a variety of testing instruments including refrigeration gages, ammeters, ohmmeters, and temperature testers in diagnosing problems and malfunctions, and a variety of measuring devices including feeler gages, vernier calipers, inside and outside calipers and micrometers, thread gages, dial indicators, screw pitch gages, protractors, dividers, composers, steel squares, clinometers, etc. Applies skill to accomplish work to tolerances of .001 inch.

--Knowledge of the uses of lathes, shapers, and milling machines to understand the processes necessary for certain repairs. Knowledge and skill in the use of drill press, honing equipment, grinders, jig borers, jig grinders, power hacksaws, electric and acetylene welding and flame cutting processes, and a variety of electric and hand tools common to the trades involved. Applies a knowledge of the characteristics of a variety of metals and alloys such as stainless, monel, brass, bronze, babbitt, silver, aluminum, mild and hardened steels, etc.

RESPONSIBILITY

Works under the general supervision of the Master. Receives oral and written assignments including blueprints, drawings, and charts. Plans and accomplishes work in accordance with standard procedures, directives, regulations, U.S. Coast Guard regulations, and overall marine requirements. Receives no technical guidance or technical supervision in operation and repair of engine room facilities and exercises independent judgment and initiative in connection with the operation and maintenance of all mechanical and electrical equipment. Work is subject to spot checks for proficiency of performance as determined from continuity of operation. Engine room facilities are subject to periodic inspections by U.S. Coast Guard for compliance with marine safety regulations.

WORKING CONDITIONS

Work is performed inside and outside subjecting employee to varying climatic conditions, abnormal noises, temperature, danger of burns, irritation from grease and oils, bruises, strains, danger from attending moving machinery, falling overboard, electrical shock, falls on slippery decks or steep stairways, possible drowning, and crankcase explosion. A life jacket is worn at all times while on deck.

PHYSICAL EFFORT

Incumbent performs work from ladders, scaffolding, and platforms and where the parts, equipment, or systems are in hard-to-reach places. Work requires the incumbent to stand, stoop, bend, kneel, crawl, climb, and work in a tiring and uncomfortable position. Frequently lifts, carries, and sets up parts and equipment that weighs up to 40 pounds.

**CHIEF ENGINEER, TUG, CLASS I
XH-4742-12
EVALUATION STATEMENT**

1. REFERENCES:

- a. OPM, JGS, Utility Systems Repairer-Operator Series, WG-4742, July 1993
- b. U.S. Army Corps of Engineers Ladder Diagram

2. SERIES AND TITLE DETERMINATION:

Position serves a Chief Engineer on a Class I tug (over 65') diesel-powered tugboat. Duties require knowledge of the vessel diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledge and skill requirements to diagnose problems and malfunctions and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Employee must hold a U.S. Coast Guard Chief Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. Position is allocated to the WG-4742 series. Position is titled Chief Engineer, Tug, Class I, in keeping with prevailing maritime titling practices. The absence of the requirement for a Chief Engineer's license precludes classification as Chief Engineer, Tugboat.

3. GRADE DETERMINATION:

Chief Engineer positions are ranked one grade level below that of the Master of the vessel. Since the Master, Tug, Class I, is graded at the XH-13 level, the Chief Engineer, Tug, Class I, is graded at the XH-12 level

NOTES ON USING THIS BENCHMARK

Licensed floating plant positions are ranked based on private industry practices. The Chief Engineer is graded 1 level below the Master. If the duties, responsibilities and grade of the Master, Tug, Class I, as well as the vessel characteristics, are significantly greater or less than this benchmark, the grade of the Chief Engineer may be graded higher or lower as well.

MAJOR DUTIES

Serves as First Assistant to the Chief Engineer on a large (over 100 feet in length) diesel-powered twin screw towboat with a total horsepower of 2, 000 hp or more operating in inland waters of the United States. Serves as the principal assistant to the Chief Engineer in the operation, maintenance, and repair of all engine room and associated machinery, refrigeration, plumbing, heating, and mechanical/hydraulic and electric/electronic systems. Is assigned as a shift engineer and stands a regular watch and is responsible for the engine room work activities during that shift. Notifies the Chief Engineer in case of major breakdown of equipment and may, in the absence of the Chief Engineer, serve in that capacity with responsibility for all watches.

1. As principal assistant to the Chief Engineer, participates with the Chief in his supervisory planning, work direction, and administration duties and responsibilities and ensures that his orders are carried out by various work crews. Discusses feasibility of repairs and methods and procedures to be followed by crews on watch. Regularly assists Chief Engineer in planning work schedules, outlining repairs, making cost estimates, and preparing performance appraisals on employees on all shifts. May act in the absence of the Chief Engineer with the responsibility for the effective and continuous operation of all mechanical, hydraulic, and electrical equipment and systems aboard the vessel and is on 24-hour call.

2. Incumbent is assigned to a shift and directs one or two engine room personnel employed in marine-oiler and/or striker occupations. Exercises shift watch responsibility for the operation, maintenance, and repair of all engine room machinery and equipment, including the main propelling engines, winches, rudder mechanisms, generators, relays, starters, air compressors, fuel pumps, water pumps, fire pumps, refrigeration plants, drinking water and coolant systems, heating and cooling systems, related electrical and/or electronic systems, and similar equipment.

a. Maintains continuous operating efficiency to prevent damage to machinery. Makes regular and periodic inspections by visual and auditory means of all machinery to determine the operating condition and the need for maintenance and repairs. Makes minor adjustments and emergency repairs on own initiative and reports major defects to the Chief Engineer. Accomplishes repairs such as replacing bearings, castings, etc.; repairing fuel lines; grinding valves; replacing cylinders and pistons; and removing and replacing complete assemblies. Ensures that all moving parts are properly lubricated. Assists in painting equipment and keeping the engine room clean.

b. Controls the operation of heating, refrigeration, and plumbing systems by manipulating necessary winches, throttles, and switches. Checks and controls the quantity of fuel, oil, water, etc., furnished for proper operation of the vessel machinery. Observes gages such as pressure gages, vacuum gages, fuel oil gages, tachometers, pyrometers, etc., to determine the proper functioning of machinery. Makes inspections to check oil levels, motor generators,

gearboxes, generator temperatures, fuel levels, etc. Checks and controls the operation of heating, refrigeration, plumbing, waste disposal/treatment, and water supply systems noting any unusual or abnormal conditions and determines the causes and remedial action necessary. Checks all water systems to ensure proper chlorination in drinking water and proper chemicals for sedimentation and other purposes. Prepares reports of fuel oil and lubrication consumption and records readings of the gages during the watch.

c. Instructs and trains subordinates in procedures and methods and observes their work for accuracy and compliance with instructions. Lays out their work and instructs them on unusual or difficult work and inspects operations and completed work. Orients new employees and conducts exit interviews with employees who leave the service. Provides input to the Chief Engineer concerning subordinates performance appraisals. Reports disciplinary problems to the Chief Engineer for resolution. Prepares shift reports reflecting the work activities during the shift and maintains an engine room log of activities. Instructs and trains subordinates in the safe and efficient performance of their duties and studies the operations directed with a view to correcting or reporting for correction any unsafe condition or practice that might cause injury to employees or persons or property damage.

