

Field Training Exercise Safety Checklist

20001016 083



PLEASE CHECK THE APPROPRIATE BLOCK BELOW:

AO# _____

_____ copies are being forwarded. Indicate whether Statement A, B, C, D, E, F, or X applies.

DISTRIBUTION STATEMENT A:
APPROVED FOR PUBLIC RELEASE: DISTRIBUTION IS UNLIMITED

DISTRIBUTION STATEMENT B:
DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES ONLY; (Indicate Reason and Date). OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO (Indicate Controlling DoD Office).

DISTRIBUTION STATEMENT C:
DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES AND THEIR CONTRACTORS; (Indicate Reason and Date). OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO (Indicate Controlling DoD Office).

DISTRIBUTION STATEMENT D:
DISTRIBUTION AUTHORIZED TO DoD AND U.S. DoD CONTRACTORS ONLY; (Indicate Reason and Date). OTHER REQUESTS SHALL BE REFERRED TO (Indicate Controlling DoD Office).

DISTRIBUTION STATEMENT E:
DISTRIBUTION AUTHORIZED TO DoD COMPONENTS ONLY; (Indicate Reason and Date). OTHER REQUESTS SHALL BE REFERRED TO (Indicate Controlling DoD Office).

DISTRIBUTION STATEMENT F:
FURTHER DISSEMINATION ONLY AS DIRECTED BY (Indicate Controlling DoD Office and Date) or HIGHER DoD AUTHORITY.

DISTRIBUTION STATEMENT X:
DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES AND PRIVATE INDIVIDUALS OR ENTERPRISES ELIGIBLE TO OBTAIN EXPORT-CONTROLLED TECHNICAL DATA IN ACCORDANCE WITH DoD DIRECTIVE 5230.25. WITHHOLDING OF UNCLASSIFIED TECHNICAL DATA FROM PUBLIC DISCLOSURE. 6 Nov 1984 (indicate date of determination). CONTROLLING DoD OFFICE IS (Indicate Controlling DoD Office).

This document was previously forwarded to DTIC on _____ (date) and the AD number is _____

In accordance with provisions of DoD instructions, the document requested is not supplied because:

It will be published at a later date. (Enter approximate date, if known).

Other. (Give Reason)

DoD Directive 5230.24, "Distribution Statements on Technical Documents," 18 Mar 87, contains seven distribution statements, as described briefly above. Technical Documents must be assigned distribution statements.

Cynthia Gleisberg
Authorized Signature/Date

Cynthia Gleisberg
Print or Type Name
DSN 703 558-2924
Telephone Number

FIELD TRAINING EXERCISE SAFETY CHECKLISTS

TABLE OF CONTENTS

1. Administration	1
2. Accident Reporting and Investigation	2
3. Vehicle Movements	3
4. Convoys	5
5. Tracked Vehicles	7
6. Vehicle Swimming/Fording Operations	9
7. Range Safety	11
8. Heat Casualty Prevention	17
9. Cold Weather Injury Prevention	20
10. Communications	24
11. Personal Protective Clothing and Equipment	26
12. Hearing Conservation	27
13. Petroleum, Oil and Lubrication Operations	28
14. Rail Loading/Unloading	31
15. Port Operations	33
16. Helicopter Sling Load Operations	34
17. Natural Hazards	35
18. Physical Contact During Tactical Training	36
19. Water Training	37
- River/Stream Crossing Operations	
- Survival, Escape, Resistance, and Evasion Training (SERE)	
20. Sports and Recreations	39
21. References	41

ADMINISTRATION

1. Does the commander ensure that the safety annex of the unit administrative/tactical SOP is current and covers all field training operations?
2. Is the commander/safety officer familiar with the safety portion of SOPs?
3. Does the commander ensure that adequate provisions for safe practices, procedures, and physical standards are incorporated into unit Letters of Instructions (LOIs) for field training exercises.
4. Does the exercise commander ensure a safety officer/NCO is appointed on orders for each participating unit and is a copy of these orders provided to the exercise safety officer and the installation safety office?
5. Have the exercise/unit safety officers received the required safety briefing from the installation safety office?
6. Are all participating personnel briefed on field training hazards, standards, and procedures prior to departure to the field?
7. Do the exercise/unit safety officers keep their commanders informed of the unit's safety status by reporting all accidents, injuries, and incidents, and recommending corrective actions?

ACCIDENT REPORTING AND INVESTIGATION

1. Are all field training accidents investigated and reported to the installation safety office or exercise safety officer as soon as possible after an accident? (AR 385-40, para 1-3a)
2. Are recordable accidents reported on a DA Form 285 through command channels to the installation safety office within 15 calendar days? A recordable accident results in 1 day or more lost time and/or \$1,000 in property damage. (AR 385-40, para 1-3b)
3. Do unit commanders/safety officers know what type accidents are Class A recordable accidents, as identified below?
 - a. An on-duty, nonprivately-owned vehicle, nonaviation accident whereby the total cost of property damage, injury, or occupational illness equals \$500,000 or greater.
 - b. A fatality or permanent total disability that occurs as a result of Army operations.
4. Do units know the procedures for reporting a Class A accident? Report the following information to the installation safety office:
 - a. Type accident/vehicle and location.
 - b. Classification of accident (Class A).
 - c. Synopsis of accident.
 - d. Number of personnel involved/any civilian involvement.
 - e. Number of injuries/fatalities.
 - f. Other agencies/units notified.
5. Are corrective actions implemented after investigations to ensure no further recurrence?

VEHICLE MOVEMENTS

1. Are blackout lights and markers turned on while operating tactical vehicles during limited visibility? (FM 21-306, page 56)
2. Are ground guides used when traveling cross country during periods of limited visibility (if the training situation permits)? (FM 21-306, page 55)
3. Are two ground guides (one in front and one in back) used while backing tracked vehicles? (FM 21-306, page 20)
4. Are ground guides used when moving vehicles in bivouac and maintenance areas? (FM 21-306, page 19)
5. Are drivers required to dismount and walk around their vehicles before moving the vehicles to ensure that the area is clear of personnel? (FM 21-306, page 19)
6. Are ground guides and perimeter guards equipped with flashlights with red lenses to signal vehicle operators during period of limited visibility/darkness? (FM 21-306, page 60)
7. Do vehicle operators immediately stop their vehicles when the ground guide's instructions are unclear, or the driver loses sight of the ground guide? (FM 21-306, page 60)
8. Do vehicle drivers maintain 10 meters between the vehicles and ground guides? (FM 21-306, page 19)
9. Are personnel prohibited from sleeping in vehicles while the engine is running? (FM 21-306, page 22y, AR 385-55)
10. Are safe sleeping areas carefully selected; i.e., safe distances from known vehicle travel routes and/or potential avenues of approach? (FM 21-306, page 22)
11. Are vehicle dismount points clearly marked and vehicle guiding procedures strictly enforced at all bivouac areas? (Fm 21-306, page 22)
12. Are the following procedures employed by units when crossing paved roads with military vehicles?
 - a. Are road guards and flashing lights posted 100 meters on each side of the crossing to stop highway traffic?
 - b. Are road guards provided and required to wear reflective vests and use baton flashlights (white or amber)?
 - c. All AMV/ACV crossings should be "administrative." Service lights will be on during periods of limited visibility.

d. One ground guide, located at the crossing site, will direct each vehicle across by hand signals, not by physically walking in front of each vehicle.

e. Crossing units will clear paved roads of mud and dirt after the crossing is completed.

f. Traffic accidents at tank crossing sites will remain undisturbed until the arrival of the Military Police unless an imminent hazard exists (refer to Accident Investigation and Reporting, this Chapter).

