
ATTACHMENT D: JOB CLASS SPECIFICATIONS

AMHS Safety Management Coordinator

Class Definition: AMHS Safety Management Coordinator is a single position job class in which the incumbent is primarily responsible for maintaining Alaska Marine Highway System (AMHS) compliance with the International Safety Management (ISM) Code and other applicable occupational health and safety regulations as they relate to AMHS maritime and shore-side policy, procedures, and staff preparedness.

Distinguishing Characteristics: AMHS Safety Management Coordinator maintains AMHS compliance with the ISM Code and other maritime occupational health and safety regulations by facilitating the continual update and distribution of Safety Management System (SMS) plans and procedures for AMHS vessels and shore-side facilities, coordinating and performing in-house and external compliance audits, coordinating and providing corresponding crew and staff training, and working with AMHS captains and management to correct ISM and other safety regulation non-compliance issues and activities in a timely manner.

The ISM Code is an international maritime safety standard intended to ensure safety at sea, prevent injury or loss of life, and prevent damage to vessels and the environment; the incumbent of this job class is AMHS' primary advisor on ISM issues and works with AMHS management, outside agencies and industry organizations to set goals, identify priorities, and manage resources and activities concerning sustained ISM compliance.

AMHS Safety Management Coordinator is distinguished from Port Captain by the latter's responsibility for the operation, safety, general maintenance (except engine room and machinery), and annual dry-docking, repair and modification of State operated ferries.

AMHS Safety Management Coordinator is distinguished from Assistant Port Captain by the latter's responsibility to assist in the operation, general maintenance (excluding engine room and machinery) and annual dry-docking, repair and modification of state operated ferries.

AMHS Safety Management Coordinator is distinguished from AMHS Security Officer by the latter's responsibility for developing, maintaining and implementing AMHS plans to guard against external security threats, and performing subsequent audits and inspections to maintain compliance with state and federal security requirements.

AMHS Safety Management Coordinator is distinguished from Safety Officer by the latter's responsibility for administering an agency's regional health and safety program and regional hazardous and toxic waste programs.

Examples of Duties

- Update and distribute the Safety Management System (SMS) manuals, Shipboard Oil Pollution Plan, Planned Maintenance, and Fleet Bunkering manuals for all AMHS vessels and facilities.
- Plan, prepare and perform all ISM related audits of AMHS vessels and facilities to assure acceptance and implementation of SMS procedures in advance of audits and inspections from outside regulatory groups.
- Coordinate and participate in SMS review meetings, with AMHS senior management, covering current AMHS compliance with ISM and SMS; identify problem areas, make recommendations on how to maintain or regain compliance, and provide interpretations of how various regulatory changes might effect AMHS operations.
- Make recommendations to management regarding short- and long-term ISM program goal identification.
- Oversee and contribute to ISM program administrative functions such as budgeting and financial controls, and create solutions for administrative issues and processes that have a negative impact on ISM program performance.
- Serve as AMHS liaison with US Coast Guard and other government agencies and industry regulatory groups regarding ISM and other maritime safety issues and investigations.
- Identify AMHS material and training needs; coordinate training staff in providing the subsequent training, and safety staff in the implementation of safety measures.

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- Represent AMHS in contract negotiations with outside agencies and regulatory groups regarding the procurement of various safety and training services.
 - Act as AMHS Designated Person to liaise with regulatory and investigatory groups regarding AMHS safety and health incidents and investigations.
 - Represent the AMHS ISM safety and training programs at public meetings and respond to public inquiries.
 - Provide relevant ISM, safety, and training information to the State Attorney General's Office regarding injuries and accidents aboard AMHS vessels.

Knowledge, Skills, and Abilities

- Some knowledge of the International Safety Management Code, Safety Management Systems, Safety of Life at Sea Convention, Occupational Health and Safety Administration and other relevant state and federal maritime safety guidelines and planning models.
- Some knowledge of maritime industry safety standards for vessels in revenue service and dry-dock status.
- Working knowledge of the development and operation of occupational health and safety programs.
- Skill in auditing and inspecting equipment and procedures for compliance with regulatory standards.
- Ability to recognize shipboard and shore-side health and safety, and plan and implement mitigating measures.
- Ability to speak articulately and knowledgeably to industry experts and laypersons alike on topics involving maritime safety.
- Ability to exercise sound judgment and render sound decisions when evaluating safety, pollution, and environmental health issues.
- Ability to communicate effectively verbally and in writing.
- Ability to work independently and effectively manage time while addressing multiple issues with conflicting deadlines and resource requirements.

