

APPENDIX J

CONVOY OPERATIONS

Section I. CONVOY PROCEDURES

J-1. General

a. When the medical company is required to relocate, extensive planning, coordination, and preparation for the move is required. The more comprehensive the plan for the relocation, the more smoothly the operation will run. Conducting a convoy is one of the activities required during a unit relocation. It requires skilled leadership, thorough planning, and strict discipline to be successfully accomplished.

b. The medical company may be required to conduct a convoy on its own without other units present, or it may be included in a convoy with other CSS units. When included in a convoy with other units, the medical company benefits from the protection afforded by those other units. When conducting a convoy with only medical assets, the medical personnel must be prepared to provide for their own defense.

c. Procedures for establishing and conducting a convoy should be standardized in the TSOP. However, if the medical company is located in the division or corps rear area, it is imperative that any such move be coordinated with the rear operations cell in the rear CP. Further, proper route authorization (convoy clearance) must be obtained from the movement control center (MCC).

d. For additional information on conducting convoy operations, refer to FM 55-30.

J-2. Definition of Terms

Terminology used in conducting convoy operations includes—

a. *Convoy.* A convoy is a group of vehicles organized for the purpose of control under a single commander. The number of vehicles constituting a convoy is determined by the division/corps commander based on the METT-T.

b. *Organizational Elements.* A small convoy presents few organizational problems. As the number of vehicles increases, so does the need to structure the convoy into manageable subelements. These subelements include—

- *March column.* For all practical purposes, the march column is the convoy.
- *Serial.* The march column is subdivided into serials. Each serial is commanded by a serial commander. A company-sized unit may be designated as a serial.
- *March unit.* For better control, a large serial may be further divided into two or more march units. The march unit is commanded by a march unit commander who is responsible to the serial commander. The march unit is the smallest organized subgroup of the convoy and should be organized to correspond to a small troop unit, such as a platoon or squad.

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- *Time gaps.* Gaps of time are established between serials and between march units so that they retain their subunit integrity. There is no set time gap; however, as a guide, the following time periods may be used:

- Serial time gap: 10–20 minutes.
- March unit time gap: 3–5 minutes.

c. *Functional Elements.* In addition to organizational elements, there are a number of functional elements that apply to all convoys, regardless of size. For a small convoy, there would only be one of each functional element. For larger convoys, each march unit should be organized as follows:

- *Head.* The first or leading task vehicle is the head and contains the officer or NCO designated by the commander as the pace setter. The pace setter is responsible for ensuring that the march unit keeps on the correct route and maintains the correct pace to achieve the rate of march for the convoy.

- *Trail.* Each march unit should have its own trail which would normally be no more than a limited recovery capability, such as a vehicle equipped with a tow bar. At the end of the march column there should be provisions for the larger administrative functions for the column, such as:

- Collection of stragglers.
- Combat health support.
- Road guide recovery.
- Fuel, maintenance, and recovery.

- *Trail party.* The trail party for the column is commanded by the trail officer or a trail maintenance officer.

J-3. Loading Plans

To ensure the efficient use of space within unit vehicles and to identify where specific pieces of equipment and supplies are placed within the convoy, comprehensive loading plans are required. Once developed, these plans should be executed exactly as planned.

J-4. Route Reconnaissance

a. During the planning stage and prior to the departure of the convoy, the commander conducts a map reconnaissance of the proposed route. This reconnaissance includes identifying—

- Start point (SP).
- Locations of friendly units.
- Known or suspected locations of hostile forces.
- Potential ambush sites.
- Check points.
- Release point (RP).

b. Prior to conducting the ground reconnaissance, updated intelligence should be obtained from the battalion S2. He may have access to visual or photographic reconnaissance information on the subject area.

c. Once the map reconnaissance is completed, a team is selected to conduct a reconnaissance of the proposed route. Procedures to be taken and information to be obtained from this reconnaissance include—

