

Summary Report for Individual Task
551-8ST-3027
Conduct Maintenance of a Vessel Structure/Components
Status: Approved

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD1 - The materials contained in this course have been reviewed by the course developers in coordination with the Transportation School, Fort Lee, VA 23801 foreign disclosure authority. This course is releasable to students from all requesting foreign countries without restrictions.

Condition: Assigned as a Junior Marine Engineer, given a completed risk assessment, vessel technical manual (TM), local Standard Operating Procedure (SOP), TB 43-1044, National Electric Code, a vessel at sea, at anchor or moored alongside the pier, personal protective equipment (PPE), lock out tag out kit, and a marine rail toolbox, day or night in all sea and weather conditions and all MOPP levels in an operational environment scenario. Standard MOPP 4 conditions do not exist for this task. See the MOPP 4 statement for specific conditions.

Standard: On order, conduct the maintenance of a vessel structure and components in accordance with the TM, SOP and TB 43-1044 without injury to personnel or damage to equipment. The vessel is fully mission capable at task completion.

Special Condition: None

Safety Risk: Low

MOPP 4: N/A

Task Statements

Cue: None

DANGER
None

WARNING
None

CAUTION
None

Remarks: None

Notes: None

Performance Steps

1. Ensure task is within crews capability/authorization.

Note:

- a. Ensure all applicable tools and equipment are in safe working order.
- b. Ensure all applicable manuals and references are accessible.

2. Perform initial inspection on work piece(s).

Note: Check with local Environmental Protective Agency (EPA) laws prior to starting any paint operation.

3. Assign personnel to perform task.

4. Enforce all safety precautions and procedures are followed.

Note: Major painting tasks, which are defined as painting a surface where more than 50 percent of the paint surface, or paint system of a major area has deteriorated to the extent that the underlying paint or structure is unprotected. The 50 percent failure stipulation applies when several separate damaged areas add up to more than 50 percent of total surface, as well as when the damage is concentrated in one area.

5. Provide assistance when necessary.

6. Conduct an in process inspection and make on the spot corrections (as applicable).

Note:

- a. Ensure analysis of vessel's structural repair is being done in the right sequence.
- b. Identify components for replacement.
- c. Ensure work piece(s) is properly repaired.
- d. Ensure repair equipment is set-up properly.
- e. Ensure repair process is being done correctly.

WARNING

Warning: Due to the volume of material applied, the application of paints, varnishes, lacquers, enamels, and other flammable liquids by the spray process is more hazardous than brush application. Potentially harmful mists created by paint spraying operations add to the health hazard. Spraying also deposits a flammable residue, which is subject to spontaneous ignition.

7. Perform a final inspection of work pieces.

Note:

8. Critique personnel on job performance.

WARNING

Paint strippers and removers present one or more of the following hazards: fire, anesthetic, toxic, or caustic. Accident investigation results indicate that extreme handling precautions are required because of these hazards and the number of different formulations involved.

Paint strippers containing phenol are considerably more toxic than most shipboard paints or solvents. Phenol is readily absorbed through the skin and may cause serious illness, or even death, if not washed off promptly.

9. Ensure maintenance forms are completed as required.

Note:

WARNING

Isocyanate vapors can cause irritation of the skin, eyes, and respiratory tract. Isocyanate vapors can cause severe allergic reactions in sensitized individuals and may produce Asthma-type symptoms.

10. Ensure tools and equipment are properly maintained.

Note: Once cured, polyurethane coatings present no special health hazards but they do present special problems during mixing, application, and curing because of the possibility of free isocyanate vapors being liberated.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the soldier a GO if all performance measures are correctly completed/pass (P). Score the Soldier a NO-GO if any of the performance measures are missed or incorrectly performed/fail (F).

