

CHAPTER 3

GROUP EQUIPMENT

3001. Group Stores

The group stores are the items that are packed and hauled in the fire team sled. These stores consist of items that are required to operate for a prolonged period in a cold weather environment. The fire team sled should not be used to haul individual gear (that gear is to be carried in the individual pack.) Group stores consist of, but are not limited to:

- a. One ECW (Extreme Cold Weather) tent complete (tent body, fly, poles, and repair kit).
- b. Extra fuel for individual stoves.
- c. One case extra of MREs/RCWs.
- d. Two shovels and pioneer gear as required (hatchet, belay rope, etc.).
- e. Two pair of climbing skins (if skiborne).
- f. One whiskbroom – used for sweeping snow off clothing and tent floor.
- g. One team cook set.
- h. Candles or lantern.
- i. Trash bags – used to collect snow for water production or track camouflage.

3002. Fire Team Sled

The fire team sled is designed to haul all of the necessary equipment required for a 4-man team to operate in a CWE. One man who may wear skis or snowshoes pulls it. In extremely rough terrain, it may be necessary for a second man to assist the primary puller, either by belaying the sled from the rear when going down hill or by hooking an extra line into the tow harness when going uphill. The weight capacity of the sled is 150-200 pounds. Exceeding this weight may cause damage to the sled. Also, overloading the sled makes it very difficult to transport.

- a. **Packing.** There is one simple principle that should be adhered to: keep the center of gravity low, centered, and to the rear half of the sled. This principle will facilitate movement of the sled and help prevent it from tipping over or nose-diving into the snow when being pulled.
- b. **Sled Movement.** There are 4 basic ways to transport your sled.
 - (1) **Towed By Vehicle.** If the assets (BV-206, snowmobile, etc.) are available this is a fairly efficient method of moving your sled.
 - (2) **Carried On A Vehicle.** This is the easiest method of transporting sleds over long distances. The roof of the passenger variant BV-206 can be used to transport sleds.
 - (3) **Carried By Helicopter.** The sleds will be the last things loaded onto the helicopter, and thus the first thing unloaded.
 - (4) **Pulled By the Individual Marine.** This is obviously the most difficult method of moving your sled. It is recommended that the man pulling the sled wear snowshoes, or skis. If the puller does wear skis, then he should also have climbing skins on to facilitate movement. Some general principles must be kept in mind when pulling the sled.
 - (a) Pulling the sled is extremely hard work. Rotate the personnel pulling the sled on a regular basis to prevent exhaustion.

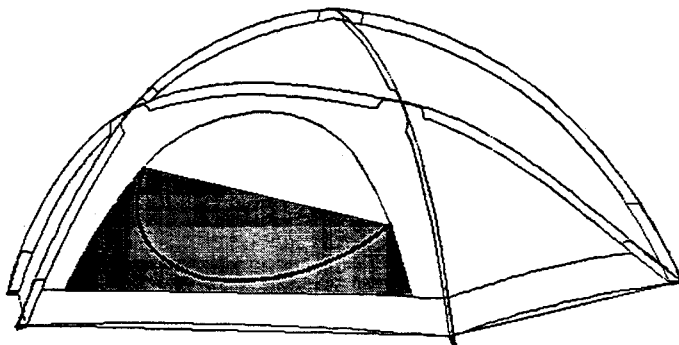
(b) One man from the team should always travel behind the sled to assist as necessary. He can attach a belay line to the sled to slow it down when going downhill, help push it uphill, and upright it if it tips over.

(c) When traversing up or down a slope, a route must be selected to prevent making kick turns. Use large, wide turns instead.