Minimum Qualifications

A bachelor's degree in Marine Transportation, Occupational Safety, Environmental Health or a closely-related field; **and**, One year of professional experience developing and/or maintaining federally regulated occupational health and safety compliance programs for the maritime industry.

Substitutions: A bachelor's degree from an accredited college in any field, and three years of professional experience developing and/or maintaining federally regulated occupational health or safety compliance programs for the maritime industry, will substitute for the required specific degree and experience.

Four years of professional experience performing occupational health or safety compliance inspections, and three years of professional experience developing and/or maintaining federally regulated occupational health or safety compliance programs for the maritime industry, will substitute for the required specific degree and experience.

AMHS Port Engineer

Class Definition: Port Engineers are shore-side personnel responsible for both the supervision of assigned engineering department staff and for overseeing the ongoing maintenance, repair, and safe operation of mechanical systems on assigned vessels in the Alaska Marine Highway System (AMHS) fleet.

This is a supervisory class with substantial responsibility for the exercise of independent judgment in employing, disciplining, or adjudicating grievances of subordinates.

Distinguishing Characteristics: Port Engineers coordinate the engineering operations for assigned AMHS vessels. This includes working directly and through subordinate marine engineering staff to plan, budget, schedule, and accomplish the ongoing maintenance and repair of mechanical systems; supervising vessel Chief Engineers; and coordinating with other AMHS management staff to maintain maximum operational readiness within AMHS.

Port Engineer is distinguished from Port Captain by the Port Captain's responsibility for maintaining the operational capability and safety of those components not directly related to the operation of the mechanical systems on assigned AMHS vessels.

Port Engineer is distinguished from Vessel Services Supervisor by the Vessel Services Supervisor's responsibility to direct, plan, manage and coordinate all activities relating to the operation, safety, and maintenance of a fleet of vessels engaged in law enforcement activities.

Port Engineer is distinguished from Vessel Construction Manager by the Vessel Construction Manager's responsibility to manage and coordinate specific vessel construction projects directly, through subordinate staff, and through contractors.

Examples of Duties

- Supervise the completion of records used to track overhaul and maintenance efforts and to provide support for budget preparation, cost analysis and project reports.
- Manage multiple AMHS fleet overhaul (capital improvement) projects (CIPs) directly and through subordinate staff.
- Approve procurements of equipment and supplies for deck, engine and steward's departments and payments and encumbrances for vessel overhaul CIPs.
- Coordinate vessel construction, overhaul, and operating schedules collaboratively with project teams composed of Port Captain, Port Stewart and other Marine Engineers.
- Participate in meetings regarding annual vessel scheduling, budget programs, and long-range vessel upgrading and equipment replacement.
- Research and analyze vessel and maintenance overhaul activities and provide consultation to AMHS management.
- Evaluate contractor performance and accept or reject contracted work and equipment.
- Periodically review the operating and power systems on assigned AMHS vessels to ensure effective operation and conformance to preventative maintenance requirements.
- Make cost estimates and track active machinery and engine repairs performed under contract and through procured services.
- Supervise, through Chief Engineers, all engineering staff and oversee all maintenance and operation activities on assigned AMHS vessels.
- Work collaboratively with other Port Engineers to establish and monitor engineering-related operating procedures and safety programs.

Knowledge, Skills, and Abilities

- Knowledge of current principles and practices associated with naval architecture or marine engineering and vessel construction, maintenance and repair.
- Knowledge of life-cycle costing and value engineering.
- Knowledge of materials testing against standards unique to the marine environment.

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- Knowledge of federal and state regulations that guide the repair and maintenance of ships.
 - Knowledge of the management and administrative requirements associated with vessel construction and repair processes.
 - Skill in managing complex ship repair and maintenance construction projects.
 - Skill in communicating, both orally and in writing.
 - Skill in using computers and programmable calculators to solve engineering problems.
 - Skill in preparing, interpreting, and using engineering plans and specifications.
 - Ability to prepare plans, specifications, schedules and cost estimates.
 - Ability to supervise ship-board engineering staff.

Minimum Qualifications

Possession of a license or Merchant Mariner Credential (MMC) endorsement as Chief Engineer (motor vessel) unlimited.

Substitution: Possession of a license or MMC endorsement as First Engineer (motor vessel) unlimited and two years of licensed marine engineering experience.

Or substitution: Possession of a license or MMC endorsement as Second Engineer (motor vessel) unlimited or Third Engineer (motor vessel) unlimited and three years of licensed marine engineering experience.

