

MSC Underway Replenishment Training Center (MUTC) – JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY (JEBLC-FS), VA.

MUTC Primary mission is to provide training for all Civil Service Mariner (CIVMAR), Contract Mariner (CONMAR), and U.S. Navy Active and Reservist personnel. Courses are consistently under revision and may require additional; hands on training, practical exams, oral and written exams.

MUTC shall provide training for both in-house and exportable MSC training courses. The in-house training courses are located at TCHR and MUTC and the exportable training is worldwide.

Exportable training courses are those provided onboard GOGO, GOCO, and COCO ships both CONUS and OCONUS. Several exportable courses may run concurrently. All courses listed below are exportable training courses with the exception of:

- Ammunition Management Course (AMC).
- Magazine Sprinkler System Operation and Maintenance (Legacy Systems).
- Standard Tensioned Replenishment-Alongside Method STREAM Cargo/Fuels.
- Stream Familiarization Course.

MUTC's target audiences for Courses of Instruction are; Masters, 1st Officer, 2nd Officer, 3rd Officer, DC Officer, Asst. DC Officer, DC Leader, Asst. DC Leader Damage Controlman, Deck Midshipman, Boatswain, Operations Chief, Able Seaman, Ordinary Seaman, Boatswain Mate, Wiper, Engine Utility Man, Utility Man.

ADVANCED OPERATIONS COURSE (AOC) (CIN: TBD- (In House))

Course length: 32 hours Class size: 18 Students Maximum

Course Description: MSC's AOC of instruction provides an overview of USN's fleet operations and how MSC's interaction with the Navy is critical to mission accomplishment. The course updates the student on the latest fleet tactics, techniques, and procedures to include operations under the confines of a contested environment. Additionally, resources available to assist the student in their day-to-day planning/operations are discussed. Lesson plans are based around PowerPoint presentations but are enhanced by open discussions from student and instructor real-life experiences and documented lessons learned reports. This 32 hour course is taught at the Secret level. The following lectures are covered throughout the course:

- Operational Orders and Procedures
- Operational Reports (Defense Readiness Reporting System- DRRS, and Casualty Reports (CASREPS)
- Warfare Area Review
- Operations in a Contested Environment
- Intelligence Threat Overview
- Emissions Control (EMCON)
- Operational Risk Management (w/emphasis on MSC resent mishaps/near-mishaps)
- Tactical CHAT

- Naval Messages
- Collaboration at Sea
- Weather
- Visual Information
- DRAKE

AMMUNITION MANAGEMENT COURSE (AMC) (CIN: TBD- (In House))

Course length: 80 hours Class size: 6 Students Maximum

Course Description: This course provides in-depth instruction on ammunition administrative duties for processing and maintaining records related to ordnance assets, and expands upon the ammunition management overview provided in the COO course. It provides students with the knowledge, skills and abilities to generate and maintain ammunition records and other technical information required to manage Navy, Marine Corps, Coast Guard, NATO, and other service ordnance using the Ordnance Inventory System – Retail (OIS-R) system. The course provides general requirements and specific fleet sentencing criteria applicable to receipt, segregation, storage and issue processes per NAVSUP P805 and P724. Students will be provided specific sentencing criteria and will use OIS-R computers, scanners and printers during practical application exercises. The exercises will be conducted to provide a framework for identifying ammunition serviceability and for reporting and tracking with OIS-R. This course is designed to expand the understanding of basic level ammunition supply procedures for students, and provides a comprehensive overview of ammunition supply systems and organizations associated with the requisition and issue, asset reporting, item management, inventory requirements, and causative research functions. Students will be taught the relationship of ammunition supply to other functions, e.g. inventory storage, maintenance, and disposal. They will gain an understanding of the features and similarities of retail supply procedures. Exercises will be conducted in the manual receipt, issue, inventory record keeping, and reporting of ammunition assets and movements, with the ultimate objective being the enhancement of fleet readiness and stock point ordnance management using OIS-R. The last two days of the course will include instruction related to proper banding and palletization of sentenced ammunition. A written test and a practical test shall be administered at the conclusion of the course and a passing grade of 75% is required for student credit.

