

## APPENDIX O

### Additional Examples for Development Phase

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#### Introduction

This appendix presents some additional examples based on the job aids presented in *Appendix M* and the suggested worksheets and templates presented in *Appendix N*.

The examples are presented in their entirety and serve only as a reference for you. The actual materials you develop may vary slightly from those presented in this appendix, depending on the course development requirements.

#### Table of Contents

The following items are included in this appendix:

Example Number	Example Title
EX – O.1.A	Performance Test (Checklist Only)
EX – O.1.B	Performance Test (Complete)
EX – O.2	Job Aid (ET School, Step-Action Table)

**Example Instructor Guides**, using the IG Template provided with SOP, Volume 5, can be viewed online under *Appendix O* on one of the below websites:

Tracen Internet Webpage:

<http://www.uscg.mil/hq/cg1/TracenPetaluma/SOP/SOP.asp>

Tracen Intranet Webpage:

[http://cgweb.tcpet.uscg.mil/T\\_Div/CDT/SOP.asp](http://cgweb.tcpet.uscg.mil/T_Div/CDT/SOP.asp)

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## EX – O.1.A: Performance Test (Checklist)

### Introduction

This sample depicts an HS School performance test checklist. This checklist is intended to be used in concert with a supporting performance test package with scenario for complete testing, scoring and administration of this assessment (as shown in EX – O.1.B).

<b>Performance Test: TPO 1.1 – Perform QA on Health Record</b>						
Name: _____				Class #: _____		
<b>TPO 1.1(EPQ 4.C.01)</b>						
Given a health record and medical forms, <b>MAINTAIN</b> the health record without error IAW with the references listed below:						
Reference(s): <i>Medical Manual, COMDTINST M6000.1D (series)</i>						
<b>Student may use the following:</b>	<input checked="" type="checkbox"/> Job Aid	<input checked="" type="checkbox"/> Reference Material	Other: _____			
<b>Evaluation Criteria:</b>						
<b>Accuracy:</b>		<b>Safety:</b>		<b>Time:</b>		
<ul style="list-style-type: none"> <li>Verbalize visual findings and "considerations" not otherwise known to the instructor if applicable to the task</li> </ul>		<ul style="list-style-type: none"> <li>Performer must demonstrate observance and adherence to safety precautions in using appropriate tools and procedures</li> </ul>		<ul style="list-style-type: none"> <li>Task completed within 20 minutes</li> </ul>		
STEP	Attempt					
	1 <sup>st</sup>		2 <sup>nd</sup>		3 <sup>rd</sup>	
	Y	N	Y	N	Y	N
1. Check all required items in Health Record.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Ensure all entries legible and in black or dark blue ink; correct if not.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Ensure all patient ID information typed, printed or stamped; correct if not.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Ensure all dates entered in yy/mm/dd format; correct if not.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Ensure all forms inserted in the correct section of the record and in chronological order; correct if not.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Ensure all forms filed by date with most recent on top; correct if not.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Determine if any forms missing; state need to contact lab or referral office to determine status of forms.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Ensure that all entries have required signatures; if not, state need to obtain signature, stamp or type name and rank of medical personnel.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Additional notes for successful testing:</i>	<input type="checkbox"/> Go <input type="checkbox"/> No Go		<input type="checkbox"/> Go <input type="checkbox"/> No Go		<input type="checkbox"/> Go <input type="checkbox"/> No Go	
Enter testing Scenario used						
Evaluator's Dated Initials:						
Course/School Chief dated Initials (required with 3 <sup>rd</sup> attempt only)						