3. Participates in major repairs and maintenance during lay-up periods.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Must possess a U.S. Coast Guard Assistant Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. If required to serve as Chief Engineer, must possess a Chief Engineer's license. Applies a knowledge of the vessel: mechanical, hydraulic, electrical, and/or electronic equipment systems, and auxiliary equipment and machinery, and the related skill requirements to diagnose problems and malfunctions and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Applies the knowledge of understand how such equipment and systems operate individually or in combination and the ability to plan and lay out repair, replacement, maintenance, and modification plans and requirements ranging from those of a minor nature to those of extreme complexity. Applies a knowledge of the fuel and water treatments associated with the various equipment and systems.

--Knowledge and ability to interpret and apply working drawings, sketches, diagrams, blueprints, and various information reflected in technical manuals. Applies a knowledge of advanced shop math to accomplish computations pertinent to electricity and electronics, electrical equipment, air conditioning and heating, refrigeration and mechanical dimensions, tolerances, and voltages. Applies skill and knowledge in the use of a variety of testing instruments including ammeters, ohmmeters, refrigeration gages, and temperature testers in diagnosing problems and malfunctions, and a variety of measuring devices including feeler gages, vernier calipers, inside

and outside calipers and micrometers, thread gages, dial indicators, screw pitch gages, protractors, dividers, composers, steel squares, clinometers, etc. Applies skill to accomplish work to tolerances of .001 inch.

--Knowledge of the use of lathes, shapers, and milling machines to understand the processes necessary for certain repairs. Applies skill and knowledge in the use of honing equipment, grinders, jig borers, flame-cutting processes, and a variety of electric and hand tools common to the trades involved. Applies a knowledge of the characteristics of a variety of metals and alloys such as stainless steel, monel, brass, bronze, babbit, silver, aluminum, mild and hardened steels, etc.

RESPONSIBILITY

Works under the general supervision of the Chief Engineer who outlines work schedules and plans for repair work to be accomplished. Recommends and participates in changing work plans to prevent delays, shutdowns, or damage, or to increase efficiency. Accomplishes and directs minor adjustments and repair on own initiative and reports major problems and malfunctions to the Chief Engineer and participates with him in determining the action to be taken. Supervises the crew and personally makes major repairs as specified by the Chief Engineer and accomplishes such work under his general supervision. Supervisor is on call at all times to provide guidance and assistance. Work is spot checked during operation and periodically given a more detailed inspection for operational efficiency. Is in technical charge of the engine room during his shift and when serving as Chief Engineer. Work is guided by written and oral instructions; operational and repair manuals; drawings, wiring diagrams, and sketches; and standard marine engine room practices. Ensures that job requirements and engine room work activities comply with established safety procedures and regulations.

WORKING CONDITIONS

Work is performed inside and outside, subjecting employee to varying climatic conditions, abnormal noises, temperature, danger of burns, irritation from grease and oils, bruises, strains, danger from attending moving machinery, falling overboard, electrical shock, falls on slippery decks or steep stairways, possible drowning, and crankcase explosion. A life jacket is worn at all times while on deck.

PHYSICAL EFFORT

Incumbent performs work from ladders, scaffolding, and platforms and where the parts, equipment, or systems are in hard-to-reach places. Work requires the incumbent to stand, stoop, bend, kneel, climb, and work in a tiring and uncomfortable position. Frequently lifts, carries, and sets up parts and equipment that weigh up to 40 pounds.

**FIRST ASSISTANT ENGINEER, TOWBOAT
XH-4742-11
EVALUATION STATEMENT**

1. REFERENCES:

- a. OPM, JGS, Utility Systems Repairer-Operator Series, WG-4742, July 1993
- b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Position serves as the First Assistant to the Chief Engineer on a large (over 100 feet in length) diesel-powered twin screw towboat with a total horsepower of 2,000 hp or more operating in inland waters of the United States. Incumbent is assigned as a shift engineer and stands a regular watch, and is responsible for the engine room work activities during that shift. Directs one or two engine room personnel employed in marine-oiler and/or striker occupations. May act in the absence of Chief Engineer. Duties require a knowledge of the vessel diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledge and skill requirements to diagnose problems and malfunctions, and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Employee must hold a U.S. Coast Guard Assistant Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. If required to serve as Chief Engineer, must possess a Chief Engineer's license. Position is allocated to the WG-4742 series. Position is titled First Assistant Engineer, Towboat, in keeping with prevailing maritime titling practices. The absence of the requirement for serving as Assistant to the Chief Engineer precludes classification as a First Assistant Engineer.

3. GRADE DETERMINATION:

This position exercises the highest level of technical engine room supervision over diesel, mechanical, hydraulic, electronic/electric, diagnostic and repair work subordinate to the Chief Engineer. In addition to serving as an Engine Room Crew Chief on one of the shifts, employees in this job serve as assistant to the Chief Engineer, and participate in supervisory planning, work direction and administrative duties and responsibilities. Employees in this job may serve as Chief Engineer in his/her absence.

a. The volume, scope and variety of the machinery, equipment and systems which must be maintained, repaired or modified involves substantial operation and repair complexities and requirements necessitating that the incumbent possess journeyman mechanical, hydraulic, electronic/electric diagnostic and repair knowledges and skills.

b. Serving in charge of a shift requires the First Assistant to lead and direct one or more engine room personnel employed as Marine Oilers and Strikers or in comparable occupations.

The job requires serving as assistant to the Chief Engineer and assisting him in the accomplishment of his full foreman type responsibilities. The First Assistant Engineer is ranked one grade level below that of the Chief Engineer and five grades below that of the Master.

4. FINAL DETERMINATION: First Assistant Engineer, Towboat, XH-4742-11

NOTES ON USING THIS BENCHMARK

The grade of the First Assistant Engineer is ranked one grade level below that of the Chief Engineer and five grades below the Master. If the Master is graded lower because of the significantly lesser vessel characteristics, the First Assistant Engineer is graded lower accordingly.

The key difference between the First Assistant and the Second Assistant is that the First Assistant participates with the Chief in accomplishing his overall engine room supervisory responsibilities. Instances where this requirement is absent mandates classification as a Second Assistant Engineer.

No criteria is provided since the XH-11 level represents the maximum level to which a First Assistant Engineer on a towboat may be assigned.

MAJOR DUTIES

Serves as Assistant Engineer on a diesel-powered tugboat that is over 65' in length, has engines with 600-2,000 horsepower, and displaces approximately 100-200 tons. Stands a regular watch on a vessel is engaged in tending and supplying floating plant construction and maintenance units, and in collecting drift, wreckage, and debris. Directs the work of unlicensed engine-room crew.