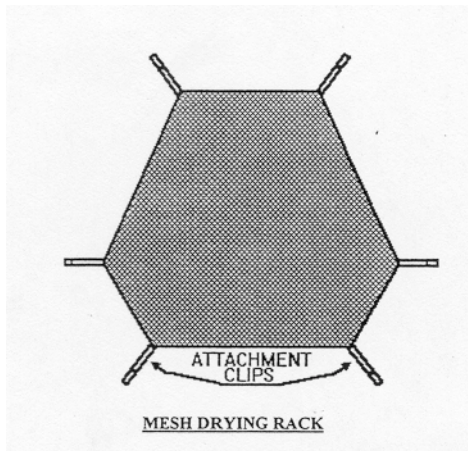
(d) The trail-breaking party should build a snow bridge to span any gaps.

3003. Extreme Cold Weather Tent

The extreme cold weather tent was developed to replace the ten-man tent, and the Norwegian tent sheets. It is lightweight and portable, weighing only 14 lbs. It is a self-standing, dome-shaped, four-season design capable of holding four Marines within its 84 square feet of floor space. The tent body is made of 3 ounce per yard urethane coated taffeta nylon. Inside the top of the tent is a mesh drying rack, and around the bottom are several mesh pockets for commonly used items. The entrance has a mesh panel designed to keep bugs out. Later versions will have two openings spaced around the tent body that facilitates joining tents together for CP's or BAS's. Another modification on later models is a stove hole by the front door that closes with a drawstring. This allows cooking to be done inside the tent during inclement weather without fear of food spills soiling the tent or fire igniting it in case the stove falls over. The tent comes with three different flysheets; a woodland camouflage cover, a desert camouflage cover, and a white cover. These sheets are also made of nylon with a heavier urethane coating. Later models will only come with two flysheets, the desert one having been deleted. The pole configuration used with this tent allows maximum use of floor space. The poles are comprised of nine sections of 7075 aluminum with an overall length of 18 ft. 2 ½ in. The poles are held together by shock cords which aid in connecting them when pitching the tent. Later models of the tent will have slightly shorter poles that are easier to put into the sleeves and reduce bending the poles by forcing them. Each tent comes with an accessory kit containing: 2 pole repair sleeves, 24 aluminum stakes, 12 nylon tie down cords, 12 line tightners, a black foam spacer, and woodland colored repair tape 3" x 36".



EXTERNAL VIEW



a. Pitching the Tent.

- (1) Clear an area and ensure that there is sufficient room for the tent (approximately 12-ft.) by spreading it out on the ground and pulling the floor section tight. Another method is to have one man stand in the center of where the tent is to be pitched and hold a ski pole for a second Marine. The second man will walk in a circle around the first man using the ski pole to measure the radius, thus ensuring that the tent will have enough room. Once the circle is marked, it should be dug down (4-6 ft.) in order to provide camouflage and protection. Depending on the tactical situation, if time is limited, the snow can be packed down to achieve some cover and concealment initially and then improve the position later by building up a surrounding snow wall.
- (2) Insert poles into the sleeves of the tent, six poles for the tent and three poles kept aside for the fly. The poles that form the triangle at the top of the tent should go in first, followed by the poles around the side. There are several grommets in each strap to adjust the tension of the tent. If the tent is too loose, snow and rain can accumulate. When pitching or striking the tent, it is advisable to push rather than pull the poles so that the sections will remain engaged.
- (3) Attach the foam spacer to the snap located on the rear of the tent. The foam spacer is used to prevent the flysheet from coming into contact with the tent, thus keeping water away from the tent.
- (4) The fly is hooked onto the back of the tent and brought over the top, ensuring that the entrances on both are aligned. Insert the remaining poles into the sleeves of the fly and adjust for tension. Pull the front of the fly out away from the tent to attain maximum tension. Inside the fly are two straps that attach to the triangular buckles on each side of the entrance, use these to adjust tension and prevent the fly from blowing away. The fly is a very important part of the tent and tent performance is degraded without it, so it is imperative that the fly not be allowed to blow away.
- (5) Use the tent stakes and guide lines provided to secure the tent. These tents, as with all tentage, are vulnerable to wind damage: therefore, it may be necessary to secure the corners prior to inserting the poles during pitching in high wind conditions. If you are pitching the tent in deep snow, it may be preferable to use 'deadmen' to hold the tent down (tied objects such as tree branches or stones that anchor to attaching points on the tent and are buried underneath snow.) Use all tie down points available depending on wind and tactical conditions. (Tying the tent down in ten different places may not be advisable if enemy attack is imminent.)
- (6) The tent is designed with a light retention material, but is not lightproof. Also, it may be possible to build a snow wall that not only shields light emissions, but also camouflages and protects the tent from the snow as well. In deep snow it is best to dig down into the snow pack and keep a low silhouette. Camouflage with overwhites or netting.