13. Bridges and Ditches.

a. Do units conduct reconnaissance of all training areas and all proposed march routes? (FM 21-305, page 22-1; FM 21-306, page 38)

b. Do units inform drivers of bridge locations and their hazards; i.e., narrower than the range roads and the potential of vehicles driving off the edges? (FM 21-306, page 63)

c. During night/limited visibility are road guards, with flashlights, posted at critical bridge locations to warn vehicle operators of the bridge, and to guide vehicles over the bridge? (FM 21-306, pages 54 thru 61)

d. Are vehicle operators advised of driving conditions and precautions; i.e., dust distances, speed limits, mud, etc? (FM 21-306, pages 38 thru 61)

CONVOYS

1. Are vehicle basic issue items, pioneer tools, highway warning devices, and fire extinguisher present on every wheeled convoy vehicle? (AR 385-55, para 2-16, AR 55-29, para 6e)
2. Do tactical vehicle drivers have a valid current SF 46? (AR 600-55, para 2a, AR 55-29, para 6d)
3. Do drivers perform before-, during-, and after-operation preventive maintenance? (FM 21-305, page 2-1; FM 21-306, page 6)
4. Are convoy drivers provided 8 hours of rest for each 10 hours of driving a tactical vehicle within a 24-hour time period? (AR 385-55, para 2-7; AR 55-29, para 6c; FM 21-305, page 9-5)
5. Do convoy commanders brief all drivers/assistant drivers/senior occupants prior to the march on hazardous areas or conditions to be encountered; i.e., safe following distances, proper speed, route, rest periods, signals, etc? (AR 55-29, para 4d(2); FM 21-305, page 24-1)
6. Are drivers of bulk fuel transporters instructed on emergency procedures for fuel leaks? (FM 21-306, page 16-4)
7. Are radio whip antennas tied down to not less than 7 feet from the ground with antenna tips covered with protective ball when operated on paved roads?
8. Are service drive lights used at all times on paved public roads (blackout drive prohibited)? (AR 55-29, para 7e)
9. Have drivers been trained to drive in adverse weather (ice, snow, fog, rain) and difficult terrain? (FM 21-305, Section 1; FM 55-30, Appendixes C and D)
10. When transporting personnel, do drivers:
 - a. Walk to rear of the vehicle before starting to secure the tailgate and safety strap, and ensure all passengers are seated? (AR 385-55, para 2-17; FM 21-305, page 21-1; FM 55-30, page 10-8)
 - b. Adjust the tarpaulin to ensure proper ventilation; i.e., in adverse weather, lash down tarpaulin and front curtain; in good weather, roll tarpaulin and secure at bars top? (FM 21-305, page 21-1)
 - c. Secure baggage/loads safely and not in the way of passengers? (FM 21-305, page 21-1)
 - d. Prohibit personnel from riding on outside of wheeled or tracked vehicles? (AR 385-55, para 2-17)
 - e. Ensure all occupants use restraint systems when available? (AR 385-55, para 2-16)

11. Are rotating or flashing amber lights and convoy flags used on the first and last vehicles in the convoy? (AR 385-55, para 2-16; FM 21-305, page 24-5)
12. Are ground guides utilized when backing vehicles 2½ ton and larger? (AR 385-55, para 2-17; FM 55-30, page 9-21)
13. Are vehicles used to transport hazardous materials/dangerous cargo; i.e., ammunition, gasoline, and flammable liquids, etc:
 - a. Appropriately placarded and loaded to meet hazard classification and compatibility requirements? (FM 55-30, Chapter 12)
 - b. Inspected using Motor Vehicle Inspection, DA Form 626? (FM 55-30, page 10-9)
 - c. Equipped with two operational fire extinguishers (15-lb carbon dioxide or two 5-pound purple "K")?
14. Do drivers know the meaning of traffic control signs, signals, devices, and markings used by civilian/military police? (FM 55-30, page 9-17)
15. When loading cargo, do personnel: (FM 55-30, page 10-7)
 - a. Place heavy items on bottom, lighter ones on top?
 - b. Distribute items evenly over the bed?
 - c. Pack cargo so that it will not shift?
 - d. Block and brace with lumber or other material to keep load from shifting?
 - e. Ensure the load does not obscure vision?
16. Are ammunition and POL cargos transported separately? (FM 55-30, page 10-8)
17. Are hazardous cargo drivers issued a copy of Special Instructions for Motor Vehicle Drivers, DD Form 836? (FM 55-30, page 10-11)
18. Do drivers reduce speed during conditions of reduced visibility and adverse weather conditions? (FM 21-305; FM 21-306)
19. Do drivers keep proper distances between vehicles? (FM 21-305; FM 21-306, page 17)
20. Are vehicles marked in accordance with FM 55-312?
21. Is the rear vehicle 2½ tons or larger and not carrying passengers?
22. Do all drivers have strip maps?
23. Are convoy speeds and catchup speeds briefed?

TRACKED VEHICLES

1. Are riders prohibited from riding on the outside of tracks? (FM 21-306, page 21)
2. Is smoking prohibited in or near a tracked vehicle? (FM 21-306, page 21)
3. Do personnel always wear protective headgear when riding in tracks? (FM 21-306, page 21)
4. Do drivers warn the crew when the track is about to cross a ditch, climb an obstacle, or take any action that might cause crewmembers to be caught off balance? (FM 21-306, page 21)
5. Do track personnel test hatch covers by checking them to make sure they are locked in position? (FM 21-306, page 22)
6. Do drivers check the driver's escape hatch to make sure it works, and that it is properly sealed and locked? (FM 21-306, page 23)
7. Do crewmembers comply with the following emergency procedures? (FM 21-306, page 22)
 - a. When tracked vehicles get out of control and overturn, do personnel stay in the vehicle while it is still moving?
 - b. When the vehicle stops moving, do personnel get out as fast as possible, because spilled fuel and oil may catch on fire?
 - c. In such an emergency, do drivers immediately shut off the engine and turn off the master switch to minimize the fire hazard?
 - d. Are fire drills practiced?
8. Is the vehicle's intercommunication system checked periodically to ensure it is working properly? (FM 21-306, page 22)
9. For night driving, do drivers: (FM 21-306, pages 54, 55, 56, 58, and 60)
 - a. Keep on course by using points in the skyline, glow of lights against the sky, the stars, important terrain features, and good judgment?
 - b. Adapt to darkness by waiting 30 minutes in total darkness before driving?
 - c. Keep distance between vehicles by the number of light spots in the tail lights of the track ahead?
 - d. Know how to operate the infrared periscope and not look into infrared headlights?

- e. Know how to operate, maintain, and install night vision devices?
 - f. Are drivers aware of limitations of the night vision devices?
10. Do drivers know that "dust distances" must be sufficient to allow the trailing vehicle driver to see the vehicle ahead and to safely stop, if needed? (FM 21-306, page 61)
11. In the event of an injury, do crewmen know how:
- a. To evacuate wounded from the vehicle?
 - b. To give first aid?
 - c. To call for MEDEVAC/or notify range control and/or higher headquarters to report the accident and request medical aid?
 - d. To preserve the accident site?