BANDING AND PALLETIZATION (CIN/CDP: G-063-0613/07R7 – (In House)) and (G-063-0613/07R8- (Exportable))

Course length: 16 hours Class size: 10 Students Maximum

Course Description: Students are taught the knowledge and skills required to identify and construct military unit loads of ammunition, explosives and associated materials for shipping, handling, storage and UNREP. Course may be exported aboard ship and other locations depending on availability of equipment, training shapes and working area. This course is taught in accordance with MIL-STD-1323 requirement.

BASIC OPERATIONS COURSE (BOC) (CIN/CDP: TBD – (In House) and Exportable)).

Course length: 32 hours Class size: 24 Students Maximum

Course Description: MSC's BOC of instruction provides a foundational understanding of the USN's capabilities, operations, policies and procedures. The course is not intended to make a sailor out of the mariner, but to make the student aware of how the Navy conducts business, at sea, on a day-to-day basis. As USN tactics, techniques, and procedures change, the student must also understand the significance of those changes in order to continue to provide sustained afloat logistic services to the warfighter at sea. This 32 hour course is classroom intensive with practical exercises to enhance the training curriculum. Course is taught at the UNCLASSIFIED level. The following lectures are covered throughout the course:

- MSC 101
- Intelligence Environment Threat Overview
- USN Command and Control (C2)
- USN Ships and Aircraft (Relevant to Surface Operations)
- Surface Warfare, Anti-Submarine Warfare, Mine Warfare Basics
- Maritime Interdiction Operations
- Introduction to Maritime Logistics
- Information Security
- Operational Risk Management
- Radio telephone Procedures (w/ practical exercise)
- Maneuvering Board Basics to include: Closest Point of Approach, Stationing, True/Desired Wind,
- Introduction to Naval Messages (w/ practical exercise)
- Visual Information
- Drake

BASIC SEAMANSHIP (CIN/CDP: S-063-0622/ 09YM – (In House)) and (S-063-0622/09YN – (Exportable)).

Course length: 8 hours Class size: 24 Students Maximum

Course Description: This course is a combination of classroom lecture and hands-on training. Students are instructed in Marlinespike Seamanship and Basic Deck Seamanship materials, methods and procedures. The subject covers areas such as regulations and safety, definitions, lines and types, deck fittings and wire ropes, whippings, splicing, knots, shackles, hand signals and safety equipment. Course may be exported aboard ship and other location.

BRIDGE RESOURCE MANAGEMENT (BRM) / MASTER-LEVEL RESTRICTED MANEUVERING SHIP HANDLING TEAM TRAINER COURSE (In House) and (Exportable)

Course length: 16 hours Class size: 6 (In-house) & Ship's Deck Licensed Personnel Ship's Restricted Maneuvering Team (Exportable)

Course Description: The first day of this course is a refresher for students and shall focus upon the intangibles of maneuvering a ship in a restricted environment. In addition to knowing and

understanding both controllable and uncontrollable forces that can affect a ship, knowing a ship's maneuvering capabilities and limitations and accurately assessing the physical environment, a student must be able to effectively communicate their orders, must be observant and constantly aware, and must take early and timely action when sensing or standing-into danger. Case studies shall be presented and discussed (what action should have been taken, by whom and when). The 2nd day of instruction shall provide each student restricted maneuvering drills and ship handling simulations in all restricted maneuvering environments using stand-alone laptop simulators. No test will be administered, however the team portion (2nd day) of the course will be assessed and reported to MSC N16. This course is a refresher for students on Single Hull Tankers (SHT), and shall focus on knowledge required to operate a ship in an open ocean environment. The course shall discuss International Rules of the Road (ROR), the Electronic Chart Display Information System – Navy (ECDIS-N) standard, surface ship contact reports to the Master, and prudent ship handling preparations prior to special evolutions. A written ROR test shall not be administered; however, a check on learning shall be conducted at the end of the ROR lecture.