Or substitution: Bachelor's degree or the equivalent from an accredited college with a major in marine engineering, naval architecture, naval science, maritime operations and technology, mechanical engineering, electrical engineering, civil engineering, or engineering management AND two years of professional experience in marine engineering or marine-engineering management including, but not limited to vessel construction, repair, or conversion; ship systems and marine equipment design; or shipyard management.

AMHS Passenger Services Inspector

Class Definition: Under direction, travels aboard State owned ferries to study and evaluate the various functions, operating methods, and public reaction to the passenger service provided.

Distinguishing Characteristics: Employees in this class may be required, in addition to the general work assignment, to specialize in passenger service or cost and stock control. This class is distinguished from that of Ship Services Manager/Port Steward in that the latter is of a central administrative nature, including planning, control and improvement of services on a division-wide basis.

Examples of Duties

- Analyze and approve all Steward and Purser department purchases. Meet and discuss the Shipyard Maintenance Repair plan for vessels with the appropriate department heads. Assist with the final determination in consideration of budget constraints and fleet-wide needs.
- Reviews weekly reports from the Chief Stewards and Chief Pursers. Reviews load counts, revenue received from food, bar, gift shop, stateroom and ticket sales. Verify cash reports.
- Reviews operating practices in the food service, cafeteria, stateroom service and janitorial areas. Determines appropriateness of work schedules and adequacy of services rendered. Determines need for, and methods, of implementing standard procedures on all vessels. Conducts training programs for passenger service personnel and evaluates results achieved. Insures compliance with existing procedures and written regulations, and adoption of new procedures and regulations.
- Evaluates changing workloads, reviews staffing needs with vessel chief stewards, and recommends specific reductions and increases in staffing based on findings. Studies allocations of duties and responsibilities of passenger services personnel. Recommends changes in duty assignments according to needs and efficiency.
- Assist in preparing and revising job specifications to formally adjudicate disputes involving assignment of utility workers.
- Inspects to determine adherence to food portion control and other cost control directives. Insures that stock controls and inventories are adequate, and implements changes and adjustments as necessary. Investigates thefts and reports of missing items. Assists the Department Procurement Specialists in property control of passenger services equipment, and initiates security precautions.
- Insures that passenger service personnel, commodities and equipment comply with health and sanitation standards.
- Reviews evaluations of passenger services personnel. Evaluates services of vendors, requests and attitudes of the traveling public and recommends appropriate policy changes to the Ship Services Manager/Port Steward.
- Performs other related duties as required.

Knowledge, Skills, and Abilities

- Knowledge of supply and property stocking and inventory distribution and control; basic cost accounting records and maintenance; work force organization and techniques of supervision; food quality control practices; health and sanitation requirements; the methods and techniques of work regulation, inspection and enforcement.
- Skill in evaluating the problems presented by customer complaints and the ability to implement required changes and controls; planning, organizing and conducting employee training programs.
- Ability to review and evaluate food service functions, stateroom services, janitorial work and concessions; provide a level of service which balances personnel and equipment limitations with the needs of the public; lead the work of others; prepare reports on a variety of activities.

Minimum Qualifications

Any combination of education and/or experience that provides the applicant with competencies in:

- **Customer Service:** Anticipates and meets the needs of both internal and external customers. Delivers high-quality products and services; is committed to continuous improvement.

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- **Developing Others:** Develops the ability of others to perform and contribute to the organization by providing ongoing feedback and by providing opportunities to learn through formal and informal methods.
 - **Performance Measurement:** Knowledge of the principles and methods for evaluating program or organizational performance using financial and nonfinancial measures, including identification of evaluation factors (for example, workload, personnel requirements), metrics, and outcomes.
 - **Planning and Evaluating:** Organizes work, sets priorities, and determines resource requirements; determines short- or long-term goals and strategies to achieve them; coordinates with other organizations or parts of the organization to accomplish goals; monitors progress and evaluates outcomes.
 - **Problem Solving:** Identifies and analyzes problems; weighs relevance and accuracy of information; generates and evaluates alternative solutions; makes recommendations.

equivalent to those typically gained by:

- Progressively responsible experience, training, and/or education in business administration/management; catering operations; culinary arts; custodial service; food service; hospitality administration/management; hotel, tourism, or restaurant management; public administration; or a closely related field.

Special Note: 33 CFR, Part 105, and US Coast Guard NVIC 03-07 require that all incumbents performing the essential duties and responsibilities of this job class maintain a Transportation Worker Identification Credential (TWIC) for access to federally-defined restricted areas within a maritime facility. Continued employment is contingent upon obtaining and maintaining a valid TWIC within six months of employment.