VEHICLE SWIMMING/FORDING OPERATIONS

1. Before crossing lakes or wide rivers, do commanders ensure that:
 - a. An onsite physical reconnaissance has been conducted to determine safe water entrances, exits, stream bed conditions, depths, and stream currents?
 - b. A rescue boat with two qualified lifeguards are in the water, standing by?
 - c. Rescue boats are equipped with life ring, rope (3/8 inch or 1/2 inch), and boat hook?
 - d. The rescue boat is positioned downstream from the crossing site?
 - e. Entrances, lanes, and exits are marked with flags, engineer tape, poles, or luminous markers?
 - f. During limited visibility crossings, is emergency lighting (tank spotlight, vehicle headlights) beamed on the water surface?
 - g. An assembly area has been selected to check equipment and conduct precrossing checks?
 - h. A qualified crossing control officer has been designated?
 - i. All personnel are briefed on emergency evacuation procedures?
 - j. All drivers and crewmembers wear type 3 or type 5 (vests) Personal Flotation Devices (PFD) during vehicle swimming operations?
 - k. No personnel in the vehicle have on load-bearing equipment during the swimming operation?
 - l. All vehicles are predipped not more than 72 hours before the crossing exercise? (FM 71-1 and appropriate TM)
2. Before entering the water, do drivers/track commanders (TCs): (FM 21-306)
 - a. Check hull drain plugs?
 - b. Select a spot that is firm and free of rocks, stumps, and deep drops?
 - c. Enter head-on in low range?
 - d. Raise the front by accelerating?
 - e. Ensure all personnel are wearing Coast Guard approved life jackets (type 3 or type 5 vests)?

3. While in the water, does the driver: (FM 21-306)
 - a. Shift to low range?
 - b. Use pivot steer levers to steer?
 - c. Head straight across slow streams, head diagonally across swift current streams downstream?
 - d. Avoid obstacles?
 - e. If vehicle stalls and is not sinking, does the crew:
 - (1) Climb out of the vehicle?
 - (2) Stay on the top with life preservers on?
 - (3) Await rescue (and not attempt to swim to shore)?
 - f. If the vehicle starts to sink, does the crew immediately evacuate?
4. When exiting stream, does the driver/TC: (FM 21-306)
 - a. Exit on a clear bank, free of obstacles/mud?
 - b. Hit the bank slow and easy and in low range?
 - c. Use pivot steer until clear?
 - d. Climb the bank in low range?

RANGE SAFETY
(AR 385-62, AR 385-63, and AR 385-64)

1. Has an officer in charge (OIC) been designated for each unit using a range training facility to be responsible for the safe conduct of training?
2. Has a range safety officer been appointed to assist the OIC during live firing?
3. Have the range OIC and safety officer received a range safety briefing and certification from range control?
4. Are range safety officers assigned no additional duties or responsibilities other than supervision of weapons firing?
5. Are the designated safety officers thoroughly knowledgeable of the weapon system being fired and the safety requirements associated with it?
6. Artillery and mortar firing:
 - a. Is an individual designated to perform every action connected with crew/drill firing?
 - b. Does a separate individual in the supervisory chain of command ensure the safety procedures are performed properly?
7. Are artillery safety officers/NCOs certified on the weapons being fired?
8. Before "occupying" any range, does the OIC ensure that:
 - a. A current copy of the technical manual (TM) for the weapon(s) being fired is on hand?
 - b. Radio (FM band) and telephone communications have been established with range control?
 - c. All personnel on the range are briefed on MEDEVAC procedures, cease fire procedures, duds, prohibited downrange areas, adjoining ranges and facilities?
 - d. All vehicle (tracked and wheeled) operators are trained to properly operate radios and call for help in the event of emergencies; i.e., range control, DUSTOFF, exercise headquarters, etc?
 - e. Medical personnel with vehicle and equipment; i.e., aid bag, litter, etc., are present and briefed as to the best route to the nearest hospital?
 - f. A red range flag (day) or red blinking light (night) is attached at the top of the range flagpole, and (night) a red light hung on left and right range limit marker?
 - g. Emergency telephone numbers/MEDEVAC card is in vehicles?

9. While using/firing any range does the OIC ensure that:
- a. The OIC/safety officer is present and has been briefed?
 - b. Permission to fire has been received from range control?
 - c. Radio communications are maintained at all times and checked hourly with range control?
 - d. No personnel are allowed forward of the firing line?
 - e. Required safety measures are observed and effective firing control is maintained?
 - f. Personnel are using proper hearing protection and wearing helmets?
 - g. A cease fire is ordered when:
 - (1) Communication with range control is lost?
 - (2) A weapon/ammunition malfunction occurs?
 - (3) A safety violation, accident, or incident occurs?
 - (4) A fire is started?
 - (5) Rounds land or detonate, or are suspected of landing or detonating, outside impact area/safety limits?
 - (6) When range control directs a cease fire?
 - h. Tanks, Army personnel carriers (APCs), and other vehicles display red flags when mounted weapon systems are being loaded or fired?
 - i. No ammunition is unloaded on wet firing line?
 - j. There is no smoking on the firing line or within 50 feet of ammunition?
 - k. Ammunition is handled, stored, and guarded in accordance with TM 9-1300-206?
10. Armor/Mech checks:
- a. Is all weapon firing contained within the range fan?
 - b. Do all vehicles not on the firing line have weapons elevated and pointed downrange?
 - c. Are all weapons properly cleared by designated safety personnel before leaving the firing line?
11. Field artillery checks:
- a. Do howitzers have safety tape placed properly?

- b. Is the safety fan shown on firing charts?
- c. Does the safety officer have a copy of the safety data?

12. Small arms checks:

- a. Are left-handed firers using brass deflectors on M16s?
- b. Are weapons cleared properly at the conclusion of firing?

13. After using any range facility, does the OIC and safety officer ensure that:

- a. Weapons are cleared of ammunition?
- b. Ammunition/explosives are removed from individuals?
- c. Ammunition, simulators, explosives, and pyrotechnics are not abandoned on the range?
- d. Inspection and clearance are requested and received from range control before departing the range?
- e. The inspection checklist for ranges is completed?

14. Ammunition care and handling:

- a. Is smoking prohibited on firing ranges, in firing positions, and within 50 feet of any ammunition or fuel storage area?
- b. Do ammunition-laden vehicles, other than those carrying small arms, display explosives signs (8-inch-high red letters on white background) on the front, rear, and one on each side?
- c. When a truck is unloaded, are signs removed?
- d. When storing ammunition on the ranges, do units:
 - (1) Place ammunition on dunnage pallets 6-inches high?
 - (2) Cover the ammunition with a tarp?
 - (3) Store ammunition within compatible groups?
 - (4) Maintain quantity-distance in accordance with TM 9-1300-206, and store ammunition 1,300 feet from bivouac areas, command posts, and similar troop locations?
 - (5) Post no smoking signs?
 - (6) Guard ammunition?

(7) Maintain lot segregation?

(8) Have two operational fire extinguishers (15-pound carbon dioxide)?

e. In the event of misfires, jammed rounds, and erratic firing is Table 6-1 used to identify local corrective action and reporting requirements?

f. Is defective ammunition:

(1) Properly identified and replaced in the original container with felt pad to protect primer?

(2) Placed in misfire pits?

(3) Turned into the ammunition supply point (ASP) upon completion of firing?

g. Duds and abandoned ammunition:

(1) Are all personnel briefed not to pick up duds or handle projectiles, flares, or ammunition found on the range?

(2) If a dud is found, is the site marked by a stake/post extending 4 feet above ground, and the explosive ordnance detachment (EOD) or range control notified?

h. Are personnel trained in the procedures and safe use of blank ammunition and simulators? (TM 9-1300-206, para 2-1)

15. Does the unit restrict the use of pyrotechnics/tracer ammunition during Category III, IV, and V forest fire danger ratings?