- Assuming the designated MOPP level.
- Activating automatic chemical alarms.
- Monitoring radiation detection/monitoring devices.
- Verifying map information.
- Identifying the roads, to include type of road (major road network [rural or trail]; type of and condition of surface; number of lanes; locations for possible check points; distances between features and areas; and accessibility [entrance and exit points] and whether there are sharp turns or other adverse characteristics).
- Listing height, width, and weight restrictions of roads, bridges, underpasses, and overpasses.
- Listing locations of culverts, ferries, fording areas, steep grades, obstacles, mine fields, barriers, and possible ambush sites.
- Identifying areas for field feeding.
- Preparing overlays.
- Computing travel time.
- Preparing strip maps.

d. An aerial reconnaissance can be conducted if security, the tactical situation, or time do not permit a ground reconnaissance. This type of reconnaissance provides the commander with a better overview of the route, but does not yield the level of detail a ground reconnaissance would.

J-5. Coordination for External Support

To successfully accomplish the convoy mission, the convoy should be as self-reliant as possible. If the distance to be covered is relatively short, this presents no major problems. However, as distance and time factors increase, assistance from other sources may be required. During the planning stage for the convoy operation, coordination with higher headquarters may be required in the following areas:

- Security (military police and/or air cover).
- Refueling (may be required depending upon distance to be traveled).
- Engineer support.
- Maintenance and salvage of vehicles.
- Medical evacuation support.
- Field services.

J-6. Vehicle Preparation

a. Prior to beginning the convoy, all vehicles which will participate should be thoroughly inspected and tested. Minor deficiencies should be corrected as quickly as possible. Major deficiencies should be reported, required parts requisitioned, and deficiencies corrected.

b. Other vehicle preparation activities include—

- Hardening vehicles with available materials such as sandbags.
- Covering reflective surfaces.
- Placing antennas at the lowest height.
- Turning radio volumes and squelches to lowest setting consistent with operational requirements.
- Ensuring that vehicles have fire extinguishers that are sealed and charged.
- Ensuring that vehicles are not overloaded (the weight and cube are within limits).

c. When a medical unit relocates (by itself) using a convoy, the vehicles should be properly marked with the emblem of the Geneva Conventions; this emblem provides a measure of security for the convoy. Camouflaging vehicles is done only when specific orders are given to do so. For information concerning display of the red cross emblem and the camouflaging of medical vehicles in relation to the Geneva Conventions, refer to Appendix A and FM 8-10.

J-7. Convoy Commander's Responsibilities

a. The convoy commander may be the unit commander or someone designated by the commander to be responsible for conducting the convoy. In convoys made up of more than one unit, the convoy commander may not be an individual assigned to the medical company. When the unit is moved in echelons, the unit commander cannot be present in each of the echelons.

b. A manifest for each vehicle is provided to the convoy commander. The manifest provides the information required to organize the convoy. As a minimum, the manifest should contain—

- Bumper numbers by unit.
- Names of the driver and assistant driver.
- Names of passengers.
- Cargo.

c. The convoy commander is responsible for organizing the convoy and for the positioning of the vehicles. He also—

pattern.

- Assigns control vehicles throughout the convoy without setting an established

- Assigns recovery vehicles positions.
- Assigns hardened vehicles near the head of the convoy.
- Assigns passenger locations.
- Assigns air guards.
- Organizes the trail party element.
- Provides vehicle position listing to the trail party leader.

d. The convoy commander briefs convoy personnel (especially vehicle drivers) on logistical and tactical information. Refer to paragraph J-8.

e. The convoy commander is responsible for ensuring that the lead vehicle crosses the SP at the appointed time. He then verifies that all of the other convoy vehicles cross the SP. Once the last vehicle passes, he forwards a crossing report to his higher headquarters. Other reports the convoy commander must forward (using the correct SOI procedures) to his higher headquarters are on checkpoint clearances, on any information which conflicts with the maps being used, and on any detection of NBC hazards.

J-8. Driver Briefing

Prior to departing the assembly area, the drivers of each vehicle in the convoy are briefed and provided a strip map or highlighted road map. The briefing should contain information concerning both logistical and tactical matters.

a. Logistical Information.

