# **MMSD Volunteer Crew Qualifications**

## **Maintenance Crew**

All members of the MMSD crew are by default members of the maintenance crew, whose purpose is to maintain and repair the MMSD vessels.

- Requirements:
  - A completed, signed MMSD crew application
  - A current Photo ID (driver license, military ID, passport, or equivalent.)
  - Proof of current medical insurance coverage
  - MMSD membership ID# and expiration date
- Junior crew: any crew member between the age of 14 and 17 has the following further requirements/restrictions:
  - Junior crew members, while at the MMSD, must have present a parent or legal guardian that is also a MMSD crew member.
  - o Junior crew members are not allowed to work above deck level

## Sail qualification

Members of the MMSD Maintenance Crew may become sail qualified by meeting additional requirements, (see Sail Qualification requirements below).

Sail qualified crew members are eligible to crew on underway activities on the MMSD vessels, after additional training.

Each year a sail crew member is qualified, MMSD will provide the current year's sail crew shirt. The current sail shirt must be worn during underway activities, except for certain offshore activities.

## Climbing qualification

Members of the MMSD crew may become climb qualified by passing additional physical qualifications and a climbing evaluation.

Climbers may be qualified to climb at various levels depending on their physical qualifications, etc.

Note: Climb qualification means a crewmember is eligible to climb - it does not entitle a crew member do so. Climbing permission is secured from either the ship captain, a mate, a mast captain or a qualified crew designated by the aforementioned.

## Sail Qualification Requirements

- Sail qualification must be renewed each year at the first quarterly testing date (Q1); if a crew member becomes qualified later in the year, they must requalify in Q1 the following year.
- Participation in the MMSD Substance Abuse screening program requiring a preemployment test prior to any underway activities. Pre-employment testing may be waived upon receipt of satisfactory evidence of active current participation in a Coast Guard approved substance abuse screening program. MMSD will provide a form for this

purpose, in which an individual may authorize his/her outside employer to release relevant information to MMSD.

- Note: each crew member must pay for their initial screening; subsequent random test costs are paid by MMSD.
- Successful completion of all parts of the annual sail qualification testing.

## **Annual Sail qualification testing**

- The purpose of this testing is to verify each year that a crew member has physical strength and basic line handling skills to be able to safely participate in ship operations.
- Testing occurs 3 times annually: on the second Sunday of March (Q1), July (Q2), and October (Q3).
- An additional test opportunity will be held in Q1 on the third Sunday of March.
- All crew must requalify each year in Q1.
- If a crew member fails to qualify, they may not participate in sailing activities, or work aloft until they successfully pass all portions of the test.
- Testing in Q2 and Q3 is to accommodate
  - New crew members
  - Crew that missed both test dates in Q1
  - o Crew that failed any portion of the testing in a previous attempt, or
  - Crew that want to upgrade their physical or climbing status (e.g. they are now able to pass the physical qualification for top-climber (i.e. pull-ups, and want to perform climbing qualification to be top-qualified)
- Testing of crew is ONLY performed on the designated testing dates if a crew member misses a test date, they must wait until the next test date to be tested.
- If any individual fails to attain sail crew qualification, then ALL portions of the test must be retaken the following quarter (i.e. if physical and knot testing are passed, but the crew member fails a climbing evaluation, then the crew member must retake the physical and knot potions of the exam as well as the climb test)
- If a climbing test is attempted and failed the crew member may remain sail qualified, but is restricted to deck level activities.
- A crew member that wants to test in Q2 or Q3 must pre-register with the purser (who shall be designated by the Director of Ship Operations) for the test at least one week in advance in order to ensure that sufficient testers are available.
- Crew members that will test the crew (Testers) are appointed by the Steering Committee.
- The Steering Committee will consist of a maximum of 12 currently qualified Sail Crew Members.
- Nominations of qualified sail crew members to the Steering Committee can be made from the Steering Committee or any currently qualified sail crew member. Nominees shall be voted upon by the existing Steering Committee and approved by the Director of Ship Operations.
- Participation in the Steering Committee shall be voluntary with a term of four (4) years and with no term limits.
- Annual testing consists of the following:
  - Successfully completing written test
  - Physical qualification
    - must be performed by ALL crew
    - see below for details
  - Knots and Belay
    - must be performed by all crew

- if the crew member being tested does not have a rating higher than greenhand, the crew member must demonstrate proficiency in all the knots and belays required for a greenhand rating.
- if the crew member holds an Ordinary or higher rating, the crew member must demonstrate proficiency in following skills:
  - Stopper hitch
  - Bowline
  - Belaying a line on a pin from each of 4 possible directions
  - 2 other knots randomly chosen from the knots required for a Greenhand rating
- Climbing evaluation
  - must be performed by all crew interested in working aloft or on jibboom of any vessel
  - anyone attempting the climbing evaluation must first pass the Knot/belay qualification AND the relevant level of the physical qualification.
  - See below for details