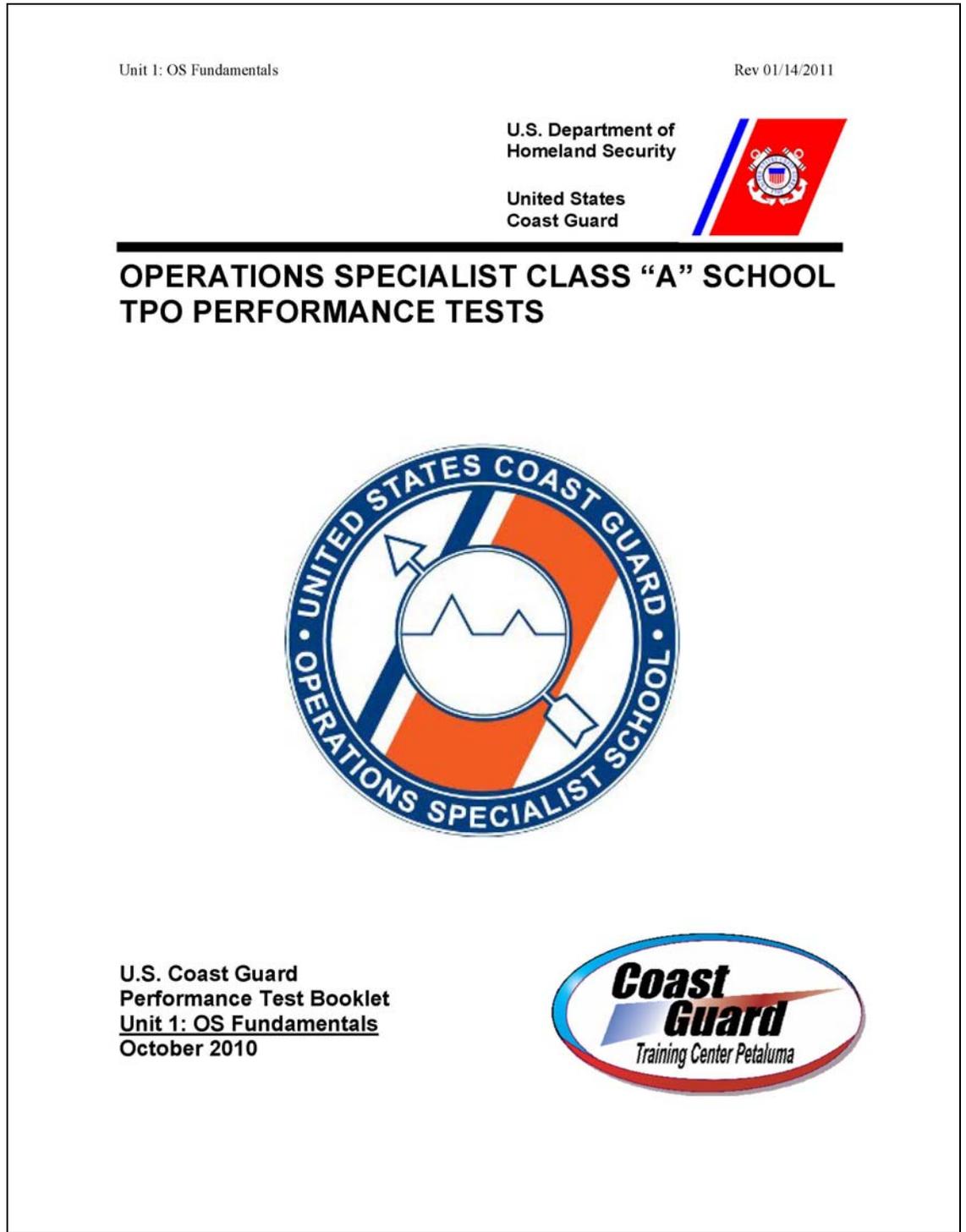
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## EX – O.1.B: Performance Test (Complete)

### Introduction

This sample is more inclusive than many PT booklets, but you need to determine the scope of your efforts. This included much detail because at the time an update to the Instructor Guides was not being conducted, so all information for the instructor with administration and scoring was placed in the PT booklet.



## EX – O.1.B: Performance Test (Complete), Continued

### Description

These pages provide an example of assessment strategy for performance tests. Local procedures may be different, but they should be specified within your PT booklet or Instructor Guide in some fashion, such as shown in this example.