CARGO ORDNANCE OPERATIONS (COO) (CIN: TBD- (In House)) and (TBD - (Exportable))

Course length: 24 hours Class size: 24 Students Maximum

Course Description: The course shall provide students with a detailed overview of:

- MSC Qualification / Certification (QUAL/CERT) program requirements
- HERO and EMCON program requirements
- Magazine sprinkler system components and alarms, operation, maintenance and testing requirements.
- Ordnance stowage, safety and records requirements
- RSL stowage, maintenance and safety requirements
- OHE, MHE and WHE operation, maintenance and training requirements
- AA&E physical security requirements
- An overview of ammunition requisitioning, reporting and accounting
- A written test shall be administered at the conclusion of the course and a passing grade is required for student credit.

COMMUNICATION TRAINING COURSE. NEW COURSE coming FY22!!!

Course length: 120 hours Class size: 10 Students Maximum

Course Description: This course covers duties and responsibilities of a Radio Electronics Technician. Introduction to RF Frequency Spectrum, Communications Operations and Etiquette, Communications Security, Message Routing and Handling Procedures, and an introduction to Shipboard communications equipment.

CRANE OFFICER ADMINISTRATION (CIN/CDP: (In House) and (Exportable))

Course length: 24 hours Class size: 6 Students Maximum

Course Description: This course covers the best practices in AS-39 Crane Officer Administration, using the NSTM Chapter 589, NAVFAC P-307 and MSC Engineering Process Instructions as guides. Course topics include technical requirements for operation, maintenance, testing, and inspection of AS-39 class shipboard cranes, load testing, certification and de-certification, Departure from Specifications and Operating Envelopes, records keeping, types of cranes, lifting concepts, communications, crane crew qualifications and training requirements. Students shall participate in workshops to reinforce concepts of safe crane operation. Upon course completion, students shall have the ability to implement and maintain a shipboard crane administration program, determine safe operating conditions, and recognize common violations of Navy/MSC Standards.

DRAKE/Joint Counter Radio-Controlled Improvised Explosive Device Electronic Warfare (JCREW) Counter Unmanned Aerial system (C-UAS) Operator Course

Course length: 6 hours Class size: 10 Students Maximum

Refresher training is required every 36 months.

Course Description: MSC exists to support the joint warfighter across the full spectrum of military operations. In order to provide that support, Commander, Military Sealift Command (COMSC) delivers on-time logistics, strategic sealift, as well as specialized missions anywhere in the world, under any condition. The complex, dynamic and often contested operational environment in which MSC's vessels routinely sail requires the ability to visually document events and operations. This provides the military chain of command the information it needs to better inform its stakeholders both inside and outside of Government with rapid, factual information regarding military operations. The DRAKE/JCREW system is defined as a Joint Counter Radio-Controlled Improvised Explosive Device Electronic Warfare (JCREW) Counter Unmanned Aerial system (C-UAS). The system is designed to counter unmanned drones and aircraft. MSC's Fleet is manned by licensed and unlicensed CIVMARS and CONMARS who are trained in maritime deck, engineering functions, and communications. Upon completion of this course, students shall comprehend MSC's requirement for and an understanding of the DRAKE/JCREW system. Students shall gain the expertise in the operational procedures and practical application of the equipment required to counter unmanned drones and aircraft using the DRAKE/JCREW system. This course will be for the DRAKE Operators, Deck officer, Able Seaman, and Utility Personnel.

Drake/Joint Counter Radio-Controlled Improvised Explosive Device Electronic Warfare (JCREW) Counter Unmanned Aerial system (C-UAS) Maintenance Course

Course length: 12 hours Class size: 10 Students Maximum

Refresher training is required every 36 months.