16. Medical evacuation:

a. Are a qualified aidman, litter, first aid kit, and vehicle (wheeled or tracked) present on the range when firing is being conducted? Does the aidman know the nearest helicopter landing zone and the quickest route to the emergency room?

b. If the aid vehicle leaves the range, is a cease fire called until a replacement is provided?

c. Is the aidman prohibited from performing duties other than medical?

d. Do all participating personnel know the following MEDEVAC procedures in the event of an injury and/or other emergency?

(1) Contact range control (FM _____, UHF _____, telephone _____).

(2) If unit is unable to contact range control, contact DUSTOFF, FM _____, via extensions _____. Advise them range control was not notified.

(3) Request for emergency air evacuation will include:

- (a) Requesting organization.
- (b) Location of nearest pickup site.
- (c) Number of casualties, type of injuries, and severity of injuries.
- (d) Weather at pickup site.
- (e) Obstacles to landing at pickup site.
- (f) Pickup area markings.

17. Ensure the requirements of AR 385-63, Chapter 2, are complied with.

LASER RANGEFINDERS, DESIGNATORS, AND ILLUMINATORS

1. Has a laser range safety officer (LRSO) been designated and is he properly indoctrinated? (TB Med 279, para 8B)
2. Does the LRSO ensure that: (TB Med 279, para 10c)
 - a. All participating personnel are instructed in safety precautions as they relate to lasers?
 - b. Laser safety SOPs are established and implemented for each laser device being used?
 - c. Laser buffer zones are established around the designated target area?
 - d. Adequate surveillance of the target area is established to prevent unauthorized personnel from entering that area?
 - e. Any case of suspected eye exposure to laser radiation is reported to the installation surgeon and installation safety office?
3. Does the laser operator: (TB Med 279, para 10d)
 - a. Fire lasers only at designated targets and never fire at specular surfaces, such as glass, mirrors, windows?
 - b. Ensure that lasers are never aimed at other personnel and that personnel are prohibited from looking into the laser beam?
4. Do personnel who must be in the target area wear laser protective eye wear designed for the specific type of laser being fired? (TB Med 279, para 10e)
5. Has the range been cleared of exposed flat glass to prevent hazardous reflections? (TG 083B, part 5)
6. Are optical devices, such as binoculars, that are used to observe the target during laser operations equipped with the appropriate laser safety filters? (TB Med 279, para 10j; TG 083B, para 17)
7. Are radio communications with personnel downrange in the target area maintained during laser operations to ensure that eye protection is being worn? (TB Med 279, para 10k)
8. Are laser operations immediately terminated when communications are broken? (TB Med 279, para 10c)
9. Are the use of laser devices, other than eye-safe lasers, prohibited in force on force tactical exercises, unless all personnel are equipped with appropriate eye protection? (TB Med 279, para 10n(3))
10. Do commanders know how and where to procure laser safety goggles? (TG 083B, Appendix A)
11. Are laser hazard boundaries properly marked with appropriate warning signs? (AR 385-63, paras 19-6 and 19-7)

HEAT CASUALTY PREVENTION

1. To ensure the safety and health of personnel, do commanders:

- a. Monitor the current heat alert category during conduct of strenuous physical activity?
- b. Ensure that subordinate commanders and leaders are notified of changes in the heat alert category?
- c. Train supervisory personnel in the heat casualty prevention procedures as outlined below?

HEAT ALERT CATEGORY	<u>WBGT INDEX</u> (Degrees F)	<u>NON-ACCLIMATIZED PERSONNEL</u>	<u>ACCLIMATIZED PERSONNEL</u>
I	82-84.9	Use discretion in the conduct of intense physical activity. Limit intensity of work and exposure to sun half the scheduled time. Reduce pace. Provide constant supervision. Encourage periodic intake of drinking water.	Normal duties.
II	85-87.9	Strenuous exercise such as PT, close order drill, prolonged marching and parades should be cancelled. Outdoor classes should be moved into the shade or cancelled. A 10 to 20-minute rest period should be alternated every hour.	Same as CAT I NON-ACCLIMATIZED PERSONNEL.
III	88-89.9	All nonessential activities and duty should be cancelled. A 20-minute rest period should be taken every hour.	Same as CAT II for NON-ACCLIMATIZED PERSONNEL.
IV	90 and above	Monitor personnel very closely.	Same as CAT II for ACCLIMATIZED PERSONNEL.

2. Does the commander allow approximately 14 days of progressive physical acclimatization for newly assigned troops?

3. Are personnel instructed in the following precautions to prevent heat-related injuries?

a. Prevention of sunburn:

- (1) Wear loose-fitting clothing.
- (2) Use sun protection 15 on exposed skin; i.e., face, hands, feet.
- (3) Avoid extended periods of unprotected exposure to the sun.

b. Prevention of heat cramp, heat exhaustion, and heat stroke:

- (1) Proper acclimatization (14 days).
- (2) Adequate water intake (1 quart of water per hour during the hot hours of the day).
- (3) Ensure continual surveillance of all personnel to detect early symptoms of heat illness.

4. Do personnel know how to recognize symptoms of heat illness, and how to administer emergency first aid treatment? (TB Med 507, para 18-20)

a. Heat cramps:

- (1) Symptoms. Painful cramps of the muscles of the extremities and abdominal wall.
- (2) Treatment. Move patient to cool, shaded area. Replace salt lost from the body with saline solution (0.1 percent) by mouth, upon recommendation of medical authority.

b. Heat exhaustion:

- (1) Symptoms.
 - (a) Profuse sweating.
 - (b) Headache.
 - (c) Tingling sensations in the extremities.
 - (d) Pallor.
 - (e) Nausea and vomiting.
 - (f) Weakness.
 - (g) Rapid pulse.

(2) Treatment.

- (a) Remove victim to cool place.
- (b) Elevate victim's legs.

c. Heatstroke: (This is a medical emergency and can be fatal if not treated promptly and correctly.)

(1) Symptoms.

- (a) Stoppage of sweating.
- (b) Skin flushed, hot, and dry.
- (c) Headache.
- (d) Fast pulse.
- (e) Nausea.
- (f) Vomiting.
- (g) Dizziness.
- (h) Mental confusion.
- (i) Unconsciousness.

(2) Treatment. Cool casualty continuously by--

- (a) Removing outer garments and/or protective clothing.
- (b) Immersing casualty's trunk in cool water, being careful not to overcool, thus causing temperature to go to other extreme.
- (c) Massaging the patient while immersed in cool water to help skin (capillaries) transport cooling effect.
- (d) Pouring cool water over casualty and fanning him to permit the cooling effect of evaporation. Place under a cool shower, if possible.
- (e) Keeping casualty in shade.
- (f) Using icebags if available at the sides of the neck and underarms during transportation to medical treatment facility to aid and maintain cooling effect.
- (g) Transporting to medical treatment facility as soon as possible.
- (h) Medical personnel can determine whether salt treatment is appropriate in the interim.

COLD WEATHER INJURY PREVENTION

1. To prevent cold weather injuries, does the commander ensure that: (TB Med 81, para 5)

- a. Safety is included in planning?
- b. Suitable cold weather gear is available and serviceable for all troops?
- c. All equipment is ready; i.e., weapons winterized, tent stoves checked?
- d. All supervisors are trained in cold weather responsibilities?
- e. All troops are trained in cold injury prevention procedures, proper cold weather operational procedures, and carbon monoxide hazards?
- f. Monitor current and forecast weather for changes.