Unit 1: OS Fundamentals	Rev 01/14/2011
<b>UNIT 1: PERFORMANCE TESTS</b>	
<b>Assessment Instructions</b>	
<b>Purpose of Assessment</b>	Performance Tests are designed to assess Student capability to perform tasks according to Coast Guard standards.
<b>Assessment Strategy</b>	Given good instruction and sufficient time for practice, we believe most Students can master job tasks at a <i>fully successful</i> level of performance. During progressively challenging practice and assessment activities, Students have opportunities to demonstrate that they can meet Coast Guard performance standards under simulated operational conditions.
<b>Assessment Tools</b>	<p>This booklet contains a <i>Performance Test Checklist (PTC)</i> for each of the following terminal performance objectives within this unit of instruction:</p> <ul style="list-style-type: none"> <li>1.1: <b>RESPOND</b> to simulated electrical shock emergency</li> <li>1.2: <b>EXTINGUISH</b> simulated Class “C” fire</li> <li>1.3: <b>CONTROL</b> visitor access within a restricted area</li> <li>1.4: <b>MAINTAIN</b> custody of accountable material</li> <li>1.5: <b>MAINTAIN</b> standard communication log</li> <li>1.6: <b>MAINTAIN</b> custody of COMSEC material</li> <li>1.7: <b>DESTROY</b> accountable material</li> <li>1.8: <b>PREPARE</b> formatted messages</li> <li>1.9: <b>PREPARE</b> classified material for transmission</li> <li>1.10: <b>APPLY</b> classification markings to classified material</li> <li>1.11: <b>PROCESS</b> classified material</li> </ul> <p>Each PTC includes process and product evaluation standards for each TPO, an <i>Assessment Record</i> for documenting Student learning performance</p> <p>The <i>Student Achievement Summary</i> is used to certify Student mastery of all performance qualification requirements in this unit of instruction.</p> <p>The <i>Assessment Map</i> illustrates a process for assessing Student learning performance.</p>
1-1	

## EX – O.1.B: Performance Test (Complete), Continued

Unit 1: OS Fundamentals

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### Assessment Instructions, continued

#### Assessment Requirements

As illustrated in the *Assessment Map*, three successful assessments are required to certify mastery of the TPO.

You may use practice activities as part of your assessment of Student performance **IF** the practice conditions are the same as those stated in the TPO performance test **AND** you base your assessment decision on the TPO standards specified in the *Performance Test Checklist* (PTC).

Typically, you certify Student mastery of the TPO upon observation of *fully successful* performance during **TWO** practice activities that cover the range of testable performance conditions and **ONE** performance test.

#### How to Prepare for Assessment

Step	Action
1	Verify Student completion of <b>ALL</b> lesson assignments <b>AND</b> practice activities for this TPO
2	Inform Student of the time and place of assessment
3	Provide Student with TPO performance standards
4	Ensure Student access to performance support resources
5	Provide assessment briefing
6	Set up assessment site

*Continued next page*

## EX – O.1.B: Performance Test (Complete), Continued

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Unit 1: OS Fundamentals

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### Assessment Instructions, continued

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#### How to Brief the Student

Just before the final practice or assessment, read the following instructions to the Student:

*You're ready for your performance check. This check will assess your capability to perform this task under simulated conditions. You will perform this task as you've done during practice exercises. During the scenario, I will role-play your supervisor. Other Instructors may assume roles according to the scenario.*

*Upon requirement to complete this task, you will be required to perform key actions to produce certain products of work or decisions according to Coast Guard performance standards in the Performance Test Checklist (PTC). You have been provided with a copy of these standards.*

*Apart from assistance you might reasonably expect in the actual work environment, you must actually perform the task by yourself. For example, since I'm acting as your supervisor during this test, you may, within reasonable limits, ask me for task guidance or clarification. You will have access to the equipment, tools, and performance support resources specified in the TPO, including job aid and/or procedural references.*

*Here's how I'll assess your performance. First, I'll compare your work to the "go" **OR** "no-go" criteria contained in the PTC. Second, after I've completed my assessment, I'll inform you of my decision. Third, I'll give you feedback on your performance.*

*For a successful performance check, you must complete each item on the PTC in a way that meets or exceeds the required standard. Your level of performance must be sufficient to support a "fully capable" assessment. This means you have demonstrated that you can perform the task according to Coast Guard standards. Your achievement will be documented in your PDR and EPQ records.*

*If **ANY** PTC item is marked as a "no-go", I must assess your performance as "not yet capable" of accomplishing this task. Should this be the case, I'll explain my decision. I'll also tell you what you must do to meet required standards. We will then arrange for extra practice and reassessment as required.*