1. Operates propelling engines and other machinery such as bilge, fire and fuel pumps, high pressure air compressors, air tanks, hot water heating systems, capstan engines, the electrical system and other auxiliary power engines powering machinery, winch, lights, heating plant, etc. Is responsible for having engine in readiness for accomplishing directions received from the Master.
2. Tends and services all vessel equipment and maintains the engine room in a clean and orderly condition. Inspects electrical wiring, lights and motors, and makes repairs or replacements where needed. Cleans bilges. Inspects and tests air and fuel tanks, gauges and safety valves. Repacks stuffing box on propeller shaft and aligns shaft. Assures compliance with safety requirements in maintenance as well as operations of all plant. Furnishes information as to the status of work and compiles workload data pertinent to the impact of repairs on operations plans and requirements. Maintains and secures all tools, supplies, and equipment issued to the engine room department.
3. Assists Chief Engineer with more complicated repairs. Assists in preparing machinery and equipment for preservation during lay-up.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Must hold a U.S. Coast Guard Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned.

--A knowledge of the vessel diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledge and skill requirements to diagnose problems and malfunctions and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Applies the knowledge to understand how such equipment and systems operate individually or in combination and the ability to plan and lay out repair, replacement, maintenance, and modification plans and requirements ranging from those of a minor nature to those of extreme complexity. Applies knowledge of the fuel, water, and waste treatments associated with the various equipment and systems.

--Knowledge and ability to interpret and apply working drawings, sketches, diagrams, blueprints, and other information reflected in technical manuals. Applies knowledge of advanced shop math to accomplish computations pertinent to electricity and electronics, electronic equipment, air conditioning and heating, refrigeration and mechanical dimensions, tolerances and voltages. Applies skill and knowledge in the use of a variety of testing instruments including refrigeration gages, ammeters, ohmmeters, and temperature testers in diagnosing problems and malfunctions, and a variety of measuring devices including feeler gages, vernier calipers, inside and outside calipers and micrometers, thread gages, dial indicators, screw pitch gages, protractors, dividers, composers, steel squares, clinometers, etc. Applies skill to accomplish work to tolerances of .001 inch.

--Knowledge of the uses of lathes, shapers, and milling machines to understand the processes necessary for certain repairs. Knowledge and skill in the use of drill press, honing equipment, grinders, jig borers, jig grinders, power hacksaws, electric and acetylene welding and flame cutting processes, and a variety of electric and hand tools common to the trades involved. Applies a knowledge of the characteristics of a variety of metals and alloys such as stainless, monel, brass, bronze, babbit, silver, aluminum, mild and hardened steels, etc.

RESPONSIBILITY

Works under the general supervision of the Chief Engineer who issues verbal orders and instructions regarding special or unusual details to be accomplished. Work is subject to spot checks for compliance with instructions. Engine room facilities are subject to periodic inspections by U.S. Coast Guard for compliance with marine safety regulations.

WORKING CONDITIONS

Work is performed inside and outside subjecting employee to varying climatic conditions, abnormal noises, temperature, danger of burns, irritation from grease and oils, bruises, strains, danger from attending moving machinery, falling overboard, electrical shock, falls on slippery decks or steep stairways, possible drowning, and crankcase explosion. A life jacket is worn at all times while on deck.

PHYSICAL EFFORT

Incumbent performs work from ladders, scaffolding, and platforms and where the parts, equipment, or systems are in hard-to-reach places. Work requires the incumbent to stand, stoop, bend, kneel, crawl, climb, and work in a tiring and uncomfortable position. Frequently lifts, carries, and sets up parts and equipment that weighs up to 40 pounds.

Bmk. No. C-24
ASSISTANT ENGINEER, TUG, CLASS I
XH-4742-09
EVALUATION STATEMENT

1. REFERENCES:

- a. OPM, JGS, Utility Systems Repairer-Operator Series, WG-4742, July 1993
- b. U.S. Army Corps of Engineers Ladder Diagram

2. SERIES AND TITLE DETERMINATION:

Position serves Assistant Engineer on a Class I tug (over 65') diesel-powered tugboat. Duties require knowledge of the vessel diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledge and skill requirements to diagnose problems and malfunctions and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Employee must hold a U.S. Coast Guard Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. Position is allocated to the WG-4742 series. Position is titled Assistant Engineer, Tug, Class I, in keeping with prevailing maritime titling practices. The absence of the requirement for a Chief Engineer's license precludes classification as Assistant Engineer, Tug, Class I.

3. GRADE DETERMINATION:

Assistant Engineer positions are ranked three grade levels below that of the Chief Engineer and four grade levels below the Master, Tug, Class I. Since the Master, Tug, Class I, is graded at the XH-13 level, the Assistant Engineer, Tug, Class I, is graded at the XH-09 level.

NOTES ON USING THIS BENCHMARK

Licensed floating plant positions are ranked based on private industry practices. The Assistant Engineer is ranked four grades below the Master and three grades below the Chief Engineer, Tug, Class I. If the duties, responsibilities and grade of the Master, Tug, Class I, as well as the vessel characteristics, are significantly greater or less than this benchmark, the grade of the Assistant Engineer may be graded higher or lower as well.

MAJOR DUTIES

Serves as a 2nd Assistant Engineer on a large (over 100 feet in length) diesel-powered twin screw towboat with a total horsepower of 2,000 hp or more operating in the inland waters of the United States. Stands a shift watch and supervises and participates in the work of one or two subordinates assigned to the shift employed as marine-oilers and/or strikers.

1. Exercises shift watch responsibility for the operation, maintenance, and repair of all engine room machinery and equipment, including the main propelling engines, winches, rudder mechanisms, generators, relays, starters, air compressors, fuel pumps, water pumps, fire pumps, refrigeration plants, drinking water and coolant systems, waste disposal/treatment systems, heating and cooling systems, related electrical, mechanical, hydraulic, and/or electronic systems, and similar equipment.

a. Maintains continuous operating efficiency to prevent damage to machinery. Makes regular and periodic inspections by visual and auditory means of all machinery to determine the operating condition and the need for maintenance and repairs. Makes minor adjustments and emergency repairs on own initiative and reports major defects to the Chief Engineer. Accomplishes repairs such as replacing bearings, castings, etc.; repairing fuel lines; grinding valves; replacing cylinders, and pistons; and removing and replacing complete assemblies. Ensures that all moving parts are properly lubricated. Assists with painting equipment and keeping the engine room clean.

b. Controls the operation of heating, refrigeration, and plumbing systems by manipulating necessary winches, throttles, and switches. Checks and controls the quantity of fuel, oil, water, etc., furnished for proper operation of the vessel machinery. Observes gages such as pressure gages, vacuum gages, fuel oil gages, tachometers, pyrometers, etc., to determine the proper functioning of machinery. Makes inspections to check oil levels, motor generators, gear boxes, generator temperatures, fuel levels, etc. Checks and controls the operation of heating, refrigeration, plumbing, and water supply systems noting any unusual or abnormal conditions and determines the causes and remedial action necessary. Checks all water systems to ensure proper chlorination in drinking water and proper chemicals for sedimentation and other purposes. Prepares reports of fuel oil and lubrication consumption and records readings of the gages during the watch.

c. Instructs and trains subordinates in procedures and methods and observes their work for accuracy and compliance with instructions. Lays out their work and instructs them on unusual or difficult work and inspects operations and completed work. Orients new employees and conducts exit interviews with employees who leave the service. Provides input to the Chief Engineer concerning subordinates performance appraisals. Reports disciplinary problems to the Chief Engineer for resolution. Prepares shift reports reflecting the work activities during the

shift and maintains an engine room log of activities. Instructs and trains subordinates in the safe and efficient performance of their duties and studies the operations directed with a view to correcting or reporting for correction any unsafe condition or practice that might cause injury to employees or persons or property damage.