2. Are participating personnel trained to recognize the early warning signs of cold weather injuries and how to perform emergency first aid treatment? (TB Med 81, paras 7 and 8)

a. Early warning signs:

- (1) Tingling, stinging, or dull sensation of exposed part followed by numbness.
- (2) Skin may appear red and then pale or waxy white.

b. Common injuries:

- (1) Frostbite - condition results when skin temperature falls below freezing.
- (2) Immersion foot - condition occurs when feet are wet for 12 hours or more in temperatures below 50 degrees Fahrenheit and when feet get little or no exercise.
- (3) Trenchfoot - condition caused by prolonged standing in water or by having wet feet for hours while temperature is just above freezing.
- (4) Hypothermia - condition caused by exposure to cold, and aggravated by wetness, wind, and exhaustion.

c. Treatment:

- (1) Remove the individual from the cold.
- (2) Remove constricting items of clothing (boots, socks, or gloves) from injury site. Protect with nonconstricting clothing/blankets.

(3) Do not apply medications, salves, or ointments.

(4) Do not allow patient to smoke or drink alcohol.

(5) Give hot liquids.

(6) If lower extremity is involved, treat as litter patient with injured part level or slightly elevated.

(7) Obtain medical help.

3. Carbon Monoxide Overexposure.

a. Are personnel trained in the hazards of carbon monoxide? (TB Med 269, para 7d)

b. Do personnel know that the most common source of carbon monoxide is the exhaust from internal combustion engines and field heaters in confined spaces without adequate ventilation; i.e., tanks, APCs, communication vans, and other enclosed areas where portable internal combustion engines and heaters are used? (TB Med 269, para 1c)

c. Do commanders ensure that: (AR 385-55, para 2-14)

(1) Personnel do not sleep in, on, or near fuel-powered vehicles while the engine (or heater) is running?

(2) Adequate ventilation is provided when engines, generators, battery chargers, and space heaters are operated?

d. Are personnel trained to recognize the warning signs and symptoms of carbon monoxide overexposure and how to perform emergency first aid treatment? (TB Med 81, paras 4 and 6)

(1) Signs and symptoms. Throbbing temporal headache, generalized weakness, dizziness, dimness of vision, nausea, vomiting, muscular incoordination and collapse, increased pulse/respiration, unconsciousness.

(2) Treatment.

(a) Remove individual from contaminated environment to fresh air.

(b) If respirations are weak/absent, administer artificial respiration and seek medical help.

4. Field Heaters: (TM 10-4500-200-13)

a. Are portable radiant-type space/tent heaters (pot belly and yukon) operated in accordance with the following?

(1) Each operator is thoroughly trained for the specific heater.

(2) Stovepipe opening flaps of the tent must be securely tied back so that flaps do not come in contact with the hot stovepipe.

(3) A sufficient number of stovepipe sections are used so that the top section is above the highest point of the tent. Six pipe sections are usually adequate.

(4) When using solid fuel (such as wood or coal) with the heater, a spark arrester must be installed on the top stovepipe section.

(5) When using liquid fuels, a draft diverter must be installed on the top section and secured with guy ropes. (Guy ropes are not used with solid fuel.)

(6) Stovepipe sections must be straight up and not allowed to come into contact with any part of the tent. Tents must be inspected to ensure that they are not sagging, and that canvas parts are not coming into contact with the stovepipe stacks.

(7) The area surrounding the heater inside the tent must be cleared of combustibles (including dry grass/pine needles/etc.) for a distance of 4 feet.

(8) Fuel cans, lines, and carburetors must be checked daily for leaks, particularly after changing fuel cans. No heater will be operated when fuel leaks are present.

(9) When heaters are operating, a Carbon Dioxide (CO²) fire extinguisher must be immediately available in the tent.

(10) Tent heaters must never be operated at full capacity even in the extreme cold. Overheating of the stovepipes may ignite tentage.

(11) Tents with wooden or canvas floors must have sandboxes on which the heaters are to be placed - at least 3½ inches of sand/dirt must be used for this purpose.

(12) Adequate ventilation must be provided where space heaters are operating.

(13) The fuel supply can for the heater must be located outside the tent and as far from the tent as the fuel hose allows.

(14) While some tent heaters are designed to use several types of liquid fuel. Gasoline will never be used as a heating fuel.

b. Are immersion heaters operated in accordance with TM 5-4540-202-12&P, and TM 10-4500-200-13, and only by properly trained personnel?

c. When operating Herman Nelson heaters and/or similar heaters:

(1) Is the heater placed as far from structures as the length of the heating ducts will allow?

(2) Is a 20-foot-long steel chain or cable attached to the heater to facilitate removal in case of fire?

(3) Is a 5-foot-high sandbag buffer maintained on the front and two sides of the heater?

(4) Are fire guards posted when Herman Nelson heaters and/or radiant-type tent heaters are operated?

COMMUNICATIONS

1. Antenna. (TB Sig 291, paras 1b and 3b)

a. Are antenna structures located a distance from overhead electrical power lines equal to twice the height of the structures?

b. Before erecting any type of antenna (structure, vehicular, or shelter), is a thorough inspection made of the immediate overhead area to prevent accidental contact with power lines?

c. Do all structures have adequate lightning arrester protection?

d. Do personnel know the following basic rescue rules if an individual comes in contact with an electrified structure?

(1) Never attempt to grasp the individual and pull him free.

(2) Try to free individual by using wooden pole, rope, or some other insulated object.

(3) Apply artificial respiration immediately.

(4) Notify MEDEVAC.

e. Are vehicular antennas properly tied down when operating around or near power lines and/or aircraft?

2. Lightning Protection.

a. Are fixed and tactical communication equipment grounded in accordance with grounding instructions contained in applicable TMs?

b. Are the operation of tactical radios during an electrical storm held to the absolute minimum?

3. Field Communication Wire, Cables, and Items of a Similar Nature. (TB Sig 291, para 1b)

a. Are communication wires, other lightweight wires, cables, or materials of a similar nature prohibited in designated helicopter landing areas unless it is buried?

b. Are communication wires, other lightweight wires, cable, or materials of a similar nature installed by units recovered upon completion of training and prior to leaving the field training areas/ranges?

c. Do personnel ensure that communication wires, etc., are NOT installed over high-tension lines?

4. Ground. (TC 11-6)

a. Are signal shelters grounded with a 5-foot ground rod? Ground rods must be all the way in the ground and bolted with tight fitting clamps and strap cable.

b. Are signal shelters separated with enough distance so that a person cannot touch both shelters at the same time? If operations call for two or more shelters to be located close together, proper grounding/bonding must be present.

c. Are trailer-mounted generators grounded with a 5-foot ground rod and generator properly bonded to the ground rod?

PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT

1. Do commanders provide and educate all personnel as to the proper wearing of PPCE? (AR 385-32, paras 4a thru 4i)
2. Do supply personnel ensure that items of personal issue are inspected regularly and maintained in serviceable and sanitary condition, and before being reissued to another person or returned to storage, are cleaned, disinfected, inspected, and repaired? (AR 385-32, para 4f)
3. Do the following personnel wear safety glasses/goggles?
 - a. Welders.
 - b. Painters.
 - c. Grinders.
 - d. Fuel handlers.
 - e. Maintenance workers.
 - f. Carpenters.
 - g. Metal workers.
 - h. Heavy equipment operators.
 - i. Pest controllers.
 - j. Electricians.
 - k. Mechanics/repairmen.
 - l. Warehouse workers.
4. Are workers requiring corrective lenses scheduled through the Preventive Medicine Clinic for vision conservation examinations?
5. Do the following personnel wear safety toe footwear?
 - a. Electrical workers.
 - b. Mechanics (tracked and wheeled).
 - c. Carpenters.
 - d. Heavy equipment operators.

