



M/V Tamaroa
B-1-E Qualification

A. Complete B-2-E Qualification:

(DATE)

- _____ 1. Complete B-2-E qualifications

B. Lube Oil Purifier:

(DATE)

- _____ 1. Add the LOP system and piping to MDE lube oil drawing
- Label all valves
 - Include all check valves
 - Include all sump suction and fill valves
- _____ 2. Demonstrate how to start and secure
- _____ 3. Know what alarms mean

C. Evaporator:

(DATE)

- _____ 1. Draw complete system
- Include all stages
 - Waste heat
 - Include brine, distillate pumps and systems
 - Show dump valve
 - Show all regulators
 - Show salinity indicator probes
- _____ 2. Lite off evaporator and place on line
- _____ 3. Demonstrate proper use of salinity indicator and interpret readings
- _____ 4. Demonstrate use of ameroyal and how it effects system
- _____ 5. Know tank line-up and piping of distilled water

- _____ 6. Describe operation of evaporator. Be able to describe how fresh water is made from salt water.
- _____ 7. Know required temperatures of all system components

D. Reverse Osmosis:

(DATE)

- _____ 1. Trace and draw S/W & distillate lines. Include all valves
- _____ 2. Know all pressures of the system. MIN/MAX limits
- _____ 3. Know what types of filters are used. Know when & how to change them
- _____ 4. Demonstrate ability to energize, maintain and secure unit

E. F/O COALESCER:

(DATE)

- _____ 1. Demonstrate ability to energize and line up unit to daytanks
- _____ 2. Know what filters go to each stage and be able to change filters
- _____ 3. Know parameters of coalescer

F. Main Engines:

(DATE)

Note: Label all valves and check valves

- _____ 1. Trace and draw fuel oil system
- _____ 2. Trace and draw lube oil system. Include prelube
- _____ 3. Trace and draw salt water system
- _____ 4. Trace and draw fresh water system
- _____ 5. Know how to add jacket water to expansion tank
- _____ 6. Name and locate all alarms. Identify pressures and temperatures at which they trip
- _____ 7. Know all temperatures and pressures. Know MIN/MAX limits for all systems
- _____ 8. Know how to adjust pyrometer readings for each cylinder. Know the cylinder numbering system for each MDE
- _____ 9. Know how to line up emergency F/O pressure
- _____ 10. Know how to re-circulate main engine salt water cooling

- _____ 11. Demonstrate testing lube oil viscosity by using the falling ball method and how to determine fuel oil dilution
- _____ 12. Know locations of where to take lube oil samples on all engines
- _____ 13. Know proper intervals for taking samples using either the visgauge or fall and drop method
- _____ 14. Know from memory the initial actions for the following casualty control evolutions:
- MOB-E-005-SF Major F/O leak MDE
 - MOB-E-010-SF Major L/O leak MDE
 - MOB-E-200-SF Crankcase explosion MDE
 - MOB-E-206-SF Loss of fuel oil pressure MDE
 - MOB-E-016-SF Fresh water overheat MDE
 - MOB-E-009-SF Loss of lube oil pressure MDE
 - MOB-E-208-SF Governor hunt
 - MOB-E-208-SF Governor surge
 - MOB-E-208-SF MDE overspeed
 - MOB-E-211-SF Hot pedestal bearing in main generator

G. Miscellaneous:

(DATE)

- _____ 1. Demonstrate ability to prelube all MDE's. Demonstrate proper pump operation
- _____ 2. Know how to add L/O to MDE
- _____ 3. Know proper L/O sump levels
- _____ 4. Know how to line up sea chest to saltwater cooling and the difference between high and low suctions
- _____ 5. Know sequence of events for blowing down MDE during prelube and lite off period
- _____ 6. Know how to energize sump heaters
- _____ 7. Know correct log entries for prelubing and blowing down
- _____ 8. Know round sheets and how to record the same

H. Jacket Water Treatment:

(DATE)

- _____ 1. Discuss intervals and procedures for adding and using nalcool in engines
- _____ 2. Describe how to test for nalcool concentration in engine
- _____ 3. Know how and when to draw J/W samples

I have completed the above qualification requirements and wish to be considered for regular B-1-E Watch.

Signature of Trainee Date

After successfully completing the oral board, I recommend this man be qualified for B-1-E Watch.

Senior Board Member Date

You have been examined by your peers and found to be qualified to stand B-1-E watch on board the M/V Tamaroa.

Assistant Engineering Officer Date

Note: The previous is based off the historical 1993 version of the *Tamaroa's* "B-1-E Qualification" supplied by John Hulslander This is a working document and items may be added or modified as circumstances and equipment dictate.