2. Participates in major repairs and maintenance during layup periods.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Must possess a U.S. Coast Guard Assistant Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. Applies a knowledge of the vessel: mechanical, hydraulic, electrical, and/or electronic equipment systems, and auxiliary equipment and machinery; and the related skill requirements to diagnose problems and malfunctions and supervise and participate in the maintenance, repair, replacement, and modification of such machinery, engines, and systems. Applies the knowledge to understand how such equipment and systems operate individually or in combination and the ability to assist in planning and laying out repair, replacement, maintenance, and modification requirements ranging from those of a minor nature to those of a major nature. Applies knowledge of the fuel and water treatments associated with the various equipment and systems.

--Knowledge and ability to interpret and apply working drawings, sketches, diagrams, blueprints, and other information reflected in technical manuals. Applies knowledge of advanced shop math to accomplish computations pertinent to electricity and electronics, electrical equipment, air conditioning and heating, refrigeration and mechanical dimensions, tolerances, and voltages. Applies skill and knowledge in the use of a variety of testing instruments including ammeters, ohmmeters, refrigeration gages and temperature testers in diagnosing problems and malfunctions, and a variety of measuring devices including feeler gages, vernier calipers, inside and outside calipers and micrometers, thread gages, dial indicators, screw pitch gages, protractors, dividers, compasses, steel squares, clinometers, etc. Applies skill to accomplish work to tolerances of .001 inch.

--Knowledge of the use of lathes, shapers, and milling machines to understand the processes necessary for certain repairs. Applies skill and knowledge in the use of honing equipment, grinders, jig borers, flame-cutting processes, and a variety of electric and hand tools common to the trades involved. Applies a knowledge of the characteristics of a variety of metals and alloys such as stainless steel, monel, brass, bronze, babbitt, silver, aluminum, mild and hardened steels, etc.

RESPONSIBILITY

Works under the general supervision of the Chief or First Assistant Engineer who provides oral and written instructions outlining work schedules and plans for repair work to be accomplished. Recommends changes to work plans to prevent delays, shutdowns, or damage, or to increase efficiency. Accomplishes and directs minor adjustments and repairs on own initiative and reports major problems and malfunctions to the Chief Engineer along with recommendations for the action to be taken. Supervises the crew and personally makes major repairs as specified by the Chief Engineer and accomplishes such work under his close supervision. Supervisor is on call at all times to provide guidance and assistance. Work is spot checked during operation and periodically given a more detailed inspection for operational efficiency. Is in technical charge of the engine room during his shift. Work is guided by written and oral instructions; operational and repair manuals; drawings, wiring diagrams, and sketches; and standard marine engine room practices. Ensures that job requirements and engine room work activities comply with established safety procedures and regulations.

WORKING CONDITIONS

Work is performed inside and outside, subjecting employee to varying climatic conditions, abnormal noises, temperature, danger of burns, irritation from grease and oils, bruises, strains, dangers involved in attending moving machinery, possible drowning from falling overboard, electrical shock, falls on slippery decks or steep stairways, crankcase explosion. A lifejacket is worn at all times while on deck.

PHYSICAL EFFORT

Incumbent performs work from ladders, scaffolding, and platforms and where the parts, equipment, or systems are in hard-to-reach places. Work requires the incumbent to stand, stoop, bend, kneel, climb, and work in a tiring and uncomfortable position. Frequently lifts, carries, and sets up parts and equipment that weigh up to 40 pounds.

Bmk. No. C-25
SECOND ASSISTANT ENGINEER
XH-4742-08
EVALUATION STATEMENT

1. REFERENCES:

- a. OPM, JGS, Utility Systems Repairer-Operator Series, WG-4742, July 1993
- b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Position serves as a Second Assistant Engineer on a large (over 100 feet in length) diesel-powered twin screw towboat with a total horsepower of 2,000 hp or more operating in the inland waters of the United States. Employee stands a shift watch and supervises and participates in the work of one or two subordinates assigned on the shift employed as marine-oilers and/or strikers. Duties require a knowledge of the vessel diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledge and skill requirements to diagnose problems and malfunctions, and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Employee must hold a U.S. Coast Guard Assistant Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. Position is allocated to the WG-4742 series. Position is titled Second Assistant Engineer, Towboat, in keeping with prevailing maritime titling practices. The absence of a requirement for an Assistant Engineer's license precludes this position from being classified as an assistant engineer.

3. GRADE DETERMINATION:

This Benchmark reflects the highest level of Engine Room Shift Crew Chief duties, skills, knowledges and responsibilities for a towboat. The Second Assistant Engineer, Towboat, is ranked eight grade levels below the Master, seven grade levels below the Chief Engineer, and three grade levels below the First Assistant Engineer. Typically, jobs covered by this Benchmark involve the direction of an engine room shift crew composed of one or more personnel employed as Marine Oilers/Strikers.

- a. The engine room maintenance repair and modification requirements necessitates that the 2nd Assistant direct one or more engine room personnel employed in marine oiler and/or striker or comparable occupations.

b. The volume, scope and variety of the machinery, equipment and systems which must be maintained, repaired or modified involves substantial operations and repair complexities and requirements and requires that the incumbent possess journeyman mechanical, hydraulic, electronic/electrical diagnostic repair knowledge and skills.

4. FINAL DETERMINATION: Second Assistant Engineer, Towboat, XH-4742-08

NOTES ON USING THIS BENCHMARK

The Second Assistant Engineer, Towboat, is ranked eight grade levels below the Master, seven grade levels below the Chief Engineer, and three grade levels below the First Assistant Engineer. If the Master is graded lower because of the significantly lesser vessel characteristics, the Second Assistant Engineer is graded lower accordingly.

No criteria is provided since the XH-08 level represents the maximum level to which a Second Assistant Engineer on a towboat may be assigned.

XH-4742-07

MAJOR DUTIES

Serves as an engineer aboard a derrickboat engaged in channel maintenance and hoisting services or a shop barge that furnishes shop, power and operational facilities for a variety of maintenance and repair projects. The derrickboat or barge is towed from location to location by a towboat, tender or tugboat.