HEARING CONSERVATION

1. Are commanders aware that Army regulation requires that proper hearing protection will be worn when the noise of equipment exceeds 85 dB(A)? (TB Med 501, para 8a)
2. Do personnel use hearing protection while operating the following equipment? (TB Med 501, Appendix G)
 - a. All Army aircraft.
 - b. Construction/engineer items such as dozers, cranes, forklifts, graders, etc.
 - c. Tractors.
 - d. Tracked vehicle engines (APCs, tanks, etc.).
 - e. Multifuel vehicle engine.
 - f. M561 (gamma goat) engine.
 - g. Small arms.
 - h. Vulcan gun.
 - i. Grenade launchers.
 - j. Missile systems.
 - k. Mortars.
 - l. Guns (tanks, howitzers).
 - m. Recoiless rifles.
 - n. Mines.
 - o. .50 caliber machinegun.
 - p. Rockets.
 - q. HMMWV vehicles.

PETROLEUM, OIL, AND LUBRICANT OPERATIONS

1. Do personnel know that a flammable liquid has a flash point below 100 - degrees Fahrenheit, and a combustible liquid has a flash point at or above 100 degrees Fahrenheit? (FM 10-69, page 10-1)
2. Do personnel know, if vapors from petroleum products are mixed with the proper amounts of air, vapors form explosive mixtures and ignite at once when in contact with a spark or flame? (FM 10-69, page 10-1)
3. Do personnel know there is an explosion if the explosive mixture ignites in a closed space? (FM 10-69, page 10-1)
4. Do personnel know that all fires connected with flammable products result from ignition of vapors? (FM 10-69, page 10-2)
5. Do personnel know there is little danger in a closed container that holds a flammable product, unless it is exposed to heat? The hazard arises from the ignition of vapors produced in transfers, use, spills, or leaks. (FM 10-69, page 10-2)
6. To prevent petroleum fires, do personnel:
 - a. Control ignition sources by: (FM 10-69, page iii, Table 1)
 - (1) Not smoking and having no matches or cigarette lighters within 50 feet of refueling vehicle points?
 - (2) Grounding and bonding vehicles?
 - (3) Prohibiting the use of open flames, heating stoves, and electrical tools in refueling/storage areas?
 - (4) Placing flame and spark arresters on all equipment?
 - (5) Never wearing nylon clothing?
 - b. Control vapor formation by: (FM 10-69, page 10-8, Table 10-2)
 - (1) Avoiding spills and cleaning up spills?
 - (2) Using drip pans and catch basins?
 - (3) Inspecting, frequently, for leaks and cracks in fuel, oil, and exhaust lines?
 - (4) Inspecting hoses, hose reels, and nozzles for bulges, tears, cuts, etc?
 - (5) Keeping containers of flammable liquids closed?
 - (6) Prohibiting the use of gasoline for cleaning? (Use only authorized solvents.)

7. Do personnel know the greatest common causes of fires are smoking and matches? (FM 10-69, page 10-2)
8. Are no smoking within 50 feet signs posted at all petroleum handling, storing, and displaying areas? (FM 10-69, page 10-2)
9. Do personnel carefully control sources of friction sparks, such as tools and grinding wheels, to prevent igniting combustibles (rubbish, paper, oily rags)? (FM 10-69, page 10-3)
10. Are personnel instructed that portable lights, power tools, and extension cords become a fire hazard in two ways when overloaded? (FM 10-69, page 10-3)
 - a. The heat it generates.
 - b. The short circuits which result from worn insulation.
11. Are personnel instructed in the following causes of static electricity? (FM 10-69, page 10-3)
 - a. Friction.
 - b. Flow of flammable liquids.
 - c. Flow of steam, air, or gas through pipe, hose, or tank opening.
 - d. Movement of vehicles with nonconductive tires over nonconductive road surfaces.
12. Do personnel bond and ground tank vehicles, loading or unloading, to permit the safe transfer of any static charge that builds up within the tank? (FM 10-69, page 10-4)
13. Are storage tanks/pods grounded? (AR 385-55, para 2-13)
14. Are AMVs prohibited from operation unless entirely free of fuel leaks? (AR 385-55, para 2-13a)
15. When refueling: (AR 385-55, para 2-13)
 - a. Does one crewman man a portable fire extinguisher having a 108:C rating or greater?
 - b. Is the engine shut off and master switch in off position?
 - c. Is smoking prohibited and are signs posted?
 - d. Are vehicles grounded and bonded?
 - e. Is correct fuel placed in vehicles?
 - f. When refueling, do personnel wear safety goggles or eye protection?

16. Before welding and cutting, are storage tanks, tank cars, tank vehicles, drums, and vehicle fuel tanks thoroughly clean and free of vapor, and certified by the Fire Department?

17. Are lock/latch open devices on automatic petroleum dispensing nozzles prohibited? (FM 10-69, page 10-4)

18. Are portable CO² fire extinguishers placed at refueling/storage points? (FM 10-69, page 10-11)

19. Is aircraft refueling accomplished in accordance with FM 10-68?

20. Are personnel familiar with the health hazards inherent in petroleum produces as listed below? (FM 10-69, pages 10-4 thru 10-7)

a. Dusts: Solid particles resulting from grinding, scraping, buffing, riveting, rivet cutting, drilling, sanding, or sandblasting and/or from evaporating/burning of liquids and residues that contain finely divided substances that injure organs/tissues when inhaled in lungs, or ingested in digestive system.

b. Gases and vapors: A gas exists as a gas at ordinary temperature and pressure. A vapor is a gas-like form of a substance that is ordinarily a solid or liquid. Poisons, asphyxiants, anesthetics, and irritant gases and vapors may injure or destroy the visual organs, the blood-forming system, tissues, or bones; keep the lungs from getting oxygen, have a narcotic effect, and/or inflame the lungs and respiratory track.

c. Flammable liquids: Flammable liquid products are dangerous inside your mouth, eyes, and body. They also cause skin contamination. Example: gasoline, jet fuel, solvents, paints, lacquers, varnishes.

d. Fumes and mists: A solid substance that can turn directly into a vapor without first becoming a liquid and can later return to the same solid state.

e. Oxygen deficiency: The air lacks the normal amount of oxygen due to flammable vapors.

21. Is loading and unloading of tank cars/trucks accomplished in accordance with appropriate regulations?

22. Do personnel know first aid procedures for petroleum-related injuries? (FM 10-69, page 10-6)

23. Are petroleum samples taken by an approved sampler only - not by a hose and mouth suction? (FM 10-69, page 11-14)

24. Do refueling operators wear gloves, safety goggles, and other PPCE to prevent skin contamination?

25. Are showers and eyewash facilities available to personnel?

26. Are personnel informed to remove POL-soaked clothes only under showers to prevent ignition by static electricity

RAIL LOADING/UNLOADING

1. Does the ramp OIC ensure all vehicles are inspected; i.e., brakes, lights, turn signals, and fire extinguishers, before loading? (FM 55-30, pages 10-9 thru 10-12)
2. Are windows and windshields covered with cardboard to prevent damage from rocks, etc., during deployment/redeployment? (Public Law 91-596)
3. Have loading teams been instructed in rail loading/unloading procedures?
 - a. Before loading the rail car: (TM 55-2220-058-14, para 2-3)
 - (1) Remove rocks, leaves, or other trash from the rail car channels so the chain anchors will slide freely.
 - (2) Pull all chains needed for tiedown out of the channels and slide the chain anchors along the bottom of the channel to required locations.
 - (3) Turn the turnbuckle body until the threaded ends are fully extended.
 - (4) Lubricate the turnbuckle threads and eyebolts with "Rust Veto" corrosion preventive compound or equivalent.
 - (5) Lay all turnbuckles to point inboard toward the center of the car and pile for each turnbuckle between the channels.
 - b. Loading/unloading vehicles: (TM 55-2220-058-14, para 3-2)
 - (1) Vehicles must be driven by qualified drivers only.
 - (2) Vehicles must not be mounted or dismounted while in motion.
 - (3) Personnel must not ride on vehicles while vehicles are being loaded/unloaded.
 - (4) A ground guide must be used during all loading and unloading operations.
 - (5) The ground guide will maintain one rail car length from the vehicle being ground guided, and will NEVER walk backwards while ground guiding.
 - (6) Tank turret guns must be in the aft travel position, and lowered into the saddle block. Turret rotation and gun-elevating controls must be wire tied to prevent movement.
 - (7) Ensure all vehicle antennas are removed or tied down, as appropriate.
 - c. Tiedowns: (TM 55-2220-058-14, paras 2-4 and 3-1)

(1) Inspect each chain assembly for apparent breaks, cracks, gouges, open welds, or deformed components. Remove from use any that have defects.