Course Description: MSC exists to support the joint warfighter across the full spectrum of military operations. In order to provide that support, Commander, Military Sealift Command (COMSC) delivers on-time logistics, strategic sealift, as well as specialized missions anywhere in the world, under any condition. The complex, dynamic and often contested operational environment in which MSC's vessels routinely sail requires the ability to visually document events and operations. This provides the military

chain of command the information it needs to better inform its stakeholders both inside and outside of Government with rapid, factual information regarding military operations. The DRAKE/JCREW system is defined as a JCREW C-UAS. The system is designed to counter unmanned drones and aircraft. MSC's Fleet is manned by licensed and unlicensed CIVMARS and CONMARS who are trained in maritime deck, engineering functions, and communications. Upon completion of this course, students shall comprehend MSC's requirement for and an understanding of the DRAKE/JCREW system. Students shall gain the required expertise to perform operational maintenance of the DRAKE/JCREW system. This classified course will be for Communications and IT personnel.

ELECTRICAL PALLET JACK HANDLING EQUIPMENT (MHE) (CIN/CDP: TBD - (In House)) or (TBD - (Exportable)). NEW COURSE coming FY22!!!

Course length: 40 hours Class size: 6 Students Maximum

Refresher training is required every 36 months.

Course Description: Students shall be instructed in the proper method of safe handling of the Electrical Pallet Jack with various types of loads to include the F-35 Aircraft Engine. During the practical portion of the course, each student is given the opportunity to operate the electric pallet jack in various simulated situations such as ship's cargo holds, above deck areas, magazines, and material handling areas. A written test and a practical test are administered at the conclusion of the course and a passing grade is required for credit. Course can be exported aboard ship and other locations depending on availability of equipment, training shapes and working area.

EXPLOSIVE MATERIAL HANDLING EQUIPMENT (MHE) (CIN/CDP: G-690-0068/07R1 - (In House)) or (G-690-0068/07R2 - (Exportable))

Course length: 40 hours Class size: 10 Students Maximum

Refresher training is required every 36 months.

Course Description: Students shall be instructed in the proper method of safe handling of ordnance and general cargo with various types of ordnance MHE which include forklift trucks (diesel and electric) and pallet transporters. During the hands-on training portion of the course, each student shall be given the opportunity to operate diesel and electric forklift trucks and pallet transporters in various simulated situations such as ship's cargo holds, above deck areas, magazines, railcars, and other explosive material handling areas. A written test and a practical test shall be administered at the conclusion of the course and a passing grade is required for student credit. Course may be exported aboard ship and other locations depending on availability of equipment, training shapes and working area.

EPF MATERIAL HANDLING EQUIPMENT (MHE) OPERATOR (10K ROUGH TERRAIN FORKLIFT, 4K RT FORKLIFT AND WINGLIFT MOBILISER) (CIN/CDP (In House) and (Exportable))

Course length: 40 hours Class size: 2-4 Students (2 Minimum)

Course Description: Students shall be instructed in the proper method of safe operation of the Lift-King 12K Rough Terrain (RT) Forklift, TEREX RT and the WINGLIFT Mobiliser, as pertains to their use aboard the EPF platform. Students shall be instructed in the operating characteristics, safety requirements, and the capabilities and limitations of the Lift-King 12K RT forklift, TEREX RT and the WINGLIFT Mobiliser when operated aboard JHSV class ships. Students shall be instructed in the responsibilities of a guide (spotter) for each piece of MHE. During the practical portion of the course, each student shall be given the opportunity to operate all MHE and to perform as a guide (spotter). A written test and a practical test shall be administered at the conclusion of the course, and a passing grade is required for student credit. This course may be exported aboard ship and other locations, depending on availability of equipment, training shapes and a working area.

FALL PROTECTION AUTHORIZED PERSON/END USER TRAINING COURSE (CIN/CDP: (In House) and (Exportable)). CIVMAR Instructed only.

Course length: 8 hours Class size: 12 Students Maximum (2 Minimum)

Recertification is required every 24 months.