*This concludes the assessment briefing. What questions do you have for me?*

*An assessment process is presented on the next page*

## EX – O.1.B: Performance Test (Complete), Continued

Unit 1: OS Fundamentals

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### Assessment Instructions, continued

**How to Assess**    *A standard assessment process is presented below:*

Step	Action		
1	Observe the Student's performance		
2	Compare the Student's performance with the actions and standards listed in the <i>Performance Test Checklist (PTC)</i>		
3	Determine if the Student has completed each key action to the specified standard		
4	According to your professional judgment, mark each assessment item to reflect your objective assessment of the Student's performance against specified performance criteria		
5	Referring to the decision table below, make assessment decision		
	IF you checked	AND Student's overall performance is	THEN assess Student as
	YES for EVERY item	GO after practices AND first assessment	☛ FULLY CAPABLE <i>Go to Step 6</i>
		OR	
		GO after extra practices AND second assessment	
	NO for ANY item	NO-GO after practices AND first assessment	☞ NOT YET CAPABLE <i>Go to Step 10</i>
		OR	
		NO-GO after extra practices AND second assessment	
	NO for ANY item	NO-GO after third OR final assessment	☞ NOT YET CAPABLE <i>Go to referral procedure</i>
6	Debrief the Student		
7	Document assessment decision		
8	Obtain Student acknowledgement of assessment decision		
9	Sign and date the <i>Performance Test Checklist (PTC)</i>		
10	Initial and date the <i>Student Achievement Summary</i>		

*End of assessment process. A remediation process is presented on the following page.*

## EX – O.1.B: Performance Test (Complete), Continued

Unit 1: OS Fundamentals

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### Assessment Instructions, continued