(2) Inspect the connector link that attaches the chain to the anchor fitting. If defects are found, replace the chain and/or fittings.

(3) Compare an eight-link segment next to the turnbuckle end of the chain with an eight-link segment near the hook fitting at the load attachment end of the chain assembly. If the eight-link near hook fitting is $\frac{1}{2}$ inch or longer than the eight-link near the turnbuckle end, the chain has STRETCHED beyond normal limits and should be REPLACED.

(4) If the chain assembly and components are free of apparent damage, attach shackles or rings, as required.

(5) Pull chains as tight as possible by hand before hooking the grab hook. (Chains must not be kinked or twisted.)

(6) Hand tighten turnbuckles, then continue to tighten them with a $1\frac{1}{2}$ -inch open-end wrench or a 15-inch crescent wrench. Tighten front and rear tiedowns at the same time so equal tension on all tiedowns will be maintained.

(7) Tighten turnbuckles until $\frac{1}{8}$ inch of the rubber pads in the compression unit shows between the metal rings.

(8) After tiedowns have been tensioned, lubricate exposed turnbuckle threads and jamnuts.

(9) Secure the load attachment hook end of the chain assembly so it cannot swing free.

(10) Unused chains, shackles, and rings must be secured to the flatcar so they will not become free.

d. Loading teams/rail guards:

(1) Chain binders and rail guards should wear safety shoes.

(2) Personnel will not lie on, under, or between rail cars.

e. Unloading: (TM 55-2220-058-14, para 2-3)

(1) Use lubricant to help loosen jamnuts.

(2) Place chain assemblies in the center of the rail car.

(3) Leave tiedowns, shackles, and rings securely stowed on rail car.

PORT OPERATIONS

Although the Commander, Military Traffic Management Command (MTMC) has overall responsibility for the operations at the port, all personnel should be briefed with regards to their safety while at the port. Does the briefing include the following?

- a. Identification of authorized and unauthorized areas such as:
 - (1) Smoking areas and no smoking rules?
 - (2) Hard hat areas?
- b. Personnel must avoid walking beneath suspended cargo loads.
- c. Complying with MTMC safety rules and policies.
- d. Remaining alert at all times while in the operation areas; i.e., be aware of vehicle or traffic, avoid horseplay or any activity which is distracting or hazardous.

HELICOPTER SLING LOAD OPERATIONS

1. Is sling loading of helicopters accomplished in accordance with FM 55-450-1? (FM 55-450-1, pages 2-2 thru 2-6)
2. Are prior planning and coordination of sling load operations always accomplished between the ground crews and aviation crews involved? (FM 55-450-1, pages 2-2 thru 2-6)
3. Are only properly trained and equipped ground crews used to hook up sling loads? (FM 55-450-1, pages 2-2 thru 2-6)
4. Is a static discharge probe always used by the ground crew before and until the sling load is hooked onto the helicopter? (FM 55-450-1, pages 2-2 thru 2-6)
5. Do helicopter pilots key FM radios (to help discharge static buildup) before sling load operations begin? (FM 55-450-1, pages 2-2 thru 2-6)
6. Are helicopter pilots guided by a ground crew signal person? (FM 55-450-1, pages 2-2 thru 2-6)
7. Do helicopter pilots maintain radio silence during hook up operations? (FM 55-450-1, pages 2-2 thru 2-6)

NATURAL HAZARDS

1. Do all personnel know how to avoid snake bites? (FM 21-11)
 - a. Walk carefully, watch your step, and where you sit.
 - b. Be careful where you place your hands when climbing or when lifting objects from the ground.
 - c. Never tease or pick up a snake. Even bites of nonpoisonous snakes may cause infection requiring medical treatment.
 - d. Avoid sudden motion when placing your hands or feet near an area which may conceal a snake. Beware of shady areas.
2. Are personnel familiar with snake bite treatment? (FM 21-11, para 6-4)
 - a. Try to kill the snake without destroying the head and take it with the patient to the medical treatment facility for identification.
 - b. Place a constricting band snugly above the bite; if swollen, move up.
3. Do all personnel know how to prevent spider bites or scorpion stings?
 - a. Check bedding before using.
 - b. Check clothing, socks, and shoes before wearing. Many a soldier has been stung on the toe as he puts his shoes on in the morning.
 - c. Avoid sleeping or leaving clothes near damp places - dampness appears to attract these creatures.
 - d. If you feel an insect or spider crawling on you, remain still. Sudden movement may cause it to bite or sting.
 - e. Never step in the shade of a bush without visually checking that spot.
 - f. Food crumbs attract insects which in turn attract scorpions, spiders, and centipedes which feed on these insects.
4. Are personnel familiar with how to treat spider bites and scorpion stings?
 - a. Keep patient quiet and send for medical aid.
 - b. The puncture should be cleansed with an application of mild antibacterial agent.
 - c. Cool the area for 10 to 12 inches around the puncture point with ice, if available.

PHYSICAL CONTACT DURING TACTICAL TRAINING

1. Is physical contact between opposing forces prohibited? Troops of opposing forces will be halted by controllers once tactical contact is made. (FM 25-4, page 57)
2. In the absence of a controller, does the senior person of each group take responsibility for avoiding contact? (FM 25-4, page 57)
3. Once an individual is captured, does he/she make no attempt to escape which will cause physical confrontation? (FM 25-4, page 57)

WATER TRAINING
(RIVER/STREAM CROSSING OPERATIONS; SURVIVAL, ESCAPE,
RESISTANCE, AND EVASION TRAINING (SERE))

1. Prior to the onset of training, have nonswimmers and weak swimmers been identified?
2. Has stream crossing plan been rehearsed prior to actual training, with all personnel understanding their positions and responsibilities?
3. Are all personnel using a sling line tied in a bowline around their chest, and in a bowline at less than arms length? Put a snaplink in each end of the rope bowline.
4. Have the far-shore and near-shore lifeguards been designated? Are they proficient swimmers? Are Class I or V life preservers in use by both lifeguards?
5. Has there been recent reconnaissance as to water depth and current at proposed crossing sites?
6. Are additional ropes available for attaching to the safety line of the individual crossing as a contingency should assistance be necessary in crossing?
7. Has all special equipment requirements for one rope bridge (wet crossing) been checked for serviceability? (Ranger Handbook, ST 21-75-2, October 1980, page 15.1.)
 - a. Two snaplinks per piece of heavy equipment.
 - b. Two snaplinks for every 120 feet of rope.
 - c. Two snaplinks per double butterfly knot.
 - d. Two snaplinks per person.
 - e. One sling rope per person.
 - f. One 14-foot utility rope per piece of heavy equipment.
 - g. One snaplink per lifeguard rucksack.
 - h. One 14-foot utility rope per lifeguard rucksack.
 - i. One waterproof bag for each RATELO.
 - j. Two Class I or V life preservers.
 - k. Two 120-foot nylon rope.