1. Operates stationary engines and equipment on a derrickboat or shop barge such as bilge pumps, fire pump, air compressors, generators, HVAC systems, sewage and water treatment plant, service water and fresh water pumps. Operates controls to start, stop, cut in and out, and synchronize generators for variation in demand. Adjusts remotely controlled circuit breakers, transformers and switches to regulate and maintain power voltage on distribution lines.
2. Performs journeyman level maintenance including installation of new equipment, diagnostic maintenance inspections, preventive maintenance, repairs, parts replacement and equipment and systems overhaul. Inspects, adjust, lubricates, tests, installs, calibrates, and/or performs major and minor repairs at regularly scheduled intervals. Utilizes plans, blueprints, wiring diagrams, engineering drawings, and electrical maintenance and repair manuals in performance of duties.
3. Compiles a list of parts and equipment needed for repairs, listing any major repairs to be made by commercial ship yards.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

-A knowledge of the barge's diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledge and skill requirements to diagnose problems and malfunctions and the repair, replacement, and modification of such machinery, engines, and systems. Applies the knowledge to understand how such equipment and systems operate individually or in combination and the ability to plan and lay out repair, replacement, maintenance, and modification plans and requirements ranging from those of a minor nature to those of extreme complexity. Applies a knowledge of the fuel, water, and waste treatments associated with the various equipment and systems.

--Knowledge and ability to interpret and apply working drawings, sketches, diagrams, blueprints, and various information reflected in technical manuals. Applies a knowledge of advanced shop math to accomplish computations pertinent to electricity and electronics, electronic equipment,

air conditioning and heating, refrigeration and mechanical dimensions, tolerances and voltages. Applies skill and knowledge in the use of a variety of testing instruments including refrigeration gages, ammeters, ohmmeters, and temperature testers in diagnosing problems and malfunctions, and a variety of measuring devices including feeler gages, vernier calipers, inside and outside calipers and micrometers, thread gages, dial indicators, screw pitch gages, protractors, dividers, compasses, steel squares, clinometers, etc. Applies skill to accomplish work to tolerances of .001 inch.

--Knowledge of the uses of lathes, shapers, and milling machines to understand the processes necessary for certain repairs. Knowledge and skill in the use of drill press, honing equipment, grinders, jig borers, jig grinders, power hacksaws, electric and acetylene welding and flame cutting processes, and a variety of electric and hand tools common to the trades involved. Applies a knowledge of the characteristics of a variety of metals and alloys such as stainless, monel, brass, bronze, babbitt, silver, aluminum, mild and hardened steels, etc.

--Duties require a Stationary Engineer's license.

RESPONSIBILITY

Works under the general supervision of the Master. Receives oral and written assignments including blueprints, drawings, and charts. Plans and accomplishes work in accordance with standard procedures, directives, regulations, U.S. Coast Guard regulations, and overall marine requirements. Receives technical guidance from the engineer in charge of floating plants in operation and repair of barge facilities and exercises independent judgment and initiative in connection with the operation and maintenance of all mechanical and electrical equipment. Work is subject to spot checks for proficiency of performance as determined from continuity of operation. Barge facilities are subject to periodic inspections by U.S. Coast Guard for compliance with marine safety regulations.

WORKING CONDITIONS

Work is performed inside and outside subjecting employee to varying climatic conditions, abnormal noises, temperature, danger of burns, irritation from grease and oils, bruises, strains, danger from attending moving machinery, falling overboard, electrical shock, falls on slippery decks or steep stairways, possible drowning, and crankcase explosion.

PHYSICAL EFFORT

Incumbent performs work from ladders, scaffolding, and platforms and where the parts, equipment, or systems are in hard-to-reach places. Work requires the incumbent to stand, stoop, bend, kneel, crawl, climb, and work in a tiring and uncomfortable position. Frequently lifts, carries, and sets up parts and equipment that weighs up to 40 pounds.

**ENGINEER, DERRICKBOAT
XH-4742-07
EVALUATION STATEMENT**

1. REFERENCES:

- a. OPM, JGS, Utility Systems Repairer-Operator Series, WG-4742, May 1974.
- b. U.S. Army Corps of Engineers Ladder Diagram

2. SERIES AND TITLE DETERMINATION:

Position serves a stationary engineer on a derrickboat. Duties require a knowledge of the derrick barge's diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledge and skill requirements to diagnose problems and malfunctions and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Employee must hold a Stationary Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. Position is allocated to the WG-4742 series. Position is titled Chief Engineer, Tug, Class II, in keeping with prevailing maritime titling practices. The absence of the requirement for a Chief Engineer's license precludes classification as Chief Engineer, Towboat.

3. GRADE DETERMINATION:

This represents the lowest level for a Chief Engineer in the Ladder Diagram. This work exceeds that of the Assistant Engineer, Tug, Class II, XH-4742-06, which is subordinate to the Chief Engineer. The work does not meet that of the Second Assistant Engineer, Towboat, XH-4742-08, which has a larger crew and which requires a U.S. Coast Guard engineer's license commensurate with the horsepower of the vessel to which assigned.

NOTES ON USING THIS BENCHMARK

Licensed floating plant positions are ranked based on private industry practices. The Chief Engineer is graded 1 level below the Master. If the duties, responsibilities and grade of the Master, Tug, Class II, as well as the vessel characteristics, are significantly greater than this benchmark, the grade of the Chief Engineer may be graded higher as well.

MAJOR DUTIES

Serves as Third Assistant Engineer on a large (over 100 feet in length) diesel-powered twin screw towboat with a total horsepower of 2,000 hp or more operating in the inland waters of the United States. This is a training position leading to the future assignment to a full performance Second Assistant Engineer position. The assignments of this job are generally the same as those for a Second Assistant Engineer but are performed under closer supervision of the Chief Engineer and higher grade engineers who provide greater than normal guidance. Is assigned regular watch responsibility and accomplishes on-the-job training in the supervision and accomplishment of the operation, maintenance, and repair of engine room equipment, machinery, and systems.

1. Exercises shift watch responsibility for the operation, maintenance, and repair of all engine room machinery and equipment, including the main propelling engines, winches, rudder mechanisms, generators, relays, starters, air compressors, fuel pumps, water pumps, fire pumps, refrigeration plants, drinking water and coolant systems, waste disposal/treatment systems, heating and cooling systems, related electrical and/or electronic systems, and similar equipment.

a. Trains in the planning and accomplishment of a shift program to ensure continuous operating efficiency to prevent damage to machinery. Makes regular and periodic inspections by visual and auditory means of all machinery to determine the operating condition and the need for maintenance and repairs. Makes routine minor adjustments on own initiative, receives guidance from higher-level engineers on emergency repairs, and reports major defects to the Chief Engineer. Accomplishes repairs such as replacing bearings, castings, etc.; repairing fuel lines; grinding valves; replacing cylinders and pistons; and removing and replacing complete assemblies. Ensure that all moving parts are properly lubricated. Assists with painting equipment and keeping the engine room clean.

b. Controls the operation of heating, refrigeration, and plumbing systems by manipulating necessary winches, throttles, and switches. Checks and controls the quantity of fuel, oil, water, etc., furnished for proper operation of the vessel machinery. Observes gages such as pressure gages, vacuum gages, fuel oil gages, tachometers, pyrometers, etc., to determine the proper functioning of machinery. Makes inspections to check oil levels, motor generators, gear boxes, generator temperatures, fuel levels, etc. Checks and controls the operation of heating, refrigeration, plumbing, and water supply systems, noting any unusual or abnormal conditions, identifies the causes and recommends remedial action to a higher level Engineer. Checks all water systems to ensure proper chlorination in drinking water and proper chemicals for sedimentation and other purposes. Prepares reports of fuel oil and lubrication consumption and records readings of the gages during the watch.

c. Instructs and trains subordinates in procedures and methods and observes their work for accuracy and compliance with instructions. Lays out their work and instructs them on unusual or difficult work and inspects operations and completed work. Provides input to the Chief Engineer concerning subordinates' performance appraisals. Reports disciplinary problems to the Chief Engineer for resolution. Prepares shift reports reflecting the work activities during the shift and maintains an engine room log of activities. Instructs and trains subordinates in the safe and efficient performance of their duties and studies the operations directed with a view to correcting or reporting for correction any unsafe condition or practice that might cause injury to employees or persons or property damage.