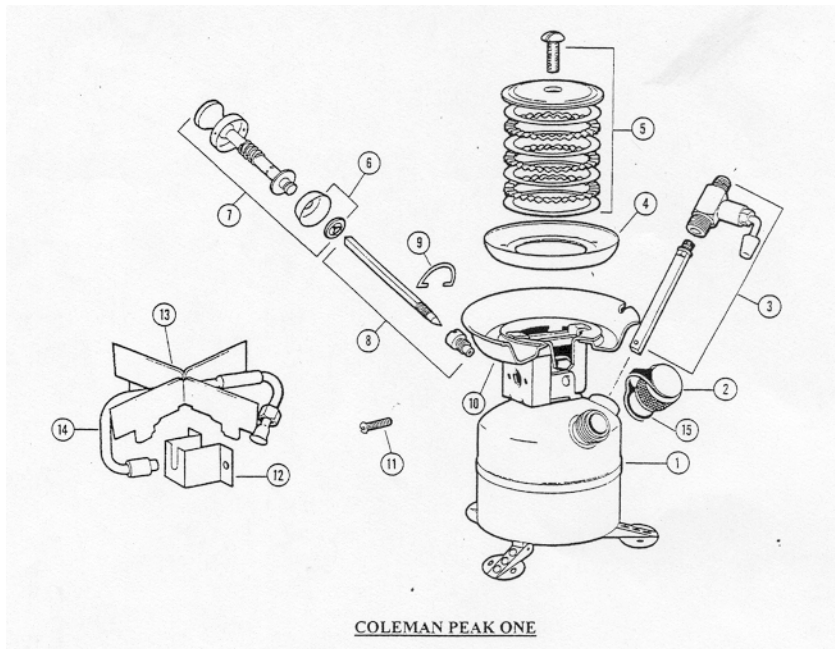
- b. Striking and Packing.** In order to strike the tent; perform the pitching instructions in reverse order. Tent poles have a tendency to freeze and must be stroked at the joints in order to loosen. Also, it is recommended that the tent fly be folded length-ways into thirds for efficient storage. Before placing it in the stuff sacks, roll tightly around the folded tent pole sections, squeezing trapped air out in the process.
- c. Maintenance.** The ECW tent requires very little maintenance. After each use, shake out loose debris. Sponge clean all dust and track marks. If the fabric requires deeper cleaning, hand wash the tent in mild soap and warm water. Air-dry the tent out of direct sunlight. Make sure that the fabric is completely dry. Never store the tent damp, as it will cause mildew and damage to the tent fabric. For the tent poles, apply a thin layer of silicon lubricant to all parts of the poles. This is excellent protection against corrosion, prevents the poles from freezing together when they are very cold, and will make the joints work more smoothly in any weather. To complete waterproofing both the tent floor and flysheet, the seams must be thoroughly sealed. Lubricate the zippers with a silicon spray to keep them running smoothly and to prevent freezing.
- d. Safety Considerations.** A four-man tent team living together for extended periods of time will quickly produce a foul atmosphere within the tent if precautions are not taken. The only way to ventilate the original version of this tent was to open the door slightly; later versions have positive ventilation in the sidewalls. This also prevents condensation from forming inside the tent, as well as from humid air preventing the proper functioning of the drying rack. Great care should be taken when lighting a stove inside the tent because a flare up could be disastrous. The place for cooking or melting snow for water is outside; if weather conditions prohibit this then cooking will be accomplished inside the vestibule. Cooking inside the tent itself can lead to fires or nasty spills on gear and other Marines, potentially resulting in burns. A small stove will heat the inside of a tent very quickly, but it will also consume all of the air in a sealed tent, resulting in asphyxiation. There have been numerous deaths caused by asphyxiation. Also, you should never sleep in the tent while the stove is lit. If at all possible, do all cooking during the day as a light discipline technique.
- e. Carrying the ECW Tent.** The Northface tent is designed to be used by a fire team and will be carried by the fire team to which it is assigned. There are a couple of ways this will be accomplished. The first way is to spread load the tent between all the members of the fire team. The second way is by use of the fire team sled. When using the sled the tent will be placed between the normal fire team stores and the pioneer gear, so that it is readily accessible when it needs to be used.