Evaluation Preparation: Ensure Soldier understands why this task to maintain a vessel structure/components is important.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Ensured task is within shop capability/authorization.			
a. Ensured all applicable tools and equipment are in safe working order.			
b. Ensured all applicable manuals and references are accessible.			
2. Performed initial inspection of work piece(s).			
3. Assigned personnel to perform task.			
4. Ensured all safety precautions and procedures are followed.			
5. Provided assistance when necessary.			
6. Conducted an in process inspection and make on the spot corrections (as applicable).			
a. Ensured analysis of vehicle structural repair is being done in the right sequence.			
b. Identified components for replacement.			
c. Ensured work piece(s) is properly prepared.			
d. Ensured repair equipment is set-up properly.			
e. Ensuree repair process is being done correctly.			
7. Performed a final inspection of work piece(s).			
8. Critiqued personnel on job performance.			
9. Ensured maintenance forms are completed as required.			
10. Ensured tools and equipment are properly maintained.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	TB 43-0144	PAINTING OF WATERCRAFT	No	No
	TB MED 502	OCCUPATIONAL AND ENVIRONMENTAL HEALTH RESPIRATORY PROTECTION PROGRAM	Yes	No
	TM 55-1905-223-10	Operators Manual for Landing Craft, Utility (LCU 2000 Class)	No	No
	TM 55-1915-200-10	Operator's Manual for Logistic Support Vessel (LSV) (NSN 1915-01-153-8801) (Reprinted W/Basic Incl C1-6)	No	No
	TM 55-1925-273-10-1	Operators Manual for Inland and Coastal Large Tug (LT)	No	No
	TM 55-1925-273-10-2	Operator's Manual for Inland and Coastal Large Tug (LT) (NSN 1925-01-509-7013) (EIC XAG) (This item is included on EM 0272)	No	No

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT. Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT. AR 200-1 delineates TRADOC responsibilities to integrate environmental requirements across DOTMLPF and ensures all training procedures, training manuals, and training doctrine includes sound environmental practices and considerations. The Army's environmental vision is to be a national leader in environmental and natural resource stewardship for present and future generations as an integral part of all Army missions. Environmental protection is never completed. Continuously be alert to ways to protect our environment and reduce waste. Leaders must ensure that their unit has an active and strong environmental program. They must understand the laws and know what actions to take. Leaders bring focus, direction, and commitment to environmental protection. Commanding officers should ensure the following environmental programs are in place and are being maintained: -Hazardous materials program. -Hazardous waste program. -Hazardous communications program. -Pollution prevention and hazardous waste minimization recycling program. -Spill prevention and response plan program.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination. bsp; All operations will be performed to protect and preserve Army personnel and property against accidental loss. Procedures will provide for public safety incidental to Army operations and activities and safe and healthful workplaces, procedures, and equipment. Observe all safety and/or environment precautions regarding electricity, cable, and lines. Provide ventilation for exhaust fumes during equipment operation and use hearing protection when required IAW AR 385-10, the Clean Air Act (CAA) and the CAA amendments, and the OSHA Hazard Communication standard. Accidents are an unacceptable impediment to Army missions, readiness, morale, and resources. Decision makers at every level will employ risk management approaches to effectively preclude unacceptable risk to the safety of personnel and property affiliated with this task. (a) Take personal responsibility. (b) Practice safe operations.(c) Recognize unsafe acts and conditions. (d) Take action to prevent accidents. (e) Report unsafe acts and conditions. (f) Work as a team.

Prerequisite Individual Tasks : None

Supporting Individual Tasks : None

Supported Individual Tasks : None

Supported Collective Tasks :

Task Number	Title	Proponent	Status
43-2-4575	Conduct Preventive Maintenance Checks and Services	43 - Maintenance (except missile) (Collective)	Approved
43-2-4552	Perform Field Maintenance	09 - Ordnance (missiles and munitions) (Collective)	Approved
55-6-0009	Manage Marine Related Activities	55 - Transportation (Collective)	Approved
43-2-4817	Perform Redeployment Maintenance Activities	43 - Maintenance (except missile) (Collective)	Approved
43-2-4805	Perform Predeployment Maintenance Activities	43 - Maintenance (except missile) (Collective)	Approved
43-2-4575	Conduct Preventive Maintenance Checks and Services	43 - Maintenance (except missile) (Collective)	Proposed
55-2-1500	Provide Quality Control	55 - Transportation (Collective)	Approved
55-2-1502	Conduct Watercraft Support Maintenance Operations	55 - Transportation (Collective)	Approved

ICTL Data :

ICTL Title	Personnel Type	MOS Data
MOS 88K Watercraft Operator SL 4	Enlisted	MOS: 88K, Skill Level: SL4, Duty Pos: TFJ
88L40 Watercraft Engineer	Enlisted	MOS: 88L, Skill Level: SL4, Duty Pos: TGB, LIC: EN, SQI: O
MOS 88K Watercraft Operator SL3	Enlisted	MOS: 88K, Skill Level: SL3, Duty Pos: TAV
88L30 Watercraft Engineer	Enlisted	MOS: 88L, Skill Level: SL3, Duty Pos: TFR, LIC: EN