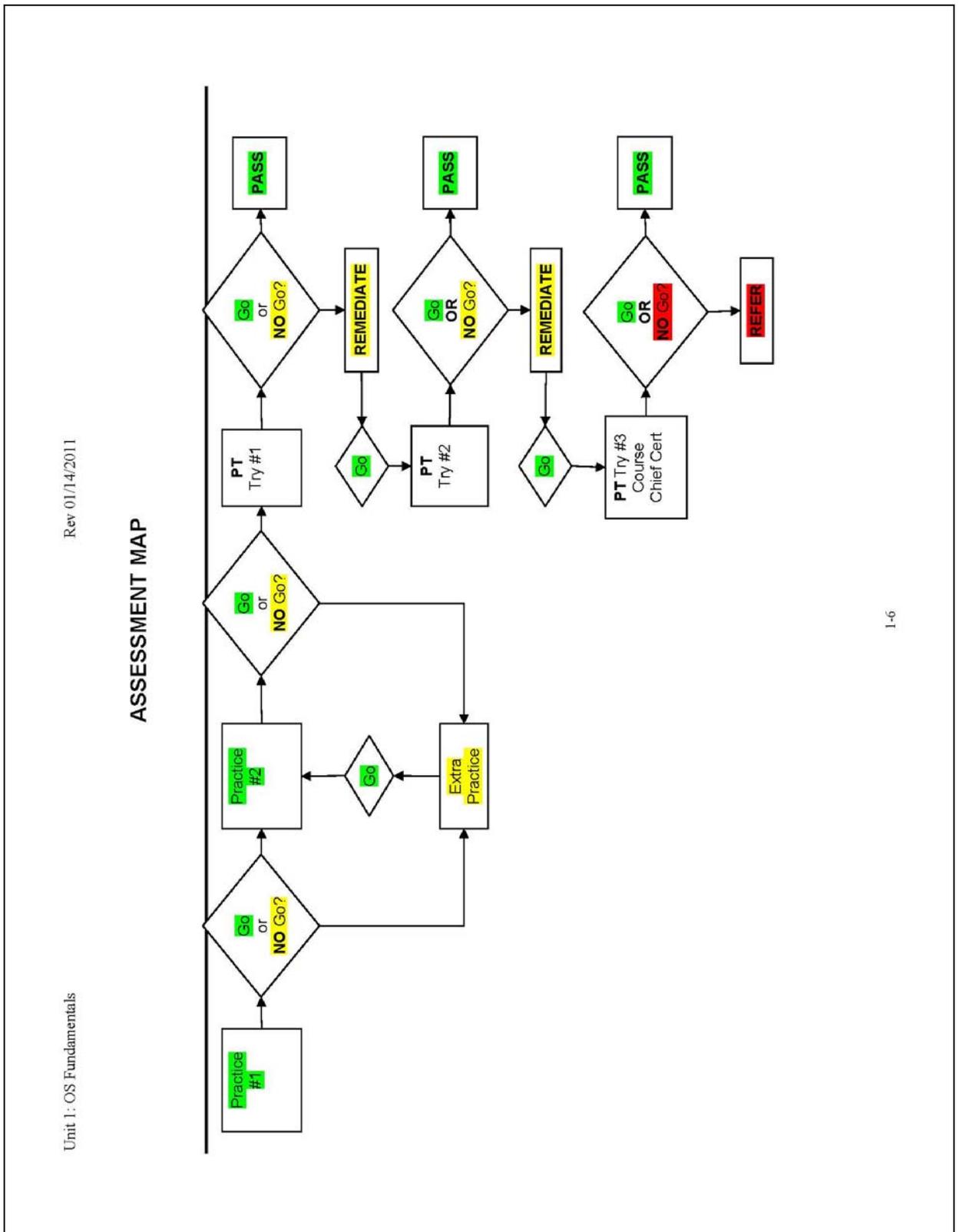
**How to Remediate**

*For each item checked NO during the assessment:*

Step	Action
11	Explain “not yet capable” assessment decision to the Student
12	Contrast Student performance with the required standard
13	Reinforce what the Student did well
14	Refer the Student to the relevant reference or procedure
15	Tell the Student what s/he must do to demonstrate “fully capable” performance
16	Document assessment decision
17	Obtain Student acknowledgement of assessment decision
18	Sign and date the <i>Performance Test Checklist</i> (PTC)
19	Arrange for extra practice, study, or coaching as required
20	When remediation is completed, schedule the next Performance Test
21	Repeat the process according to the <i>Assessment Map</i> until the Student either demonstrates “fully capable” performance OR requires referral for further assessment
NOTE	IF remediation OR referral is required, THEN the school chief OR designated deputy MUST certify any subsequent assessment decision

*End of remediation process.*

# EX – O.1.B: Performance Test (Complete), Continued



## EX – O.1.B: Performance Test (Complete), Continued

### Description

The next few pages provide the details for this particular task.

Unit 1: OS Fundamentals

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### TPO PERFORMANCE TESTS

#### 1.1: Respond to an Electrical Shock Emergency

**Performance**      **RESPOND** to an electrical shock emergency

**Conditions**      This task is performed in command, control, and communications spaces ashore or afloat, under the conditions presented below.

Table of Specifications (Conditions)	
<b>Safety</b>	<ul style="list-style-type: none"> <li>Electronic safety precautions in lesson references must be observed</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>Security measures and procedures in lesson references must be observed</li> </ul>
<b>Environment</b>	<ul style="list-style-type: none"> <li>Task is infrequently performed</li> <li>Task is performed under abnormal or emergency conditions due to equipment damage or fault caused by a variety of factors</li> <li>Task may involve stress</li> <li>Visibility may be limited due to workplace or environmental conditions</li> </ul>
<b>Equipment</b>	<ul style="list-style-type: none"> <li>Electronic equipment as source of shock (simulated)</li> </ul>
<b>Tools</b>	<ul style="list-style-type: none"> <li>Standard response kit</li> <li>Nonconductive instrument</li> </ul>
<b>Performance Support</b>	<ul style="list-style-type: none"> <li>Assistance that is normally available to workplace performers shall be provided to the Student. Access to procedures or job aids shall also be provided.</li> <li>Within reasonable limits, Students may seek task clarification or directions from the Instructor.</li> <li>Students must perform the task to produce specified outputs without additional assistance.</li> </ul>