Course Description: Students shall be instructed in the proper use of fall protection equipment. Required for anyone going aloft over 4 feet. This course covers fall Protection procedures set forth in ISM. The student shall demonstrate their ability to use fall protection equipment including the wearing the full body harness. Other gear include Work Positioning lanyards, Y-Lanyards, Ladder Climbing devices, Self-Retracting Lifelines, Vertical Lifelines and Rope Grabs. Any student who successfully completes the Fall Protection Authorized Person course will satisfy the MSC training requirement and shall receive a certificate of completion.

FALL PROTECTION AUTHORIZED RESCUER TRAINING COURSE (CIN/CDP: (In House) and (Exportable)). CIVMAR Instructed only.

Course length: 8 hours Class size: 12 Students Maximum (2 Minimum)

Recertification is required every 24 months.

Course Description: Students shall be instructed in the proper use of fall protection equipment. This training is required for the Fall Protection program aboard ship. This course covers fall protection procedures set forth in SMS. The student shall demonstrate their ability to rescue anyone aloft using proper techniques and procedures. A Rescue Plan, and Rescue Team are required in SMS. Any student who successfully completes the Fall Protection Authorized Rescuer Training Course shall satisfy the MSC training requirement and shall receive a certificate of completion.

FUEL OIL TESTING COURSE (In-House and Exportable). CIVMAR Instructed only. (NEW COURSE coming FY22)

Course length: 32 hours

Class size: 6 - 10 Students

Course Description: Any student who successfully completes the Fuel Oil Testing course shall satisfy the MSC training requirement and shall receive a certificate of completion. Upon completion of this course the students shall be able to identify shipboard fuel oil system testing requirements given applicable technical reference(s) with 75% accuracy and perform the following:

- Fuel Oil environmental compliance and spill containment given applicable technical reference(s) with 75% accuracy.
- Lubricant management given applicable technical reference(s) with 75% accuracy.
- Sampling procedures given applicable technical reference(s) with 75% accuracy.
- Fuel Oil quality management given applicable technical reference(s) with 75% accuracy.
- Lube Oil quality management given applicable technical reference(s) with 75% accuracy.

MAGAZINE SPRINKLER SYSTEM OPERATION AND MAINTENANCE (LEGACY SYSTEMS) (CIN: TBD- (In House))

Course Length: 40 hours Class Size: 6 Students Maximum

Course Description: Students shall be instructed in the proper operation, testing, casualty analysis, preventive maintenance and repair of salt water activated, dry-type magazine sprinkler systems and associated thermo-pneumatic controls. Upon completion of this course, students shall have in-depth knowledge of the system operation, preventive and corrective maintenance on Magazine Sprinkler Systems and Magazine Sprinkler Valve, the general, physical, functional and operational details of the Automatic Control System, and of preventive maintenance of the Automatic Control System.

ORDNANCE HANDLING EQUIPMENT (OHE) (CIN/CDP: G-4E-1212/09Z0 - (In House))

Course length: 32 hours Class size: 12 Students Maximum

Refresher training is required every 36 months.

Course Description: This course shall familiarize and assist the students in becoming proficient in loading and unloading cargoes, stores, and the proper use of OHE which includes slings, beams, non-powered hand-trucks and cargo hooks. Students shall also be required to select and install the proper OHE on a variety of ordnance training loads. Safety shall be heavily emphasized during training. A written and a practical test shall be administered at the conclusion of the course and a passing grade is required for student credit. Course may be exported aboard ship and other locations depending on availability of equipment, training shapes and working area.

PROBE REPAIR AND MAINTENANCE – (CIN/CDP: J-690-0077/2587 (In House) and (Exportable))

Course length: 24 hours Class size: 8 Students (4 Minimum)

Course Description: Students shall be instructed in the proper method of safely disassembling/assembling and repairing the Fueling-at- Sea Probe assembly. During the lecture portion of the class, students shall be familiarized with the Probe's parts, functions, the importance of

procedural disassembly and reassembly, and all safety requirements associated with performing maintenance on a fueling Probe. During the practical portion of the course, the students shall be guided, step-by-step, in the disassembly, replacement of parts, and assembly of the Fuel Probe. A written and a practical test shall be administered at the conclusion of the course, and a passing grade is required for student credit.