- Terminal business hours and staff schedules are determined and/or adjusted based on varying AHMS vessel sailings and may be subject to change with minimal advanced notice. Incumbents may be required to work fluctuating schedules, split shifts, and/or be available to report any time for work 24 hours a day, 7 days a week (including holidays), in order to respond to port calls as needed.
- Some positions in this class may require the incumbent to operate motor vehicles. Such positions require that the applicant possess a regular driver's license and be 18 years of age or older.
- "Competencies" means a combination of interrelated knowledge, skills, abilities, and behaviors that enable a person to act effectively in a job or situation.
- "Typically gained by" means the prevalent, usual method of gaining the competencies expected for entry into the job.
- "Progressively responsible" means indicating growth and/or advancement in complexity, difficulty, or level of responsibility.
- "Training" and "education" in this guidance are synonyms for the process of acquiring knowledge and skills through instruction. It includes instruction through formal and informal methods (such as classroom, on-line, self-study, and on-the-job), from accredited and unaccredited sources, and long-duration (such as a post-secondary degree) and short-duration (such as a seminar) programs.

AMHS Vessel Construction Manager 1

Class Definition: Positions in this job class manage and coordinate one or more small to medium vessel engineering and construction projects. Projects involve development, construction, contract administration and implementation; coordination of marine engineering staff, naval architects, consultants, and contractors; and negotiation of differences, coordination of actions and making decisions regarding quality, timeliness and cost.

Vessel construction projects involve the design and /or construction of ships and ship systems including: hull, machinery, deck, accommodations, auxiliary, and propulsion. Projects may include new ship construction, but more commonly require refurbishment of existing vessels.

Distinguishing Characteristics: This is the first working level in the Vessel Construction Manager series. Assignments are typically limited to one project and require practical knowledge of naval architecture and marine engineering disciplines such as flotation and trim, stability, structural design and analysis, launching and docking, propulsion systems, seakeeping, maneuverability, auxiliary systems and ships' service systems, consisting of: distillation, hydraulics, electrical, steam, water, air, fuel, oil, refrigeration and ventilation. Incumbents of this class usually manage a single vessel construction project of limited complexity, duration, and typically having several construction activities that must be coordinated. Project considerations include human factors and environment, engineering materials, ship layout and vessel stability, power and resistance, and mechanical, electrical, and structural components. Incumbents' duties include such diverse areas as contract administration, consultant coordination, financial management, coordinating public involvement, and providing liaison with outside agencies (regulatory, client, legal). Persons working in this class typically travel to shipyards for projects and are given extended field assignments that are often out-of-state. An incumbent of this class is typically the senior staff member on-site and has lead responsibility for Vessel Construction Assistants, Project Inspectors, and temporary on site administrative staff.

This class is distinguished from the Vessel Construction Manager 2 level by the latter's management of medium to large vessel construction projects. Incumbents are eligible for promotion to the Vessel Construction Manager 2 classification upon management's assessment that the employee is capable of performing at the higher level.

Examples of Duties

- Reviews vessel construction proposals and analyzes parameters of a project; reviews all planning data; prepares cost estimates, evaluates scheduling and practical engineering feasibility.
- Prepares requests for proposals and advertisements. Supports the consultant selection process and negotiates contracts with successful consulting firms. Serves as agreement administrator.
- Oversees the preparation of project plans, permits, specifications, and schedules, including work performed by in-house personnel and private naval architectural or marine engineering consultants for conformance to program requirements.
- Reviews related vessel construction project matters pertaining to alternatives, environmental impact, system surveys, material testing and inspection and acquisition of materials.
- Coordinates inspections for vessel projects in progress and provides expert assistance and construction expertise as required to project inspectors and project engineer; reviews and approves pay estimates, and requests for change orders.
- Performs vessel inspections to ensure that the work is in accordance with the plans and specifications; checks approved materials workmanship, progress, safety and observes the required testing.
- Conducts field reviews to ensure conformity of preliminary details with site conditions and inspection prior to recommending acceptance by the State.
- Coordinates, monitors and reviews the engineering activities of construction projects; recommends changes to the plans and specifications to meet the field conditions; consults with planning, design and construction personnel regarding budgetary controls, planning, design and construction and maintenance criteria.
- Supervises the maintenance of various project records and performs project office work in connection with budget preparation, cost analysis, and progress reports. Recommends approval of payments and encumbrances.