- Destination.
- Route.
- Rate of march and catch-up speed.
- Vehicle intervals.
- Chain of command for convoy operations.
- Start point.
- Release points and arrangements made for them.
- Critical points and checkpoints.
- Maintenance procedures (routine and emergency).
- Location of refueling points.
- Visual signals.
- Radio listening/silence instructions.
- Location of scheduled halts.
- Driving safety.
- Accident reporting.
- Special procedures for driving at night, such as the use of NVGs.

- Procedures for traveling during blackout conditions, to include ground guides.
- b. Tactical Information.*
- Update on the tactical situation and areas of suspected enemy activity.
 - Actions taken in case of—
 - Air attack.
 - Sniper fire.
 - Ambush.
 - Nuclear, biological, or chemical attack.
 - Actions taken to protect unit personnel, equipment, and supplies.

J-9. March Procedures

At the SP, the vehicles and drivers come under the control of the convoy commander. The convoy commander is responsible for keeping the convoy on the schedule agreed upon in the planning phase.

a. Rate of March. The rate of march depends on the TSOP, local conditions, and the speed capability of the slowest vehicle in the convoy. It may also depend on the distance to be covered by the convoy. Convoy speeds normally range between 15 and 20 miles per hour, while catch-up speeds are 25 to 30 miles per hour. The rate of march, however, may be affected by grades, sharp curves, or urban areas, visibility and road conditions, and the training and experience of the drivers.

(1) Table J-1 provides the time-distance statistics for selected vehicle speeds.

(2) The formulas in Table J-2 shows how to plan your march rate.

b. Vehicle Intervals. The vehicle interval is the distance that should be kept between each vehicle. The interval depends on the type of formation the convoy is using. There are three formations that may be used. Each type has its advantages and disadvantages.

(1) The closed column keeps vehicles as close as possible, leaving only enough space to avoid accidents. It is used most often in blackout marches and in times of poor visibility. In daylight, the closed column requires fewer guides, escorts, and markers. However, it should not be used in daylight in a CZ since the close spacing between the vehicles makes the convoy a lucrative target for the enemy. Further, upon reaching the RP, it may cause congestion on the road and slow traffic down.

Table J-1. Time-Distance Table for Selected Vehicle Speeds

TRAVEL TIME ¹								
DISTANCE		RATE		RATE		RATE		
		10 MPH (7.5 MIH) 16 KPH (12 KIH)		20 MPH (15 MIH) 32 KPH (24 KIH)		30 MPH (25 MIH) 48 KPH (40 KIH)		
Km	Mi	Hr	Min	Hr	Min	Hr	Min	
1		0	5	0	2.5	0	1.5	
	1	0	8	0	4	0	2.4	
2		0	10	0	5	0	3	
3		0	15	0	7.5	0	4.5	
	2	0	16	0	8	0	4.8	
4		0	20	0	10	0	6	
	3	0	24	0	12	0	7.2	
5		0	25	0	12.5	0	7.5	
6		0	30	0	15	0	9	
	4	0	32	0	16	0	9.6	
7		0	35	0	17.5	0	10.5	
8		0	40	0	20	0	12	
	5	0	40	0	20	0	12	
9		0	45	0	22.5	0	13.5	
	6	0	48	0	24	0	14.4	
10		0	50	0	25	0	15	
	7	0	56	0	28	0	16.8	
	8	1	4	0	32	0	19.2	
	9	1	12	0	36	0	21.6	
	10	1	20	0	40	0	24	
20		1	40	0	50	0	30	
30		2	30	1	15	0	45	
	20	2	40	1	20	0	48	
40		3	20	1	40	1	0	
	30	4	0	2	0	1	12	
50		4	10	2	5	1	15	
	40	5	20	2	40	1	36	
	50	6	40	3	20	2	0	

¹The MPH (miles per hour) figure indicates vehicle speed and the MIH (miles in the hour) figure indicates the rate of march for that speed. The KPH (kilometers per hour) figure indicates vehicle speed and the KIH (kilometers in the hour) indicates the rate of march for that speed.