3004. Peak 1 Stove.

The Coleman Peak 1 is a multi-fuel stove. It can burn white gas or kerosene. To be certain on how to operate this stove it is important to be able to identify the different parts.

a. Nomenclature of the Peak 1 Stove

- (1) The following diagram corresponds to the numbered list:



- | | |
|------------------------------|-------------------------|
| (a) Fount | (I) Clip for pump cap |
| (b) Filler cap | (j) Burner box assembly |
| (c) Valve assembly | (k) Screw (six) |
| (d) Burner bowl | (l) Generator bracket |
| (e) Burner ring set | (m) Grate |
| (f) Pump cup | (n) Generator assembly |
| (g) Pump plunger | (o) Lanyard |
| (h) Air stem and check valve | |

b. Serviceability Check

- (1) Make sure the screw is tightened down on the burner assembly.
- (2) Ensure the grate is not loose, bent or damaged.
- (3) Make sure that the pump cup is not bent and seats well into the fuel tank. Lubrication may be necessary to provide efficient pressure.
- (4) Check all the parts of the pump plunger for cracks.
- (5) Ensure that the filler-cap has a gasket and a tight fit to the fuel tank.
- (6) Ensure that the pump-cap clip is in place to hold the pump assembly stable while pressurizing the fuel tank.
- (7) Check the generator assembly for kinks or fuel leaks.

(8) Ensure the threads of the valve assembly are not damaged and that they fit properly into the fuel tank.

(9) Check the fount for fuel leaks and that the proper, clean fuel is used in the fuel tank.

- c. **Maintenance.** If proper maintenance is not performed periodically, the stove will begin to fall apart and fail to operate properly. Ensure that all parts of the stove are tight. Remove excess carbon buildup by taking a small toothbrush or AP brush and a small amount of fuel and scrub the following areas: burner head, outside area of the burner head, and the entire stove itself due to spilt food. If at all possible, keep the stove inside a pack or wrapped in clothing and out of the extreme cold until use to prevent possible cracking and damage to the plastic and rubber parts.

d. **Lighting**

(1) Ensure the fuel tank has sufficient fuel in it (no more than $\frac{3}{4}$ to allow for pressurization.)

(2) Place the stove on a level surface. **DO NOT TIP THE STOVE.**

(3) Be sure the control knob is in the “off” position.

(4) Open the pump knob one turn counterclockwise.

(5) With the thumb over the hole of the pump knob, pump air into the fuel tank, **DO NOT OVERPRESSURIZE THE FUEL TANK.** If little or no resistance is felt, lubricate or replace the pump cup.

(6) Close pump knob firmly to the right.

(7) Hold a lit match to the burner bowl.

(8) Turn the black control knob counterclockwise to the “HI” position. If a yellow flame or liquid fuel appears in the burner, turn the control knob “OFF” and allow the flame to burn out excess fuel or allow it to evaporate before relighting.

(9) It may be necessary to re-pump the stove occasionally during use for full heat output.

(10) To regulate the heat, turn the control knob between “HI” and “LOW”.

(11) To turn the stove off, turn the control knob fully clockwise to the “OFF” position and the flame will slowly extinguish itself.