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- Serves as consultant and makes detailed analyses of proposed projects for the economic as well as the practical project phases; makes specialized technical studies; conducts related research work, prepares review comments and reports.
 - Meets with federal, state, local officials and community groups and makes project presentations.
 - Oversees the contract warranty provisions and functions as a liaison between the contractor and vessel operations personnel, following completion of construction.
 - Assigns portions of project work to engineering staff; reviews, evaluates and coordinates project components.
 - Conducts analysis of contractor claims, drafts Engineer's Decision Document and may be required to testify in court regarding the facts in a dispute.

Knowledge, Skills, and Abilities

- Thorough knowledge of marine engineering principles as it applies to the design and construction of ships and ship systems.
- Thorough knowledge of acceptable construction practices.
- Considerable knowledge of the principles and practices applied in the inspection and testing of materials used in the construction of vessel projects.
- Considerable knowledge of life-cycle costing and value engineering.
- Considerable knowledge of the time and effort necessary to complete specific vessel construction and engineering tasks.
- Working knowledge of applicable federal and state regulations.
- Skill in establishing and maintaining effective working relationships.
- Skill in communicating with others, both orally and in writing.
- Skill in using computers and programmable calculators to solve engineering problems.
- Skill in preparing, interpreting, and using engineering plans and specifications.
- Skill in applying mathematical principles in such marine engineering areas as computing vessel stability, trim, and in performing structural design analysis.
- Ability to negotiate and deal constructively with adversarial relationships.
- Ability to analyze facts and precedents and make appropriate decisions.
- Ability to set goals, monitor progress, and adjust resources to accomplish objectives.
- Ability to observe details on job sites that can affect progress, schedules, and safety.

Minimum Qualifications

Bachelor's degree or the equivalent from an accredited college or university with a major in marine engineering, naval architecture, mechanical engineering, electrical engineering or naval science AND one year of experience as an Engineering Assistant 3 or a Vessel Construction Assistant 3 with the State of Alaska or the equivalent elsewhere.

Or

Bachelor's degree or the equivalent from an accredited college or university in Civil Engineering or Engineering Management and two years work experience equivalent to an Engineer Assistant 3, Engineering Associate or Vessel Construction Assistant 3 with the State of Alaska.

Substitution: Additional marine or naval engineering experience equivalent in kind and level to a Vessel Construction Assistant 3 with the State of Alaska may be substituted for the required college education on a year-for-year basis.

Graduate study from an accredited college or university in marine engineering or naval architecture may be substituted for the required experience on a year-for-year basis.

Vessel Construction Manager 2

Class Definition: Positions in this job class manage and coordinate medium to large vessel engineering and construction projects. Projects involve development, construction, contract administration and implementation; coordination of marine engineering staff, naval architects, consultants, and contractors; and negotiation of differences, coordination of actions, and making decisions regarding quality, timeliness and cost.

Vessel construction projects involve the design and/or construction of ships and ship systems including: hull, machinery, deck, accommodations, auxiliary, and propulsion. Projects may include new ship construction, but more commonly require refurbishment of existing vessels.

Distinguishing Characteristics: This is the advanced level in the Vessel Construction Manager series. Assignment require working knowledge of naval architecture and marine engineering disciplines such as flotation and trim, stability, structural design and analysis, launching and docking, propulsion systems, seakeeping, maneuverability, auxiliary systems as well as water, air, fuel, oil, refrigeration and ventilation. Incumbents of this class usually manage a single vessel construction project on increased complexity, duration, and typically having several construction activities that must be coordinated. Project considerations include human factors and environment, engineering materials, ship layout and vessel stability, power and resistance, and mechanical, electrical, and structural components. Additional work performed by incumbents of this class involves contract administration, consultant coordination, financial management, public information forums, and coordination with outside agencies (regulatory, client, legal).

Vessel Construction Manager 2 represents the highest level class in the series which typically has extended field assignments both in and out-of-state. Vessel Construction Managers 2 have broader responsibility and greater independence than Vessel Construction Managers 1. This advanced level manager is typically assigned large, technically complex projects involving funding from multiple state and federal sources; and requiring considerable knowledge of contract law and skill in negotiating to ensure timely redelivery with proper repairs, construction, or modification while limiting the state's financial liability. Projects often have short timelines to meet the requirements of the printed operations schedule and may require specialized and technically difficult inspections to ensure removal of hazardous materials such as lead paint, asbestos and the like.