(2) The open column puts the vehicles farther apart. This allows the vehicles to travel faster on the highways. It is best used through areas where there is enemy action or where road conditions are bad.

Table J-2. Rate of March Formulas

Use rate of march formulas to find the distance (D), rate (R), and time (T) it will take the convoy to reach its destination:

$D = RT$ Distance equals the rate multiplied by the time.

$T = \frac{D}{R}$ Time equals the distance divided by the rate.

$R = \frac{D}{T}$ Rate equals the distance divided by time.

This means if you must go 100 miles and you must arrive within 5 hours, you must average at least 20 miles per hour.

(3) The infiltration method has the vehicles leave the SP, one at a time or in small groups of various sizes. This affords the maximum security and deception. The interval depends on the rate of march and the speed at which the vehicles will be traveling. This method affords the best passive defense against observation and attack. However, it does take longer to complete than the other two methods. Further, it results in the convoy being harder to control and protect because of the increased interval distances. Other disadvantages include the following:

- Drivers get lost.
- Specific details must be given to each driver.
- Maintenance, refueling, and field feeding are difficult to arrange.
- Vehicles may bunch up causing columns to form.
- Inexperienced drivers (experienced drivers are required).
- Orders are not easily changed.
- Difficulty redeploying as a unit until all vehicles arrive at the destination.

c. *Halts.* There are two types of halts that may occur during convoy operations. These are scheduled and unscheduled halts.

(1) Halts may be scheduled for a number of reasons, such as refueling, rest, or routine maintenance. For a scheduled halt, the vehicles stop at the time and location planned, the prescribed intervals between vehicles are maintained, and the vehicles are moved off the road. During these stops, the drivers perform preventive maintenance checks and services (PMCS) and inspect the vehicle loads to ensure they have not shifted. Local security is established until the convoy departs. The location for the halts should be selected when map and route reconnaissance takes place. The area selected should—

- Be big enough for the convoy to pull into.
- Have unimpeded visibility of at least 200 yards at each end of the convoy.
- Have no curves or grades that interfere with the field of view.

(2) When an unscheduled halt occurs, the convoy commander alerts the march column. He then reports the halt to the higher headquarters. As with a scheduled halt, the vehicle intervals are maintained and local security is established. When the march is resumed, the commander notifies his higher headquarters.

d. Refueling. As a rule, you can schedule refueling for your night halts since most vehicles can travel farther (about 300 miles) on a tank of gas than the convoy will move in one day.

(1) Each vehicle should have two filled 5-gallon gas cans. The fuel could be used to refuel during short halts, but it is better to save it for an emergency.

(2) Vehicles may be able to carry enough 5-gallon cans for daily refueling. If not, a vehicle near the rear may move forward during long halts and drop off filled cans. When the driver gets to the head of the convoy, he turns around and goes back, picking up the empties on the way.

(3) External refueling support may also be used. Coordination for location and time must be accomplished prior to the start of the convoy.

e. Communications. Radio communications must conform with SOI and COMSEC procedures. For communications within the convoy, hand and arm signals, panels, and markers may be used. All drivers should be thoroughly briefed on the hand and arm signals which will be used.

f. Night Operations. When convoy operations occur at night, the procedures will vary slightly from the procedures used during daylight convoys. A period of adjustment is required for drivers to adapt to night driving conditions (night vision). If the convoy is required to move under blackout conditions, significant changes must be made in the procedures.

- Lower the speed of the vehicles and tighten up the vehicle intervals.
- Use the blackout lights on the vehicles. Each vehicle has marker lights, taillights, front lights, and a driving light. The marker lights do not light up the road, but they do pinpoint the

vehicle's position from up to 230 meters away. They cannot be seen from an altitude of more than 120 meters.

- Ensure that security personnel are alert as the convoy is more vulnerable to attack because of the shorter interval and the rate of march. Further, the driver will be concentrating on the vehicle in front of him and the one to the rear of him and will not be as alert for security purposes.

