

**Report Date:** 28 Apr 2014

**Summary Report for Individual Task  
514-42R-1104  
Implement Electrical Safety Procedures  
Status: Approved**

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DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

DESTRUCTION NOTICE: None

**Condition:** The band is operating within a garrison or deployed environment in order to provide music throughout the area of operations to instill in our forces the will to fight and win, foster the support of our citizens, and promote our national interests at home and abroad. There is a requirement for the Soldier to implement electrical safety procedures for all electrical systems relevant to the units sound reinforcement, audio recording and lighting systems. All assigned equipment and systems are provided. The band company has access to supported unit staff and higher headquarters for administrative, logistical, intelligence, and communications. This task may be performed incorporating other Operational Variables (PMESII-PT) and METT-TC constraints within garrison, off-post, and the area of operations. This may include activities, disrupters, terrain and weather, personnel, equipment, time, and legal considerations. These factors address similar considerations expressed in different terms. This task should not be trained in MOPP. This task should not be trained in MOPP 4.

**Standard:** Implement electrical safety procedures to prevent injury to personnel or damage to equipment, in accordance with DA PAM 385-26, AR 385-10, operation manuals and local SOPs.

**Special Condition:** None

**Safety Level:** Low

**MOPP:** Never

<b>Task Statements</b>
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**Cue:** There is a requirement for the Soldier to implement electrical safety procedures.

<b>DANGER</b>
None

<b>WARNING</b>
None

<b>CAUTION</b>
None

**Remarks:** International electrical standards cannot be re-created at USASOM. Certain aspects of this task will be trained at the unit level.

**Notes:** These steps will happen concurrently in the operational environment.

### Performance Steps

1. Define each of the following electrical properties:
  - a. Voltage.
  - b. Current (DC and AC).
  - c. Line Frequency.
  - d. Power.
  - e. Resistance/Impedance.
  - f. Grounding.
  
2. Define each of the following terms as it applies to electrical safety procedures:
  - a. Ohm's Law.
  - b. American Wire Gauge (AWG).
  - c. Single-/Split-/Three-Phase Power.
  - d. Transformer.
  
3. Determine voltage of an electrical outlet using a multimeter.
  
4. Test for proper grounding of an electrical outlet using a multimeter.
  
5. Calculate the maximum current draw of production systems.
  
6. Inspect production systems for potential electrical hazards.

(Asterisks indicates a leader performance step.)

**Evaluation Guidance:** Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO GO if any performance measure is failed (F).

**Evaluation Preparation:** Setup: Ensure that all required materials are available to the Soldier. Evaluate this task during lab time. Evaluate the Soldier on the demonstration of fundamental knowledge of electrical systems operation and safety. To aid in evaluating this task, use audio/visual equipment to provide feedback. Brief the Soldier: "You must implement electrical safety procedures."

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Defined electrical properties.			
2. Defined electrical terms.			
3. Determined voltage for an electrical outlet using multimeter.			
4. Tested for proper grounding of an electrical outlet using multimeter.			
5. Calculated maximum current draw of production systems.			
6. Inspected production systems for electrical hazards.			

**Supporting Reference(s):**

Step Number	Reference ID	Reference Name	Required	Primary
	AR 220-90	ARMY BANDS	No	No
	AR 385-10	The Army Safety Program <a href="http://www.apd.army.mil/pdffiles/r385_10.pdf">http://www.apd.army.mil/pdffiles/r385_10.pdf</a>	No	No
	ATTP 1-19	U.S. Army Bands	No	No
	PAM 385-26	THE ARMY ELECTRICAL SAFETY PROGRAM	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.

**Safety:** In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET 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. 1. Live musical performance poses an immediate noise hazard. Hearing protection is required.

2. In the event of a fire, Soldiers will exit the classroom in an orderly manner (last one out closes the door); meet at the location the Primary Instructor has designated; class leaders will hold an accountability formation and report their findings to Primary Instructor.

3. In the event of severe weather or tornado, Soldiers will exit the classroom in an orderly manner; move to the location the Primary Instructor has designated (basement or center of building); class leaders will hold an accountability formation and report their findings to Primary Instructor.

4. It is important for Soldiers to be aware of their surroundings. Hazards such as tripping over wires, falling on musical equipment, lifting or dropping heavy sound reinforcement equipment, working with electricity, etc. need to be mitigated to avoid injury.

5. If the task is performed outdoors, Soldiers should use caution while marching on uneven ground. In the event of severe weather or tornado, the bandmaster may have to make a determination on-site as to extracting sections of, or the entire band, from the mission to mitigate damage to equipment and hazards to Soldiers.

6. When assessing venues, it is important to ensure proper travel safety to and from location, regardless of distance travelled. When assessing the capabilities of a potential venue, it is important to be aware of all safety hazards in the building such as electrical, fire, water, etc.

**Prerequisite Individual Tasks :** None

**Supporting Individual Tasks :** None

**Supported Individual Tasks :**

Task Number	Title	Proponent	Status
514-42R-1103	Operate Assigned Lighting System	514 - Music (Individual)	Approved
514-42R-1102	Operate Assigned Sound Reinforcement System	514 - Music (Individual)	Approved
514-42R-1101	Determine Appropriate Sound Support for a Given Mission	514 - Music (Individual)	Approved

**Supported Collective Tasks :**

<b>Task Number</b>	<b>Title</b>	<b>Proponent</b>	<b>Status</b>
02-2-2411	Created from Template: Conduct Music Performance Team Operations	02 - Music (Collective)	Proposed