Examples of Duties

- Reviews vessel project proposals and analyses outlining parameters of a project; reviews all planning data; prepares cost estimates, evaluates scheduling and practical engineering feasibility.
- Prepares requests for proposals and advertisements. Supports the consultant selection process and negotiates contracts with successful consultant/construction firms. Serves as agreement administrator.
- Oversees the preparation of project plans, permits, specifications, and schedules, including work performed by in-house personnel and private naval architectural or marine engineering consultants for conformance to program requirements.
- Conducts field reviews to ensure conformity of preliminary details with vessel conditions and inspection prior to recommending acceptance by the State.
- Oversees the contract warranty provisions and functions as a liaison between the contractor and vessel operations personnel, following completion of construction.
- Coordinates, monitors, and reviews the marine engineering activities of vessel construction projects; recommends changes to the plans and specifications to meet actual vessel conditions; consults with planning, design and construction, and maintenance criteria.
- Supervises the maintenance of various project records and performs project office work in connection with budget preparation, cost analysis, and progress reports.
- Meets with federal, state, local officials and community groups and makes project presentations.
- Assigns portions of project work to engineering staff; reviews, evaluates, and coordinates project components.
- Conducts analysis of contractor claims, drafts Engineer's Decision Document and may be required to testify in court regarding the facts in a dispute.

Knowledge, Skills, and Abilities

- Thorough knowledge of marine engineering principles as it applies to the design and construction of ships and ship systems.
- Thorough knowledge of acceptable construction practices.
- Thorough knowledge of the principles and practices applied in inspecting and testing materials used in vessel construction projects.
- Considerable knowledge of life-cycle costing and value engineering.
- Considerable knowledge of the time and effort necessary to complete specific vessel construction and engineering tasks.
- Considerable knowledge of applicable federal and state regulations.
- Considerable knowledge of construction project management principles: including but not limited to organization, planning, staffing, budgeting, reporting, cost management, documentation, and contractor and public relations.
- Working knowledge of the tools of management: including but not limited to methods development, cost analysis, operating controls, records and reports, and studies applicable in evaluating programs or services.
- Skill in establishing and maintaining effective working relationships.
- Skill in communicating with others, both orally and in writing.
- Skill in using computers and programmable calculators to solve engineering problems.
- Skill in preparing, interpreting, and using engineering plans and specifications.
- Skill in applying mathematical principles in such marine engineering areas as computing vessel stability, trim, and in performing structural design analysis.
- Ability to negotiate and deal constructively with adversarial relationships.
- Ability to analyze facts and precedents and make appropriate decisions.
- Ability to prepare plans, specifications, schedules and cost estimates.
- Ability to set goals, monitor progress, and adjust resources to accomplish objectives.
- Ability to establish and maintain effective working relationships with associates, contractors, and consultants.

Minimum Qualifications

Bachelor's degree or the equivalent from an accredited college or university with a major in marine engineering, naval architecture, mechanical engineering, electrical engineering or naval science; **and**, One year of experience equivalent in kind and level to a Vessel Construction Manager 1 with the State of Alaska.

Substitution: Additional marine or naval engineering experience equivalent in kind and level to a Vessel Construction Assistant 3 with the State of Alaska may be substituted for the required education on a year-for-year basis.

One year of project management experience in the Engineer/Architect or Technical Engineer/Architect series with the State of Alaska or the equivalent elsewhere and one year of experience equivalent to a Vessel Construction Assistant III may, together, be substituted for the required year of experience.

Junior Engineer

Class Definition: Under supervision of the First Assistant Engineer and/or watch engineer, is responsible for maintenance and operation of a variety of mechanical equipment on board a vessel of the Alaska Marine Highway System.

Examples of Duties

- Stands engine room watch in the absence of a watch Oiler. Trains new unlicensed engine personnel in the duties of the engine room. May stand watch with Oiler.
- Assists in maintenance and overhaul of diesel engines and other equipment in the Engine Department.
- Maintains stateroom plumbing, heating, ventilation, and electrical equipment.
- Assists in maintaining security of the vessel. Maintains awareness of vessel and lot security and reports any suspicious activity or threats immediately.
- Updates inventory/maintenance management system (online computer program).
- Maintains batteries and deck machinery.
- Assists with taking on fuel, potable water, lube oil, ballast, and spares.
- Maintains vessel's refrigeration equipment.
- Installs, maintains, and repairs galley equipment.
- Maintains cleaning equipment.
- Maintains and repairs baggage tractor.
- Maintains and repairs fresh/salt water sanitary systems.
- Maintains all other mechanical and electrical equipment aboard vessel as required.
- May be a member of the emergency squad.
- Operates lathe, drill presses, and gas/electric welding machines.
- Maintains marine sanitation device machinery and equipment.
- Performs other duties as assigned by the First Assistant Engineer or other designated Engineer.