*Continued next page*

## EX – O.1.B: Performance Test (Complete), Continued

Unit 1: OS Fundamentals

Rev 01/14/2011

### TPO PERFORMANCE TESTS

#### 1.1: Respond to an Electrical Shock Emergency

##### Standards

The key actions AND outputs of this task shall be assessed against standard performance criteria contained in the *Performance Test Checklist* (PTC) for this TPO. These include:

Table of Specifications (Standards)	
<b>Completeness</b>	<ul style="list-style-type: none"> <li>Victim completely removed from source</li> </ul>
<b>Accuracy</b> (Without error)	<ul style="list-style-type: none"> <li>Power correctly secured</li> <li>Victim removed using nonconductive instrument</li> <li>Victim placed in correct recovery position</li> <li>No injury to self or others</li> <li>Appropriate notification to command and/or supervisor</li> </ul>
<b>Time</b>	<ul style="list-style-type: none"> <li>Action is taken immediately</li> </ul>

##### Key Results

Accurate assessment of situation and victim condition, in conformance with procedures and standards specified in the *Performance Test Checklist* (PTC) for this TPO.

Without harm to self or others, victim is free from source of shock and in recovery position, in conformance with procedures and standards specified in the *Performance Test Checklist* (PTC) for this TPO.

##### References

- US Coast Guard Electronics Manual, COMDTINST M10550.25 (series)
- US Navy Occupational Safety and Health Manual, OPNAVINST 5100.19 (series)

##### PT Checklist (PTC)

Use the *Performance Test Checklist* (PTC) on the following pages to (1) assess key performance actions and outputs against job performance standards and (2) record Student performance achievements.

*Continued next page*

## EX – O.1.B: Performance Test (Complete), Continued

Unit 1: OS Fundamentals

Rev 01/14/2011

### PERFORMANCE TEST CHECKLIST (PTC)

Name: \_\_\_\_\_

Class #: \_\_\_\_\_

<b>TPO 1.1</b>			
Respond to an Electrical Shock emergency			
<b>Student may use the following:</b>	<input type="checkbox"/> Job Aid	<input type="checkbox"/> Reference Material	Other: _____
<b>EVALUATION CRITERIA:</b>			
<b>Accuracy:</b>		<b>Completeness:</b>	<b>Time:</b>
<ul style="list-style-type: none"> <li>• Power correctly secured</li> <li>• Victim removed using nonconductive instrument</li> <li>• Victim placed in correct recovery position</li> <li>• No injury to self or others</li> <li>• Appropriate notification to command and/or supervisor</li> </ul>		Victim completely removed from source	Action is taken immediately

STEP	Attempt					
	1 <sup>st</sup>		2 <sup>nd</sup>		3 <sup>rd</sup>	
	Y	N	Y	N	Y	N
<b>Process Evaluation</b>						
1. Secure Power	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Obtain help	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Remove victim from source	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>✓ Victim completely removed from source with nonconductive instrument</li> <li>✓ Action taken immediately</li> <li>✓ No injury to self or others</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Assess condition of victim	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Brief responders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Make notifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Product Evaluation</b>						
1. Victim free of source	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>✓ Victim completely free, in correct recovery position</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Response decisions:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>✓ Accurate and immediate assessment of situation</li> <li>✓ Accurate and immediate assessment of victim condition</li> <li>✓ Correct decision – safe to assist without causing harm to self or others</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Reports:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>✓ Accurate and timely reports to command and/or supervisor</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Additional notes for successful testing:	<input type="checkbox"/> Go <input type="checkbox"/> No Go		<input type="checkbox"/> Go <input type="checkbox"/> No Go		<input type="checkbox"/> Go <input type="checkbox"/> No Go	
Enter testing Scenario used: _____						
Evaluator's Dated Initials: _____						
Course/School Chief dated Initials (required with 3 <sup>rd</sup> attempt only) _____						

End of PT Checklist. To record Student progress, go to the Assessment Record on the following page.