- Put the windshield down if possible.
- Ensure blackout lights are working.
- Ensure drivers are trained to drive under blackout conditions.

g. Defense. Although medical units displaying the emblem of the Geneva Conventions (red cross) are protected against intentional attack, convoy personnel must be prepared to defend themselves. The best defense is keeping the enemy from knowing where the unit is and where it is going. When traveling, the driver should—

- Keep on the lookout for mines and booby traps. (Watch the local people as they may drive or walk carefully around mines.)

- Drive in the tracks of the vehicle in front.

- Drive on the body of the road and not on the shoulder, in the grass, or over brush or piles of fresh dirt.

- Be alert for ambushes and snipers, and if attacked, clear the kill zone as quickly as possible.

- Be alert for attacks by aircraft.

J-10. Combat Health Support During Convoy Operations

Depending upon the size of the convoy, at least one medical vehicle should be designated for emergency treatment. If the convoy is long and subdivided into serials with gap times of 20 minutes between serials, it may be necessary to designate a treatment vehicle in each serial. The treatment vehicle can be any vehicle that is large enough to carry the trauma treatment MES.

b. Routine sick call is not accomplished during a convoy. Only acute illnesses, traumatic injuries, and wounds are treated. If the illness, injury, or wound is of a serious nature, the patient is treated, stabilized, and evacuated. The preferred means of evacuation is by air ambulance. Coordination for this support is made prior to the start of the convoy operation.

This section implements STANAG 2174.

Section II. ROAD SIGNS

J-11. General

The military police are responsible for MSR. They mark the routes in accordance with FM 19-4 and STANAG 2174. All drivers must be familiar with the signs used.

J-12. Types of Routes

- a. *Main Supply Routes.* There are two types of MSRs—axial and lateral—in a TO.

(1) *Axial main supply routes.* Axial MSRs run to and from the forward edge of the battle area (FEBA) and are identified by odd numbers.

(2) *Lateral main supply routes.* Lateral MSRs run parallel to the FEBA and are identified by even numbers.

b. *Link Routes.* A link route connects a unit or an activity to an MSR. A departing convoy follows the link-route signs to the MSR. The convoy then follows the MSR until guided off the MSR by signs warning the need to exit and again follow link-route signs until arriving at its destination. The part of a traveled route coinciding with an MSR will not have link-route signs.

J-13. Signs

- a. *Main Supply Routes.* The signs used on MSRs are depicted in Table J-3.

b. *Link Routes.* A prescribed format for a link-route sign is not established; however, sometimes showing direction with a white arrow on a black background is enough.