## Ratings/Endorsements

- Ratings (Greenhand, Ordinary, Able and Bosun) are sequential rankings that indicate
  acquisition of a certain increasing level of general knowledge relevant to rigging,
  maintenance and operation of MMSD ships.
- Ratings must be earned in sequence (i.e. you must be awarded an Ordinary Rating before you can test for Able)
- Ratings may be earned without being sail crew qualified.
- Endorsements indicate that a particular set of specialized skills have been demonstrated. In general, endorsements require sail crew qualification
- For each required skill for a rating/endorsement, the Steering Committee will designate a Subject Matter Expert (SME). That person will be responsible for ensuring the related training materials and standards are adequate.
- For each skill, one or more Skill Mentors will be designated. The SME will by default be
  a Skill Mentor; additional Skill Mentors can be proposed by the SME and accepted by
  the Steering Committee and the Director of Ship Operations.
- The skills/knowledge required for each rating/endorsement is documented in the Ratings Log book.
- Ratings and Endorsements can be earned (for the most part) regardless of sail qualification status and/or climbing ability.
- A rating or endorsement expires five years from the date issued.
- A rating/endorsement may be renewed by testing with the Promotion Board (See "Promotion Board" section below) at any time (i.e. a crew member need not have all skills checked off again by a Skill Mentor)
- If a rating lapses, a crew member may requalify at the highest level previously obtained; a crew member does NOT need to requalify first at lower levels.
- Any member of the Promotion Board that observes a lack of proficiency in one or more skills that a crew member **should** possess according to their earned ratings/endorsements
  - Has the duty to call together a Promotion Board within 14 days to consider whether the crew member should be stripped of the relevant rating/endorsement.
  - Director of Ship's Operations may restrict the duties of that crewmember in accordance with the detected lack of proficiency, especially in cases where safety is compromised.

# Earning a rating or endorsement

- Upon request, each crew member will be given a rating log book that detail the skills/knowledge required for each rating or endorsement.
- The crew member is responsible for maintaining the rating log book. The MMSD purser
  will record only ratings and endorsements earned, not individual skills demonstrated; if a
  ratings log book is lost, the crew member will need to get checked off again on any skills
  that have been checked off but not part of an approved rating/endorsement.
- Training materials for all skills etc. will be documented in either written or video form, or using online resources.
- The crew member is expected to learn the task through self-instruction, and with assistance from his/her mast captain, or designated mentors for each area
- Once the crew member feels competent in the skill, they can request that a Skill Mentor verify their competence. If the mentor feels the crew member has demonstrated the skill properly, the mentor will initial and date that skill in the crew member's rating log
- When all skills for a rating/endorsement have been checked off, the crew member may request from the purser an appointment with an upcoming promotion board. This request must occur no less than one week in advance.

### **Promotion Board**

- A Promotion Board will consist of three members consisting of:
  - Current or previous MMSD sailing ship captain
  - Current or previous MMSD mast captain
  - Director of Ship Operations
- One or more Promotion Boards will meet on the Sunday following crew testing.
- The promotion board members will:
  - Verify that the crew member's rating log have all necessary skills checked off
  - Test each candidate on any subset of the tasks specified as a requirement for the rating/endorsement for which they are testing or a lower rating the candidate holds. Testing can consist of verbal questioning, written tests, demonstration of a particular task, etc.
  - All three members of the Promotion Board must approve the award of the rating or endorsement.
  - If the crew member rating/endorsement is approved, the promotion board embosses and dates the relevant ratings log page.
- Awarded ratings and endorsements are recorded by the MMSD purser, who shall be appointed by the Director of Ship Operations.

#### **Crew Selection**

## **Crews for MMSD vessels**

- Crew are selected by Director of Ship Operations and ship's officers
- Sail crew members are ranked using a weighted metric system including volunteer hours, and physical/climbing qualification (climbers get additional points).
- Crew members with higher rankings are given preference in crew assignments.

- Crew selection also takes into account factors based on Aptitude, Attendance and Attitude. Failure to follow instructions is also noted and considered.
- Crew members are asked for their preference of Ship/Mast assignment which may or may not be granted based on the manning requirements set forth by the Ship's Captains.