CHAPTER 6
SPORTS AND RECREATION

SPORTS AND RECREATION

1. Does the commander assure proper planning for safety in the unit sports and recreational programs? (DA Pam 385-5)
2. Does the commander insist that all supervisors of sports and recreational activities under their jurisdiction coordinate their procedures with other activities and units? (DA Pam 385-5)
3. Have coaching officials been selected and trained in sports safety? (DA Pam 385-5)
4. Do officials ensure that the playing facilities meet all mandatory requirements? (DA Pam 385-5)
5. Do officials ensure that spectators do not pose a danger to players or themselves as a result of conduct of the play? (DA Pam 385-5)
6. Are officials enforcing safety-related rules without exception and removing individuals involved in unsportsmanlike conduct? (DA Pam 385-5)
7. Do officials take action as necessary to control accident potential during the game? (DA Pam 385-5)
8. Is there an installation safety director to assist the commander by advising on safety matters? (DA Pam 385-5)
9. Is there a morale support officer (MSO) to provide guidelines for the overall program? (DA Pam 385-5)
10. Are the authorized swimming areas supervised during hours of operation? (AR 385-15)
11. Are periodic health examinations given to those participants taking part in more strenuous sports and physical training? (DA Pam 385-5)
12. Do participants go through some type of training program to ensure they are ready for a particular sport? (DA Pam 385-5)
13. Are teams or opponents matched as to their capabilities? (DA Pam 385-5)
14. Do all participants know the rules of the game and have knowledge of the physical skills essential for the safe conduct of the sport? (DA Pam 385-5)
15. Are participants encouraged to develop a personal responsibility for safety and given the opportunity to plan, execute, and evaluate their own conduct? (DA Pam 385-5)
16. Is there a unit safety officer to ensure the success of the program? (DA Pam 385-5)
17. Are participants cautioned on swimming while exhausted, overheated, or immediately after eating? (DA Pam 385-6)

18. Do swimming pools meet the standards of safety and sanitation established by local authorities and any regulations. (DA Pam 385-15)

19. Are the areas selected for sports suitable for their intended use? (DA Pam 385-5)

20. Are periodic inspections conducted of areas selected for recreational use? (DA Pam 385-5)

21. Are facilities and equipment inspected prior to use? (DA Pam 385-5)

22. Are athletic fields flat and smooth, free of rocks, sticks, standing water, broken glass, and other debris? (DA Pam 385-5)

23. Are gymnasium floors free of obstructions? (DA Pam 385-5)

24. Is proper protective equipment worn by those who have a need for it? (DA Pam 385-5)

25. Do participants always use the proper practice equipment to ward off unnecessary cuts, bruises, sprains, and broken bones? (DA Pam 385-5)

APPENDIX A

REFERENCES

REFERENCES

1. Public Law 91-596, 91st Congress, S. 2193, 29 Dec 70 (Occupational Safety and Health Act of 1970).
2. Code of Federal Regulations, Number 29, Part 1910, Occupational Safety and Health Standards.
3. AR 55-29 (Military Convoy Operations in CONUS)
4. AR 190-5 (Motor Vehicle Traffic Supervision)
5. AR 385-10 (The Army Safety Program) with all supplements.
6. AR 385-15 (Water Safety)
7. AR 385-30 (Safety Color Code Markings and Signs)
8. AR 385-32 (Protective Clothing and Equipment) with all supplements.
9. AR 385-40 (Accident Reporting and Records) with all supplements.
10. AR 385-55 (Prevention of Motor Vehicle Accidents) with all supplements.
11. AR 385-63 (Range Safety)
12. AR 600-55 (Motor Vehicle Driver - Selection, Testing and Licensing) with all supplements.
13. AR 700-68 (Storage and Handling of Compressed Gases and Gas Cylinders).
14. DA Pam 385-5 (Fundamentals of Army Safety in Army Morale Support Activities)
15. DA Pam 385-6 (Playing it Safe in the Water)
16. DA Pam 738-750 (Maintenance Management Update)
17. FC 42-2 (Maintenance)
18. FC 55-32 (Driver Selection, Training and Supervision in Unit Tactical Fleet Vehicle Operations)
19. FM 10-69 (Petroleum Supply Point Equipment and Operations).
20. FM 21-305 (Manual for the Wheeled Vehicle Driver).
21. FM 21-306 (Manual for the Tracked Combat Vehicle Driver).
22. FM 25-4 (How to Conduct Training Exercises).

23. FM 29-2 (Organizational Maintenance Operations).
24. FM 54-11 (Container Movement and Handling in the Theater of Operations).
25. FM 55-30 (Army Motor Transport Units and Operations).
26. FM 44-450-1 (Army Helicopter External Load Operations).
27. FM 71-1 (Tank and Mech Inf Company Team)
28. TB 43-0142 (Safety Inspection and Testing of Lifting Devices).
29. TB Med 81 (Cold Injury).
30. TB Med 269 (Carbon Monoxide: Symptoms, Etiology, Treatment and Prevention of Overexposure).
31. TB Med 279 (Control of Hazards to Health from Laser Radiation).
32. TB Med 501 (Hearing Conservation).
33. TB Med 502 (Occupational and Environmental Health Respiratory Protection System).
34. TB Med 507 (Prevention, Treatment and Control of Heat Injury).
35. TB Sig 291 (Safety Measures to be Observed when Installing and Using Whip Antennas, Field Type Masts, Towers, Antennas, and Metal Poles that are used with Communication, Radar, and Direction Finder Equipment).
36. TB 385-4 (Safety Maintenance and Electrical Repair)
37. TC 11-6 (Grounding Techniques).
38. TM 5-4540-202-12&P (Operator's and Organizational Maintenance Manual: Heater, Immersion, Liquid Fuel Fired 35,000 BTU Output for Corrugated Cans (Military Model M67) NSN 4540-00-469-6593).
39. TM 9-243 (Use and Care of Hand Tools and Measuring Tools).
40. TM 9-1300-206 (Ammunition and Explosives Standards).
41. TM 9-2320-209-20-3-2 (Maintenance Organizational Level, 2½ Ton).
42. TM 9-2320-242-20-3-2 (Maintenance Organizational Level Truck, Cargo, 1¼ Ton).
43. TM 9-2610-200-20 (Organizational Care, Maintenance and Repair of Pneumatic Tires Inner Tubes and Radial Tires).

44. TM 9-6140-200-14 (Operator's Organizational, Direct Support and General Support Maintenance Manual for Lead-Acid Storage Batteries).
45. TM 10-4500-200-13 (Operator, Organizational and Direct Support Maintenance Manual: Heaters, Space and Immersion).
46. TM 55-2220-058-14 (Transportability Guidance Transport of Cargo on the Railway Car, Flat 140-Ton Capacity (NSN 2220-01-058-6377)).
47. TM 55-3810-229-14/N (Crane, Truck-Mounted, Hydraulic, 25-Ton Harnischfeger Model MT-250 (NSN 3810-00-018-2021); Crane, Truck-Mounted, Hydraulic, 35-Ton Harnischfeger Model MT-300 (NSN NA)).
48. Standard First Aid and Personal Safety, American Red Cross, Second Edition 1979.
49. The Preventive Maintenance Monthly, Issue 386, Jan 85, page 20-20.
50. TG 083B, Laser Rangefinder Hazards, 1979, United States Army Environmental Hygiene Agency, Aberdeen Proving Ground, MD 21010.