Table J-3. Signs Identifying Military Routes and Locations

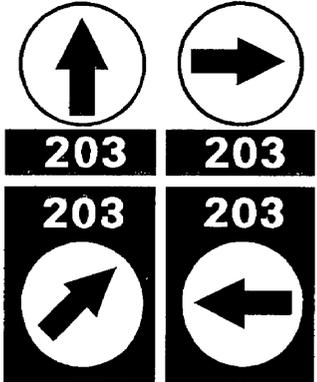
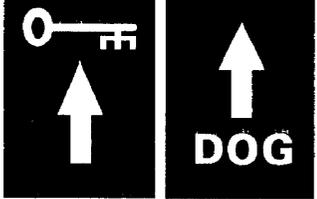
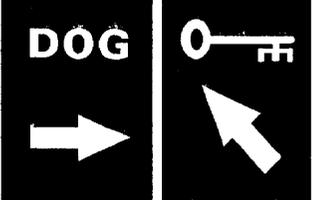
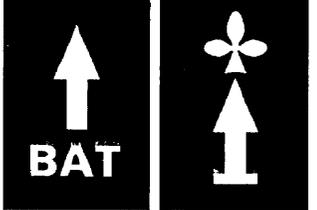
TYPE	EXAMPLES	DESCRIPTION	PURPOSE	PLACEMENT
DIRECTION INDICATOR		WHITE, 30-CENTIMETER DIAMETER DISK WITH BLACK DIRECTIONAL ARROW; ID NUMBER OR NAME IS MOUNTED BELOW DISK. OR WHITE DISK ON BLACK RECTANGULAR BOARD.	INDICATES DIRECTION; IDENTIFIES ROUTE OR NAME.	AT INTERSECTIONS WHERE ROADS MERGE AND WHERE ROUTES SEPARATE.
GUIDE SIGNS SIGNS USED TOGETHER AT IMPORTANT ROAD JUNCTIONS.		RECTANGULAR; SYMBOLS IN WHITE ON BLACK BACKGROUND; INCLUDES DIRECTIONAL ARROW AND ROUTE NUMBER, NAME, AND/OR SYMBOL.	INDICATES LOCATIONS, DISTANCES, DIRECTIONS, ROUTES.	WHERE NEEDED.
WARNING SIGNS SIGNS USED TOGETHER AT IMPORTANT ROAD JUNCTIONS.		SAME AS ABOVE.	SHOWS CORRECT DIRECTION TO TAKE AT ROUTE JUNCTIONS.	A SUFFICIENT DISTANCE (50-100 METERS) BEFORE A JUNCTION TO ALLOW DRIVERS TO MAKE THE TURN SAFELY. ON ROADS WHERE SPEED IS RESTRICTED, SIGNS MAY BE PLACED 25 METERS BEFORE JUNCTION.
CONFIDENCE SIGNS		SAME AS ABOVE.	REASSURES DRIVERS THAT THEY ARE STILL ON THE CORRECT ROUTE. USED IN URBAN AREAS TO ASSURE DRIVERS THAT THEY ARE FOLLOWING THE CORRECT ROUTE. ALSO USED ON LONG STRETCHES OF ROAD WHERE IT IS UNNECESSARY TO USE WARNING AND CONFIRMATION SIGNS FOR A CONSIDERABLE DISTANCE.	WHERE NEEDED.

Table J-3. Signs Identifying Military Routes and Locations (Continued)

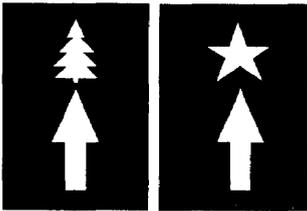
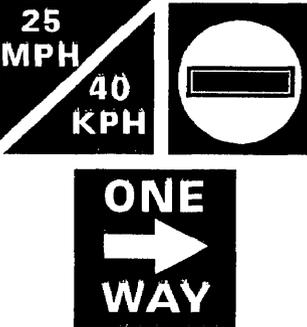
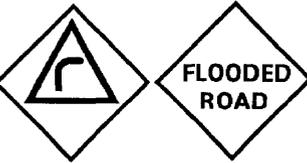
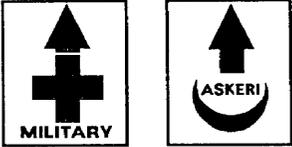
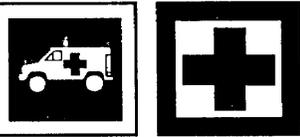
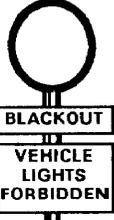
TYPE	EXAMPLES	DESCRIPTION	PURPOSE	PLACEMENT
CONFIRMATION SIGNS		RECTANGULAR; SYMBOLS IN WHITE ON BLACK BACKGROUND; INCLUDES DIRECTIONAL ARROW AND ROUTE NUMBER, NAME, AND/OR SYMBOL.	LETS DRIVERS KNOW THEY ARE ON CORRECT ROUTE AFTER CHANGING DIRECTION.	JUST AFTER TURNS, BUT VISIBLE WHILE MAKING TURN (IF POSSIBLE).
COUNTDOWN SIGNS		MILITARY EQUIVALENT OF CIVILIAN SIGNS LIKE STOP AND YIELD.	WARNS OF SIGNIFICANT LOCATIONS: START POINTS, RELEASE POINTS, BEGINNINGS AND ENDS OF ROUTES, LINK ROUTES, MSR JUNCTIONS, AND BLACKOUT AREAS. ANYTHING REQUIRING A MAJOR CHANGE TO MOVEMENT.	SERIES OF 3 SIGNS AT 100-METER INTERVALS BEFORE THE DESIGNATED LOCATION.
REGULATORY SIGNS		MILITARY EQUIVALENT OF CIVILIAN SIGNS LIKE STOP AND YIELD.	REGULATES AND CONTROLS TRAFFIC ON A ROUTE.	WHERE NEEDED. POSTED BY ENGINEERS AND CONSIDERED PERMANENT.
HAZARD SIGNS		YELLOW, DIAMOND-SHAPED BACKGROUND WITH INFO PRINTED IN BLACK.	INDICATES TRAFFIC HAZARDS: DANGEROUS CORNERS, STEEP HILLS, CROSSROADS. RARELY USED IN COMMZ AS CIVILIAN SIGNS USUALLY SUFFICE; MILITARY SIGNS WILL BE USED IN COMBAT ZONE.	WHERE NEEDED. POSTED BY ENGINEERS AND CONSIDERED PERMANENT.