## EX – O.1.B: Performance Test (Complete), Continued

Unit 1: OS Fundamentals

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### PERFORMANCE TEST CHECKLIST (PTC)

#### Assessment Record

TPO 1.1: How to Respond to an Electrical Shock Emergency		Date:
Test #1 Student Performance:	<input type="checkbox"/> Fully Capable	<input type="checkbox"/> Not Yet Capable
Feedback:		
Assessment Decision:	<input type="checkbox"/> PASS	<input type="checkbox"/> REMEDIATE

Instructor Signature/Date: \_\_\_\_\_ / \_\_\_\_\_ Student Signature/Date: \_\_\_\_\_ / \_\_\_\_\_

TPO 1.1: How to Respond to an Electrical Shock Emergency		Date:
Test #2 Student Performance:	<input type="checkbox"/> Fully Capable	<input type="checkbox"/> Not Yet Capable
Feedback:		
Assessment Decision:	<input type="checkbox"/> PASS-TAKE TEST #3	<input type="checkbox"/> REMEDIATE

Instructor Signature/Date: \_\_\_\_\_ / \_\_\_\_\_ Student Signature/Date: \_\_\_\_\_ / \_\_\_\_\_

TPO 1.1: How to Respond to an Electrical Shock Emergency		Date:
Test #3 Student Performance:	<input type="checkbox"/> Fully Capable	<input type="checkbox"/> Not Yet Capable
Feedback:		
Assessment Decision:	<input type="checkbox"/> PASS	<input type="checkbox"/> REFER

School Chief Signature/Date: \_\_\_\_\_ / \_\_\_\_\_ Student Signature/Date: \_\_\_\_\_ / \_\_\_\_\_

*End of PT Checklist. To record Student achievement, go to the Student Achievement Summary.*

## EX – O.1.B: Performance Test (Complete), Continued

### Description

This page shows a summary of student achievement that the school uses to keep record of student performance (kept on file for one year), captured by Unit.

Unit 1: OS Fundamentals		Rev 01/14/2011	
<b>STUDENT ACHIEVEMENT SUMMARY PERFORMANCE QUALIFICATION STANDARDS (PQS)</b>			
<b>Unit 1: OS Fundamentals</b>			
<b>Student:</b>		<b>Class #:</b>	
<b>TPO</b>	<b>TASK</b>	<b>ASSESSOR'S INITIALS</b>	<b>DATE</b>
1.1	<b>RESPOND</b> to simulated electrical shock emergency		
1.2	<b>EXTINGUISH</b> simulated Class "C" fire		
1.3	<b>CONTROL</b> visitor access within a restricted area		
1.4	<b>MAINTAIN</b> custody of accountable material		
1.5	<b>MAINTAIN</b> standard radio log		
1.6	<b>MAINTAIN</b> custody of COMSEC material		
1.7	<b>DESTROY</b> accountable material		
1.8	<b>PREPARE</b> formatted messages		
1.9	<b>PREPARE</b> classified material for transmission		
1.10	<b>APPLY</b> classification markings to classified material		
1.11	<b>PROCESS</b> classified material		
<p><i>As certified by the signatures below, this Student has demonstrated his or her capability to satisfactorily perform the tasks listed above, under normal supervision and other conditions simulating those that he or she can expect to encounter in the actual job environment.</i></p>			
<b>NAME</b>	<b>SIGNATURE</b>	<b>TITLE</b>	<b>DATE</b>
		<b>Assessor</b>	
		<b>Lead Instructor</b>	
		<b>School Chief</b>	

## EX – O.2: Job Aid (ET School)

### Introduction

This sample from ET School is a Step-Action (or Cookbook-type) job aid. The order of events is important, designated by the sequence or numbering of each step, and a critical part of each step emphasized through the use of an image.

ET-A School

Soldering

### Job Aid: HOW to Install A BNC coaxial cable connectors using soldering

The following components make up the contents of the BNC Solder Kit:



Follow the steps below to perform this task:

Step	Action	Illustration
1	Inventory the BNC connector kit for the following: <ul style="list-style-type: none"> <li>• pin</li> <li>• connector body</li> <li>• clamp nut</li> <li>• dielectric bushing</li> <li>• braid clamp</li> <li>• rubber gasket</li> <li>• metal washer</li> <li>• metal bushing</li> <li>• connector body center dielectric bushing</li> </ul>	
2	Don safety glasses, and prepare the work area.	