## Physical/Climb qualifications

• Qualification at Deck, Jibboom, Course or Top-man level: every crew member must pass a physical test, and if working off the deck, must pass a climbing test:

	Physical Testing					Climb Testing		
	Horizontal haul	Vertical Haul	Hang	Recoveries	Pull-up	Climb around	Course climb	Climb over
Deck	✓	<b>√</b>						
Jibboom	✓	<b>√</b>	<b>√</b>	<b>√</b>		<b>✓</b>		
Course	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>			<b>√</b>	
Тор	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>			<b>√</b>

## **Physical Test Criteria:**

- Horizontal Haul: haul on a horizontal line to bring an object weighing 70 pounds approximately
   15 feet off the deck, under control both hauling the object up, and bringing the object down to the deck. Dropping the object from any height fails the test.
- Vertical Haul: haul on a vertical line to bring an object weighing 70 pounds approximately 15 feet off the deck, under control both hauling the object up, and bringing the object down to the deck. Dropping the item from any height fails the test.
- Hang:
  - o begin with both hands on bar
  - hang from one hand for 5 seconds
  - switch hands
  - hang for an additional five seconds
  - o then put the second hand back on bar must end with both hands on bar
- Recoveries: demonstrate two successful recoveries
  - Hang in harness from lanyard clipped onto practice yard jackstay
  - Recover to a standing position on the footrope
- Pull-up: 1 pull-up (not chin-up: hands must be facing away), bringing chin over bar

## Climbing Test Criteria: (see Sail Training 101 manual for details)

- Jib-boom Climb-around: demonstrate proper etiquette, technique and skill in laying on and off
  the Star jibboom, and maneuvering out to a work position at the forward end of the jibboom,
  then laying back to the deck
- Course Climb: demonstrate proper etiquette, technique and skill in climbing up to and laying on the Star fore or main yard and maneuvering out to a work position on the yard, and then laying off the yard and back to the deck.
- Top Climb-over: demonstrate proper etiquette, technique and skill in climbing up and over the
  tops, continuing on laying on and off one of the Star fore top yards and maneuvering out to a
  work position on the yard, and then laying off the yard and back to the deck. Initial Top Climbover training shall be performed on belay.

Due to differences in the rigging on each of the MMSD sail vessels, the climbing qualifications are interpreted slightly differently on each MMSD vessel. The following table indicates where in each ship's rig a climber with a particular qualification is allowed to climb and work:

Qualification Level	Star	Californian	Surprise	
Deck	Deck	Deck	Deck	
Jib-boom	Jib-boom	Jib-boom	Deck	
Course	Fore or Main or jib- boom	Jib-boom	Fore or main yard	
Тор	Anywhere in rig			

## **Climb mentoring**

Passing the climbing evaluation is only a first step in becoming a qualified climber:

- Crew members that are newly qualified as climbers (climbing apprentices) are not allowed to work off the deck except under the supervision of climbing mentors.
- **Climbing mentors** are experienced climb qualified crew members selected by the climbing instructors that will mentor and supervise other climbers.
- When working off the deck, there must be at least one climbing mentor for every two climbing apprentices. Where possible the mentor should be stationed between the two apprentices.

 When a climbing apprentice has demonstrated to at least two climbing mentors that they have gained sufficient skill to no longer require direct supervision, a climbing apprentice is considered a fully qualified climber.

#### Attire and tools

- Crewmembers are expected to wear appropriate work clothing and shoes while working at SDMM. Appropriate shorts may be worn (i.e. no Daisy Dukes, overly tight, extremely short inseams, etc.). Enforcement of appropriate attire is the responsibility of the MMSD employee in charge (ship captain, etc.)
- Maintenance crew members are expected to purchase and wear a maintenance crew shirt while working at MMSD, to distinguish them from MMSD guests, and to allow them access to nonpublic areas of MMSD.
- Each year a crew member is qualified, MMSD will provide one current year's sail crew shirt (short sleeve). The current sail shirt must be worn during underway activities, except for certain offshore activities (under direction of ship's captain) or when "period attire" is required by MMSD.
- Sail qualified crew members may purchase additional sail crew shirts, hats, jackets etc.
- Many tasks performed during maintenance require use of simple hand tools (knife, spike, etc.).
   Crewmembers are expected to provide and maintain their personal tools.
- Crewmembers working off the deck must supply and wear a climbing harness, lanyard and locking carabineer, and appropriate shoes for climbing all of which are approved by a climbing instructor.

#### **Volunteer Crew representative to MMSD Board of Directors**

- This representative:
  - Observes and contributes to the MMSD Board of Directors meeting and reports back to crew any relevant information.
  - Reports to the Board on crew operations.
- Each representative is elected to a 2 year term.
- No term limits: Current representative can run for additional terms.
- Candidates for this office are nominations by current crew members in good standing
- Candidates can self-nominate.
- Candidates cannot be an employee of the SDMM.
- Elections shall take place, by ballot, at the first regularly scheduled crew meeting in November.
- Term shall begin January 1 of the year following the ballot.