Table J-3. Signs Identifying Military Routes and Locations (Continued)

TYPE	EXAMPLES	DESCRIPTION	PURPOSE	PLACEMENT
<p>MILITARY CASUALTY EVACUATION ROUTE SIGNS</p>	 <p>TRAFFIC STRAIGHT ON (FOR ALL NATIONS EXCEPT TURKEY)</p> <p>TRAFFIC STRAIGHT ON (FOR ALL TURKISH MEDICAL UNITS)</p>	<p>RECTANGULAR WHITE BACKGROUND WITH RED DIRECTIONAL ARROW, CROSS, OR CRESCENT; WORD MILITARY; UNIT OR SUBUNIT DESIGNATION; AND OTHER INFORMATION LIKE UNIT OR NATIONAL MARKINGS. OR DIRECTIONAL DISK WITH 4 SEGMENTS CUT OUT TO FORM A CROSS, OR DIRECTIONAL DISK WITH A CRESCENT CUT OUT. INCLUDE SAME INFORMATION.</p>	<p>INDICATES EVACUATION ROUTE FOR MILITARY CASUALTIES.</p>	<p>WHERE NEEDED.</p>
<p>CIVILIAN CASUALTY EVACUATION ROUTE SIGNS</p>	 <p>CIVILIAN CASUALTY EVACUATION ROUTE</p> <p>CIVILIAN CASUALTY 5KM</p>	<p>BLUE GENEVA CONVENTIONS INFO SIGN. INCLUDES AMBULANCE IN WHITE WITH RED CROSS OR CRESCENT. INCLUDES WORDS CIVILIAN CASUALTY EVACUATION ROUTE BENEATH SIGN IN HOST NATION LANGUAGE.</p>	<p>INDICATES CIVILIAN CASUALTY EVACUATION ROUTES.</p>	<p>ALONG ROUTES FOR CIVILIAN TRAFFIC. DESIGNATED BY HOST NATION.</p>
<p>BLACKOUT WARNING SIGNS</p>		<p>BASED ON GENEVA CONVENTIONS HAZARD WARNING SIGN. LEGEND AND DISTANCE ON RECTANGULAR PLAQUE BENEATH WARNING SIGN.</p>	<p>INDICATES BEGINNING OF BLACKOUT AREA.</p>	<p>SAME AS WARNING SIGNS.</p>
<p>BLACKOUT ENFORCEMENT SIGNS</p>		<p>GENEVA CONVENTIONS PROHIBITORY SIGN; PLAQUE BENEATH SAYS VEHICLE LIGHTS FORBIDDEN.</p>	<p>INDICATES A BLACKOUT IS IN EFFECT.</p>	<p>EVERY 100 METERS ALONG THE BLACKOUT ROUTE.</p>
<p>BLACKOUT RELAXATION SIGNS</p>		<p>SAME AS BLACKOUT WARNING SIGN.</p>	<p>INDICATES END OF BLACKOUT AREA.</p>	<p>AT THE END OF THE BLACKOUT ROUTE.</p>