Continued on next page

## EX – O.2: Job Aid (ET School), Continued

ET-A School

Soldering

### HOW to Install A BNC coaxial cable connectors using soldering, continued

Step	Action	Illustration
3	Slip the clamp nut, metal washer, and rubber gasket onto the RG-58 cable. The threaded portion of the clamp nut should be positioned toward the connector end, and the smooth side of the rubber gasket should be positioned toward the clamp nut.	
4	Measure 3/8" down from the top of the cable, and strip outer jacket of the coaxial cable without damaging the metallic shielding.	
5	Remove the excess outer jacket.	
6	Slide the braid clamp down over the metallic shield. The outer jacket will stop the braid clamp.	

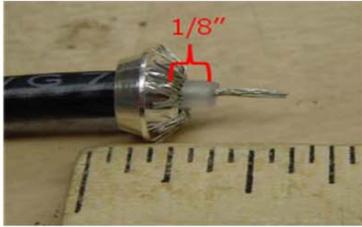
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## EX – O.2: Job Aid (ET School), Continued

ET-A School

Soldering

### HOW to Install A BNC coaxial cable connectors using soldering, continued

Step	Action	Illustration
7	Flare the braided shield away from the dielectric and down over the braid clamp. Trim the shielding at the centerline of the braid clamp.	 Centerline
8	Remove all but 1/8" of the dielectric shield. Be careful not to cut the center core.	
9	Twist the center core to prevent the wires from fraying.	
10	Tin the center core. Apply solder to the core, being careful not to increase the diameter. Use a solder wick or an extractor to remove excess solder.	

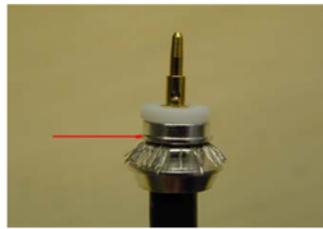
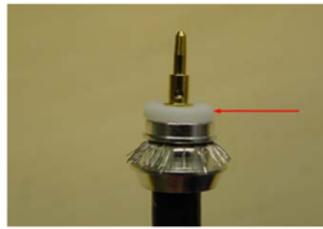
*Continued on next page*

## EX – O.2: Job Aid (ET School), Continued

ET-A School

Soldering

### HOW to Install A BNC coaxial cable connectors using soldering, continued

Step	Action	Illustration
11	Test fit the pin. Remove excess solder if necessary.	
12	The pin should lay flush against the dielectric shield. Ensure that no tinned core shows. Trim if necessary. Do not solder yet.	
<p><b>Note:</b> In the next step, you will install the dielectric bushing so that side A (recessed side) faces up to receive the tab on the bottom of the pin. Ensure that side B (no recess) faces down and sits flush against the metal bushing.</p>		
13	Place the metal bushing over the dielectric shield, ensuring that it sits flush on the braid.	
14	Slide the dielectric bushing with pin onto the center core, flush with the metal bushing, and with side A up and side B down.	

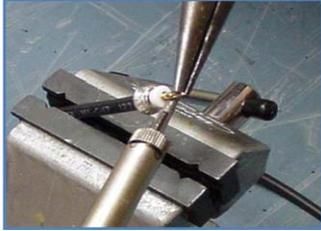
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## EX – O.2: Job Aid (ET School), Continued

ET-A School

Soldering

### HOW to Install A BNC coaxial cable connectors using soldering, continued

Step	Action	Illustration
15	Secure the cable into the vice.	
16	Solder the pin. Carefully add solder to the conductor hole. If the core was pre-tinned, additional solder may not be needed. DO NOT apply heat too long or the dielectric bushing could warp	
17	Allow the pin to cool. Check for a solid connection after cool down.	
18	Remove the connector from the vice.	
19	Slide the connector body's bushing over the pin. The bushing should sit flush against the dielectric bushing.	

*Continued on next page*

## EX – O.2: Job Aid (ET School), Continued

ET-A School

Soldering

### HOW to Install A BNC coaxial cable connectors using soldering, continued

Step	Action	Illustration
20	Slide the metal connector body over the entire assembly.	
21	Secure the washer and rubber gasket with the camp nut.	
22	Tighten the clamp nut using your hands. Follow up with a wrench or pliers.	
23	The solder BNC connector is completed.	
24	Test the connector strength using the pull-apart method.	
End of procedure		