Knowledge

- Extensive knowledge of mechanical equipment.
- Substantial knowledge of power tools and hand tools, including; chain falls, lathe, drill presses and gas/electric welding machines.
- Thorough knowledge of vessel and lot security procedures.
- Basic knowledge of computer operation for inventory control.
- Extensive knowledge of the duties performed by the emergency squad.
- Excellent knowledge and understanding of the English language.
- Extensive knowledge in electrical systems.
- Extensive knowledge of the MSD system.
- Working knowledge of safe handling of cleaning products and equipment.
- Substantial knowledge of Respiratory Protection requirements and appropriate Personal Protection Equipment (PPE).

Skill in

- Working with travelling public and being responsive to their needs.
- Using both power and hand tools.
- General vessel security.
- The English language.
- Organizing and coordinating work activities in work area.
- Maintaining and repairing equipment.

Ability to

- Use power tools and hand tools, including; chain falls, lathe, drill presses and gas/electric welding machines.
- Assist in the maintenance of vessel security.
- Use electric meters.
- Follow standing orders.
- Speak and understand the English language as is required in performing the general duties of this position and during a shipboard emergency.
- Perform complex or varied tasks.
- Accept and carry out responsibility for direction, control, and planning.
- To work independently.
- Work well with the public and be a positive representative of the State of Alaska.
- Lead the work of others in work area.
- Respond calmly to an emergency situation, maintaining the confidence of the travelling public.
- Perform the physical duties required of the position.
- Establish and maintain cooperative relationship with shipmates.

Minimum Qualifications

- Valid U.S. Coast Guard (USCG) issued Merchant Mariner's Credential (MMC) endorsed with the following:
 - National Ratings:
 - QMED – Jr. Engineer
 - Lifeboatman
 - USCG STCW (International) Ratings:
 - Able Seafarer Engine
 - Rating Forming Part of an Engineering Watch
 - Proficiency in the Use of Survival Craft
 - Basic Training (BT) (Formerly Basic Safety Training (BST)) or BST '
 - Security Awareness
- Valid Transportation Worker Identification Card (TWIC)
- Valid USCG Medical Certificate (See STCW Expire Date – Valid 2 years)
- Passenger RO/RO Certification for:
 - Crowd Management
- Valid Driver's License

AMHS Specific Training and Certifications

- Passenger RO/RO Certification for:
 - Vessel Specific Familiarization Training
- Equal Employment Opportunity (EEO)/Preventing Sexual Harassment Certificate or
 - Respectful Workplace Certification may be substituted
- Basic HCT Curriculum
- Maritime Security Awareness on-line course
 - Security 101 course may be substituted
- Marine Evacuation System Certification
- Refrigeration Recovery Certification

Able Bodied Seaman

Class Definition: Under the supervision and direction of the Deck Watch Officer, stands wheel and lookout watches. Under supervision of the Boatswain performs operational, maintenance, and sanitation duties on a vessel of the Alaska Marine Highway System.

Examples of Duties

- Stands wheel watch and reads compass to steer specified course.
- Stands lookout for hazards to navigation.
- Assists in maintaining security of the vessel. Maintains awareness of vessel and lot security, ensures all visitors are escorted by active crewmember, monitors car deck ramp, and reports any suspicious activity or threats.
- Operates deck machinery.
- Assists in tying up and letting go of the vessel, loading and unloading of car and lashing and unlash of cargo vans.
- Stand day watch (0600 -1800) where applicable.
- May stand watch, as applicable to satisfy work/rest rules.
- Splices rope and line. Maintains rigging including areas aloft.
- Washes down deck.
- May operate baggage cart to and from vessel.
- Operate forklift.
- Performs routine and periodic maintenance including area preparation and painting.
- Removes trash/garbage from vessel.
- Serves as member of the Emergency Squad, as required..
- Performs duties as per Muster List (Station Bill).
- Other duties as assigned.

Knowledge of:

- Marlinespike Seamanship.
- Rudder commands and bridge steering controls.
- Vessel and lot security procedures.
- Duties performed by the emergency squad.
- All fire stations and equipment required at each location.
- And understanding of the English language.
- Safe handling of cleaning products and equipment as per the Materials Safety Data Sheets (MSDS) and industry Standards.
- Respiratory Protection requirements and appropriate Personal Protection Equipment (PPE).
- EEO principles and guidelines.
- Personnel Issues.

Skill in:

- Wire and rope splicing.
- Maintenance of all shipboard safety equipment.
- Wire and rope splicing.
- Use of ship safety equipment such as Marine Evacuation Chute (MEC), Means of Rescue (MOR), lifeboat, fast Rescue boat, life rafts, and general fire-fighting equipment.
- Working with the travelling public and being responsive to their needs.
- Organizing and coordinating work activities.
- Repair and maintenance of standing and running rigging.
- Proper methods for tie-up and let-go.