2. Participates in major repairs and maintenance during lay up periods.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

--Must possess a U.S. Coast Guard Assistant Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. Progressively develops a knowledge of the vessel: mechanical, hydraulic, electrical, and/or electronic equipment systems, and auxiliary equipment and machinery, and the related skill requirements to diagnose problems and malfunctions and supervise and participate in the maintenance repair, replacement, and modification of such machinery, engines, and systems. Applies the knowledge to understand how such equipment and systems operate individually or in combination. Receives continuous on-the-job training in planning and laying out repair, replacement, maintenance, and modification requirements ranging from those of a minor nature to those of a major nature. Applies knowledge of the fuel and water treatments associated with the various equipment and systems.

--Applies knowledge and ability to interpret and apply working drawings, sketches, diagrams, blueprints, and other information reflected in technical manuals. Applies knowledge of advanced shop math to accomplish computations pertinent to electricity and electronics, electrical equipment, air conditioning and heating, refrigeration and mechanical dimensions, tolerances, and voltages. Applies skill and knowledge in the use of a variety of testing instruments including ammeters, ohmmeters, refrigeration gages and temperature testers in diagnosing problems and malfunctions, and a variety of measuring devices including feeler gages, vernier calipers, inside and outside calipers and micrometers, thread gages, dial indicators, screw pitch gages, protractors, dividers, composers, steel squares, clinometers, etc. Applies skill to accomplish work to tolerance of .001 inch.

--Knowledge of the use of lathes, shapers, and milling machines to understand the processes necessary for certain repairs. Applies skill and knowledge in the use of honing equipment, grinders, jig borers, jig flame cutting processes, and a variety of electric and hand tools common to the trades involved. Applies a knowledge of the characteristics of a variety of metals and

alloys such as stainless steel, monel, brass, bronze, babbitt, silver, aluminum, mild and hardened steels, etc.

RESPONSIBILITY

Works under the close supervision of the Chief Engineer or a higher grade engineer. Receives specific oral and written instructions outlining work schedules and plans for repair work to be accomplished. Recommends changes to work plans to prevent delays, shutdowns, or damage, or to increase efficiency. Accomplishes and directs routine minor adjustments and repairs on own initiative and reports all problems and malfunctions to the Chief Engineer along with recommendations for the action to be taken. Directs the crew and personally makes major repairs as specified by the Chief Engineer and accomplishes such work under his close supervision. Requests higher level guidance when abnormal situations occur or when changes in plans are involved. Supervisor is on call at all times to provide guidance and assistance. Work is periodically inspected during process and reviewed in detail upon completion or at the end of the shift for operational efficiency. Is in technical charge of the engine room during his shift. Work is guided by written and oral instructions; operational and repair manuals; drawings, wiring diagrams, and sketches; and standard marine engine room practices. Ensures that job requirements and engine room work activities comply with established safety procedures and regulations.

WORKING CONDITIONS

Work is performed inside and outside subjecting employee to varying climatic conditions, abnormal noises, temperature, danger of burns, irritation from grease and oils, bruises, strains, dangers involved in attending moving machinery, possible drowning from falling overboard, electrical shock, falls on slippery decks or steep stairways, crankcase explosion. A lifejacket is worn at all times while on deck.

PHYSICAL EFFORT

Incumbent performs work from ladders, scaffolding, and platforms and where the parts, equipment, or systems are in hard-to-reach places. Work requires the incumbent to stand, stoop, bend, kneel, climb, and work in a tiring and uncomfortable position. Frequently lifts, carries, and sets up parts and equipment that weigh up to 40 pounds.

**THIRD ASSISTANT ENGINEER, TOWBOAT
XH-4742-07
EVALUATION STATEMENT**

1. REFERENCES:

- a. OPM, JGS, Utility Systems Repairer-Operator Series, WG-4742, July 1993
- b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Position serves as Third Assistant Engineer on a large (over 100 feet in length) diesel-powered twin screw towboat with a total horsepower of 2,000 hp or more operating in the inland waters of the United States. This is a training position leading to the future assignment to a full performance Second Assistant Engineer position. Incumbent is assigned regular watch responsibility. Duties require a knowledge of the vessel diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledges and skill requirements to diagnose problems and malfunctions, and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Employee must possess a U.S. Coast Guard Assistant Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. Position is allocated to the WG-4742 series. Position is titled Third Assistant Engineer, Towboat, in keeping with prevailing maritime titling practices. The absence of a requirement for an Assistant Engineers license precludes this position from being classified as an assistant engineer.

3. GRADE DETERMINATION:

This is a trainee job only and is designed to provide on-the-job training and development leading to a target level assignment as a Second Assistant Engineer, XH-4742-08. The grade will always be one grade lower than that of the target level job. Possession of an assistant engineer's license is necessary for assignment to a position covered by this Benchmark.

4. FINAL DETERMINATION: Third Assistant Engineer, Towboat, XH-4742-07

MAJOR DUTIES

Serves as Chief Engineer on a Class II tug (under 65') diesel-powered tugboat engaged in waterway maintenance. Exercises responsibility for the operation, maintenance, and repair of all engine room and associated machinery, refrigeration, plumbing, heating, and hydraulic/electric/electronic systems.