STANDARD TENSIONED REPLENISHMENT ALONGSIDE METHOD (STREAM) CARGO/FUELS (CIN/CDP: G-060-0612/07RD) – (In House). NEO Team Building Course.

Course length: 80 hours Class size: 12 – 24 Students (12 Minimum)

Refresher training is required every 36 months.

Course Description: “TEAM BUILDING”. This course shall cover STREAM operations for transfer at sea of ordnance/cargo and Fueling-At-Sea (FAS) via Connected Replenishment (CONREP). Topics of discussion shall include safety gear and safety procedures, review of OHE, UNREP cargo handling procedures, MHE operation, hazardous material, CONREP familiarization and pre-operational procedures, CONREP operations, personnel transfer and emergency procedures. Practical training may be conducted at the land-based MSC MUTC STREAM facility. The site has both sending and receiving ship training platforms. The students, under close instructor’s supervision, are required to conduct STREAM Cargo/FAS operations exercises, including night training, based on real life scenarios. A written and a practical test shall be administered at the conclusion of the course and a passing grade is required for student credit.

STREAM FAMILIARIZATION COURSE_ CIVMAR Refresher course.

Course length: 40 hours Class size: 16 Students Maximum (12 Minimum)

Course Description: “TEAM BUILDING”. This course was developed to provide an introduction to underway replenishment for Civilian Mariners. The students shall be introduced to the equipment, terminology, and procedures associated with UNREP with a heavy emphasis on safety.

STREAM WINCH BOOTH OPERATOR COURSE (CIN/CDP: N/A)

Course length: 40 hours Class size: 2 Students Maximum

Course Description: This course was developed to provide an introduction to underway replenishment Winch Booth Operations for Civilian Mariners. The students are introduced to the equipment, terminology, and procedures associated with UNREP Winch Booth Operations for both the Cargo and Fuel STREAM Rigs with a heavy emphasis on safety.

VERTICAL REPLENISHMENT FAMILIARIZATION (VERTREP) (CIN/CDP: G-063-0612/07R5 - (In House)).

Course length: 16 hours Class size: 24 Students Maximum

Refresher training is required every 36 months.

Course Description: Topics of instruction shall include; advantages of VERTREP operations, duties and responsibilities of personnel involved, safety and emergency procedures, hazards of Foreign Object Damage and walk down procedures, VERTREP planning procedures, load staging and pick up procedures, drop load zone precautions, helicopter flight patterns, personnel transfer, cargo transfer, hoisting procedures and sound powered phone talker procedures. A written test shall be administered at the conclusion of the course and a passing grade is required for student credit. Course can be exported aboard ship and other locations depending on availability of equipment, training shapes and working area.

VISUAL INFORMATION (VI) OPERATIONS

Course length: 8 hours Class size: 6 Students Maximum

Refresher training is required every 36 months.

Course Description: MSC exists to support the joint warfighter across the full spectrum of military operations. In order to provide that support, COMSC delivers on-time logistics, strategic sealift, as well as specialized missions anywhere in the world, under any condition. The complex, dynamic and often contested operational environment in which MSC's vessels routinely sail requires the ability to visually document events and operations. This provides the military chain of command the information it needs to better inform its stakeholders both inside and outside of Government with rapid, factual information regarding military operations. VI is defined as still photography and video products that are collected, transmitted and disseminated in a timely manner and contribute to the fleet commanders' operational and strategic decision-making process, provide support for analysis, and enrich public comprehension. MSC's Fleet is manned by licensed and unlicensed CIVMARS and CONMARS who are trained in maritime deck, engineering, and communications functions. CIVMARS and CONMARS will gain expertise or training in the procedures and equipment required to capture and quickly transmit VI to fleet Maritime Operations Centers. Topics include tasks and activities necessary to execute the VI mission, including collection, transfer and dissemination of VI in accordance with specific Operational Commanders' requirements.

END.....