Ability to:

- Maintain and operate all deck machinery, to include: anchor winch, transfer spans, zoom booms, forklifts, paint systems, and rafts systems.
- Operate windlass, winches, and hydraulic equipment.
- Read a compass, steer a vessel, and comply with helm orders in the English language.
- Follow vessel and lot security procedures.
- Follow standing orders.
- Chip paint and prepare metal for painting.
- Perform the physical duties required of this position.
- Use the ship safety equipment.
- Perform complex or varied tasks.
- Work independently.
- Lead the work of others in your work area. (if applicable)
- Respond calmly to emergency situation, maintaining the confidence of the travelling public and crew.
- Maintain a cooperative working environment.

Oiler

Class Definition: Under the supervision of the First Assistant Engineer and/or Watch Engineer, assists in the safe, efficient operation of the main propulsion units, electrical generation units, and related mechanical equipment on board a vessel of the Alaska Marine Highway System.

Examples of Duties

- Watch standing duties include, checking temperature, pressure and tank-level gauges. Maintaining proper machinery fluid levels, checking the Marine Sanitation Device, logging main engine and auxiliary engine performances. Checks the steering gear, cleans and changes filters and strainers, and calls watch.
- Assists in maintaining security of the vessel. Maintains awareness of vessel and lot security and reports any suspicious activity or threats immediately.
- Operates/cleans/maintains fuel oil and lube oil purifiers.
- Assists with painting and cleaning.
- Assists in keeping the engine room and machinery clean and safe. Assists in preventive maintenance in vessel equipment and machinery.
- May be required to assist Jr. Engineer with engine room duties.
- May be a member of the emergency squad.
- Performs fuel, oil, water, and void soundings.
- Assists in pumping fuel and bilges.
- Assists with taking on fuel, lube oil, potable water, ballast, and spares.
- Other duties as assigned by the First Assistant Engineer or other designated Assistant Engineer.

Knowledge

- Substantial knowledge of mechanical equipment.
- Working knowledge of power tools, hand tools, and machine shop equipment.
- Substantial knowledge of vessel and lot security procedures.
- Basic knowledge of computer operation.
- Working knowledge to perform maintenance and repair mechanical and electrical equipment.
- Working knowledge of the duties performed by the emergency squad.
- Excellent knowledge and understanding of the English language.
- Knowledge of safe handling of cleaning products and equipment.
- Knowledge of health sanitation practices.
- Substantial knowledge of Respiratory Protection requirements and appropriate Personal Protection Equipment (PPE).

Skill in

- Working with travelling public and being responsive to their needs.
- General vessel security.
- The English language.
- Using both power and hand tools.
- Organizing and coordinating work activities in work area.
- Maintaining and repairing equipment.

Ability to:

- Use power tools, hand tools, and maintenance shop equipment.
- Assist in the maintenance of vessel security.

- Use electric meters.
- Follow standing orders.
- Speak and understand the English language as is required in performing the general duties of this position and during an emergency aboard ship.
- Perform varied tasks.
- Accept and carry out assignments as directed.
- To work independently.
- Work well with the public and be a positive representative of the State of Alaska.
- Respond calmly to an emergency situation, maintaining the confidence of the travelling public.
- Perform the physical duties required of the position.
- Establish and maintain cooperative relationship with shipmates.

Minimum Qualifications

- Valid U.S. Coast Guard (USCG) issued Merchant Mariner's Credential (MMC) endorsed with the following:
 - National Ratings:
 - QMED – Oiler
 - Lifeboatman
 - USCG STCW (International) Ratings:
 - Able Seafarer Engine
 - Rating Forming Part of an Engineering Watch
 - Proficiency in the Use of Survival Craft
 - Basic Training (BT) (Formerly Basic Safety Training (BST)) or BST ‘
 - Security Awareness
- Valid Transportation Worker Identification Card (TWIC)
- Valid USCG Medical Certificate (See STCW Expire Date – Valid 2 years)
- Passenger RO/RO Certification for:
 - Crowd Management
- Valid Driver's License

AMHS Specific Training and Certifications

- Passenger RO/RO Certification for:
 - Vessel Specific Familiarization Training
- Equal Employment Opportunity (EEO)/Preventing Sexual Harassment Certificate or
 - Respectful Workplace Certification may be substituted
- Basic HCT Curriculum
- Maritime Security Awareness on-line course
 - Security 101 course may be substituted
- Marine Evacuation System Certification