1. Operates engines and other machinery such as bilge, fire and fuel pumps, high pressure air compressors, air tanks, hot water heating systems, and the electrical system. Is responsible for having engine in readiness for accomplishing directions received from the Master.
2. Tends and services all vessel equipment and maintains the engine room in a clean and orderly condition. Inspects electrical wiring, lights and motors, and makes repairs or replacements where needed. Cleans bilges. Inspects and tests air and fuel tanks, gauges and safety valves. Repacks stuffing box on propeller shaft and aligns shaft. Assures compliance with safety requirements in maintenance as well as operations of all plant. Furnishes information as to the status of work and compiles workload data pertinent to the impact of repairs on operations plans and requirements. Maintains and secures all tools, supplies, and equipment issued to the engine room department.
3. Prepares machinery and equipment for preservation during lay-up. Discusses with the tug master the nature and extent of vessel and equipment repairs and/or alterations to be accomplished during the off-season lay-up. Supervises all repairs made to vessel mechanical and electrical equipment during annual lay-up repairs. Incumbent may be assigned to the maintenance and repair of floating plant or other essential duties during annual lay-up periods.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

- Must hold a U.S. Coast Guard Chief Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned.
- A knowledge of the vessel diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledge and skill requirements to diagnose problems and malfunctions and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Applies the knowledge to understand how such equipment and systems operate individually or in combination and the ability to plan and lay out repair, replacement, maintenance, and modification plans and requirements ranging from those of a minor nature to those of extreme complexity. Applies a knowledge of the fuel, water, and waste treatments associated with the various equipment and systems.
- Knowledge and ability to interpret and apply working drawings, sketches, diagrams, blueprints, and various information reflected in technical manuals. Applies a knowledge of advanced shop

math to accomplish computations pertinent to electricity and electronics, electronic equipment, air conditioning and heating, refrigeration and mechanical dimensions, tolerances and voltages. Applies skill and knowledge in the use of a variety of testing instruments including refrigeration gages, ammeters, ohmmeters, and temperature testers in diagnosing problems and malfunctions, and a variety of measuring devices including feeler gages, vernier calipers, inside and outside calipers and micrometers, thread gages, dial indicators, screw pitch gages, protractors, dividers, composers, steel squares, clinometers, etc. Applies skill to accomplish work to tolerances of .001 inch.

--Knowledge of the uses of lathes, shapers, and milling machines to understand the processes necessary for certain repairs. Knowledge and skill in the use of drill press, honing equipment, grinders, jig borers, jig grinders, power hacksaws, electric and acetylene welding and flame cutting processes, and a variety of electric and hand tools common to the trades involved. Applies a knowledge of the characteristics of a variety of metals and alloys such as stainless, monel, brass, bronze, babbitt, silver, aluminum, mild and hardened steels, etc.

RESPONSIBILITY

Works under the general supervision of the Master. Receives oral and written assignments including blueprints, drawings, and charts. Plans and accomplishes work in accordance with standard procedures, directives, regulations, U.S. Coast Guard regulations, and overall marine requirements. Receives no technical guidance or technical supervision in operation and repair of engine room facilities and exercises independent judgment and initiative in connection with the operation and maintenance of all mechanical and electrical equipment. Work is subject to spot checks for proficiency of performance as determined from continuity of operation. Engine room facilities are subject to periodic inspections by U.S. Coast Guard for compliance with marine safety regulations.

WORKING CONDITIONS

Work is performed inside and outside subjecting employee to varying climatic conditions, abnormal noises, temperature, danger of burns, irritation from grease and oils, bruises, strains, danger from attending moving machinery, falling overboard, electrical shock, falls on slippery decks or steep stairways, possible drowning, and crankcase explosion. A lifejacket is worn at all times while on deck.

PHYSICAL EFFORT

Incumbent performs work from ladders, scaffolding, and platforms and where the parts, equipment, or systems are in hard-to-reach places. Work requires the incumbent to stand, stoop, bend, kneel, crawl, climb, and work in a tiring and uncomfortable position. Frequently lifts, carries, and sets up parts and equipment that weighs up to 40 pounds.

Bmk. No. C-28
CHIEF ENGINEER, TUG, CLASS II
XH-4742-07
EVALUATION STATEMENT

1. REFERENCES:

- a. OPM, JGS, Utility Systems Repairer-Operator Series, WG-4742, July 1993.
- b. U.S. Army Corps of Engineers Ladder Diagram

2. SERIES AND TITLE DETERMINATION:

Position serves a Chief Engineer on a Class II tug (under 65') diesel-powered tugboat. Duties require knowledge of the vessel diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledge and skill requirements to diagnose problems and malfunctions and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Employee must hold a U.S. Coast Guard Chief Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. Position is allocated to the WG-4742 series. Position is titled Chief Engineer, Tug, Class II, in keeping with prevailing maritime titling practices. The absence of the requirement for a Chief Engineer's license precludes classification as Chief Engineer, Towboat.

3. GRADE DETERMINATION:

The grade of the Chief Engineer is ranked one grade level below that of the Master, Tug, Class II. Position is classified as Chief Engineer, Tug, Class II, XH-4742-07.

NOTES ON USING THIS BENCHMARK

Licensed floating plant positions are ranked based on private industry practices. The Chief Engineer is ranked one level below the Master. If the duties, responsibilities and grade of the Master, Tug, Class II, as well as the vessel characteristics, are significantly greater than this benchmark, the grade of the Chief Engineer may be graded higher as well.

MAJOR DUTIES

Serves as Assistant Engineer of a diesel-powered Class II tug (under 65'), usually engaged in tending and supplying floating plant. Vessels of this type typically operate rivers, channels or harbor areas, where they tend a variety of floating plant engaged in harbor/channel/waterway maintenance.

1. Incumbent is in complete charge of one shift of the engine room. Operates engines and other machinery such as bilge, fire and fuel pumps, high pressure air compressors, air tanks, hot water heating systems, and the electrical system. Is responsible for having engine in readiness for accomplishing directions received from the Master.

2. Tends and services all vessel equipment and maintains the engine room in a clean and orderly condition. Inspects electrical wiring, lights and motors, and makes repairs or replacements where needed. Cleans bilges. Inspects and tests air and fuel tanks, gauges and safety valves. Repacks stuffing box on propeller shaft and aligns shaft. Assures compliance with safety requirements in maintenance as well as operations of all plant. Furnishes information as to the status of work and compiles workload data pertinent to the impact of repairs on operations plans and requirements. Notifies the Chief Engineer of necessary major repairs to engines. Maintains and secures all tools, supplies, and equipment issued to the engine room department.

Performs other duties as assigned.

NOTE: This job is required only when the tug operates on a two-shift basis.

SKILLS AND KNOWLEDGES

--Must hold a U.S. Coast Guard Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned.

--A knowledge of the vessel diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledge and skill requirements to diagnose problems and malfunctions and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Applies the knowledge to understand how such equipment and systems operate individually or in combination and the ability to plan and lay out repair, replacement, maintenance, and modification plans and requirements ranging from those of a minor nature to those of extreme complexity. Applies a knowledge of the fuel, water, and waste treatments associated with the various equipment and systems.

--Knowledge and ability to interpret and apply working drawings, sketches, diagrams, blueprints, and various information reflected in technical manuals. Applies a knowledge of advanced shop math to accomplish computations pertinent to electricity and electronics, electronic equipment, air conditioning and heating, refrigeration and mechanical dimensions, tolerances and voltages. Applies skill and knowledge in the use of a variety of testing instruments including refrigeration gages, ammeters, ohmmeters, and temperature testers in diagnosing problems and malfunctions, and a variety of measuring devices including feeler gages, vernier calipers, inside and outside calipers and micrometers, thread gages, dial indicators, screw pitch gages, protractors, dividers, composers, steel squares, clinometers, etc. Applies skill to accomplish work to tolerances of .001 inch.

--Knowledge of the uses of lathes, shapers, and milling machines to understand the processes necessary for certain repairs. Knowledge and skill in the use of drill press, honing equipment, grinders, jig borers, jig grinders, power hacksaws, electric and acetylene welding and flame cutting processes, and a variety of electric and hand tools common to the trades involved. Applies a knowledge of the characteristics of a variety of metals and alloys such as stainless, monel, brass, bronze, babbitt, silver, aluminum, mild and hardened steels, etc.

RESPONSIBILITY

Works under the general supervision of the Chief Engineer. Receives oral and written assignments from the Chief Engineer including blueprints, drawings, and charts. Plans and accomplishes work in accordance with standard procedures, directives, regulations, U.S. Coast Guard regulations, and overall marine requirements. Work is subject to spot checks for proficiency of performance as determined from continuity of operation. Engine room facilities are subject to periodic inspections by U.S. Coast Guard for compliance with marine safety regulations.

WORKING CONDITIONS

Work is performed inside and outside subjecting employee to varying climatic conditions, abnormal noises, temperature, danger of burns, irritation from grease and oils, bruises, strains, danger from attending moving machinery, falling overboard, electrical shock, falls on slippery decks or steep stairways, possible drowning, and crankcase explosion.

PHYSICAL EFFORT

Incumbent performs work from ladders, scaffolding, and platforms and where the parts, equipment, or systems are in hard-to-reach places. Work requires the incumbent to stand, stoop, bend, kneel, crawl, climb, and work in a tiring and uncomfortable position. Frequently lifts, carries, and sets up parts and equipment that weighs up to 40 pounds.

Bmk. No. C-29
ASSISTANT ENGINEER, TUG, CLASS II
XH-4742-06
EVALUATION STATEMENT

1. REFERENCES:

- a. OPM, JGS, Utility Systems Repairer-Operator Series, WG-4742, May 1974.
- b. U.S. Army Corps of Engineers Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Position serves Assistant Engineer on a Class II tug (under 65') diesel-powered tugboat. Duties require a knowledge of the vessel diesel, electric, mechanical, hydraulic and/or electronic equipment, systems, and auxiliary plant and machinery, and the related knowledge and skill requirements to diagnose problems and malfunctions and supervise and participate in the repair, replacement, and modification of such machinery, engines, and systems. Employee must hold a U.S. Coast Guard Engineer's license commensurate with the type engine room machinery and equipment, horsepower, and characteristics of the vessel to which assigned. Position is allocated to the WG-4742 series. Position is titled Assistant Engineer, Tug, Class II, in keeping with prevailing maritime titling practices. The absence of the requirement for an Engineer's license precludes classification as Assistant Engineer, Towboat.

3. GRADE DETERMINATION:

The Assistant Engineer is one grade lower than the Chief Engineer, XH-07, in keeping with accepted maritime practice.

NOTES ON USING THIS BENCHMARK

The existence of each of the following elements represents a basis for grade increases:

(1) The significantly greater size, horsepower, volume and complexity of machinery, equipment, electrical/electronic systems requires significantly greater diagnostic, repair, modification and maintenance skills, knowledges and work requirements. However, the vessel characteristics do not meet the level of the Tug, Class I.

(2) Supervisory/Crew Chief responsibilities are significantly greater than that required for the Chief Engineer position.

XH-7404-03**MAJOR DUTIES**

Serves as the cook in charge of the galley and mess hall and is responsible for the preparation and serving of meals for the crew in accordance with standard operating procedures. Personally participates in and supervises and/or directs a crew of cooks and mess attendants in cooking, preparing, and serving meals including meats, fish, soups, poultry, vegetables, fruits, salads, breads, cakes, and desserts; and storage of commodities. Supervises subordinates in cleaning the galley, dining area, and crew quarters.

1. Plans and prepares three well-balanced, nutritious and appetizing meals daily. Prepares and cooks meats, vegetables, soups, and desserts. Bakes pies, cakes, rolls, and bread. Cuts meats and poultry into required daily rations. Supervises and/or directs mess attendants in serving meals, washing dishes and keeping galley and mess hall clean. Supervisors and/or directs a lower-grade cook in the preparation of the simpler foods.
2. Follows up on delays in equipment repairs and decides whether malfunctioning equipment can be repaired. Reports major breakdowns and non-routine delays to supervisor for action to prevent spoilage of food or delay in the preparation of meals. Makes progressive and final inspection of completed work for compliance with instructions, established work practices, and quality. Inspects the galley, mess hall, refrigerators, and storage areas to ensure they are maintained in a sanitary and orderly condition and that all dishes and utensils are washed and the galley and mess equipment is maintained in good operating condition. Oversees the storage of foodstuffs to prevent spoilage or waste.
3. Issues safety equipment and ensures its proper use and enforces safety rules. Makes inventories of subsistence supplies available, determines subsistence needs periodically and informs the Master who arranges for requisitioning.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Incumbent is required to possess a U.S. Coast Guard Document with endorsement for Food Handler. Must possess the ability to plan menus that are dietetically proper and select menus which encompass some special requirements; e.g., diabetic; low salt; low cholesterol. Must have

the skills and experience to plan for and prepare a wide variety of food for 9-30 persons. Applies the skill and knowledge to operate and maintain all galley equipment.

RESPONSIBILITY

Works under the very general supervision of the Master. The planning and preparation of meals is left almost entirely to the discretion of the incumbent, subject only to special requests from the Master. The only limitations are that the food be appetizing and nourishing and that the subsistence allowance is not exceeded. Guides include written and oral instructions, specific time requirements, and established methods and procedures. Work is subject to spot check during performance and upon completion for conformance to instructions, prescribed procedures, and the meeting of quality and quantity standards as prescribed.

WORKING CONDITIONS

Work is performed primarily in the galley where there is constant exposure to above-average temperatures. Subject to cuts when working with power equipment or to burns when working near the range. Subject to falls when food is spilled on deck and when the vessel is in rough water.

PHYSICAL EFFORT

Incumbent is required to exert moderate to heavy physical effort storing and handling galley supplies and materials.

**COOK
XH-7404-03
EVALUATION STATEMENT**

1. REFERENCES:

- a. OPM, JGS, Cook Series, February 1992
- b. U.S. Army Ladder Diagram, 1953

2. SERIES AND TITLE DETERMINATION:

Subject position serves as the cook aboard a towboat or tugboat that operates three shifts a day. Position is involved in the preparation of regular or special diet foods and meals. This includes cooking meats, poultry, fish, shellfish, and vegetables and making soups, gravies, sauces, desserts, and other foods. The incumbent uses standardized recipes and menus and personal knowledge and experience to measure, assemble, and mix ingredients; regulate cooking temperatures; and add seasoning to foods. This meets the Cook Series, WG-7404 series definition. Position is titled Cook.

3. GRADE DETERMINATION:

This position is the lowest graded cook position in the Ladder Diagram. Position does not meet the Cook-Steward, XH-7404-04, as it is not responsible for preparing and serving meals to a crew of approximately 40-60 persons. Rather, the crew served ranges from approximately 9-30 persons.

4. FINAL DETERMINATION: Cook XH-7404-03