

## **US Shelter-Half System & Comparison.** **An inexpensive alternative tool for Cdn Rangers**

By Terrace Patrol 2 I/C Richard Kean (July 3<sup>rd</sup>, 2006)



I often ponder and experiment with shelter systems while thinking ahead to situations where they may be useful to us as Rangers.

In this example we are going to examine the age old and tested US Shelter-Half system.

I believe the use of the word "Shelter" is very well suited here because this certainly is not a 'Pup-Tent' (although it is often referred to as such). To clarify this it is important to understand that this system, by design, only provides shelter from precipitation or to provide shade. There is no utility to keep the bugs out and is fairly limited at keeping out the wind. It is however more adept at providing relief from the inclement weather than a tarp shelter system.

This particular example was purchased on ebay for about CDN \$30.00 shipped, from Missouri USA and included both shelter halves, two three-piece articulated poles, and one length of 3/8" hemp rope. I have since found complete units for sale on ebay and from military surplus retailers between \$10 to \$15 US (not including shipping).

### **Applications:**

Besides being a shelter these are useful for any sort of covering application whether it be to cover your wood pile or use them for hunting blinds, poncho, frost protection and a good inexpensive way to provide the kids with a fort in the back garden.

### **Shelter Description:**

A complete Shelter is made of the following:

1. Two heavy duty O.D. cotton shelter-Half sections with tie down ropes
2. Metal grommets and buttons on edges
3. Each Shelter half or tarp is basically a 5' x 4' square with two 4'x4'x4' triangles, one on each end (approx 25 square feet. including triangle sections)
4. They have a double row of snap closures along at least one edge to attach a second piece making a total tarp area of 10'x 5' (with snap weather flaps at each end).

### **Shelter Description (continued):**

5. Each shelter half can be used as an individual poncho complete with hood hole, or as an equipment cover (ie: PCX250 Paracom Radios).
6. Water repellent. When complete the unit weighs under 6 lbs (both halves together).
7. Complete shelter includes:
  - a. 2 shelter halves
  - b. 2 X 42" wooden poles x 1" dia. Each pole is made of 3 -14" sections with a total of 6 sections or 2 complete poles.
  - c. 6 - tent stakes / pins
  - d. 2 lengths of rope ( 9' long)

**Weight Comparisons** 10'X12' Poly tarp VS One Complete Shelter Half

- ONE 10'X12' Poly Tarp = 2lbs 10oz
- ONE Cotton Shelter-Half = 2 lbs 15oz

3 Piece Pole set = 9 oz	These items do not need to be carried with the Ranger as they can be made as required
4 Tent Pegs = 4 oz	

Weights do not include rope and twine

**DESIGN**

You will note that the US Shelter-Half system is full of snaps along the sides and have rope loops at the corners. These serve different purposes depending on the application you need it for.

***The Single-Half Shelter***



This is an example of the shelter set-up for one person. Note the ends can be moved in or out depending on your size and use.



Rangers should ensure to dig a shallow trench around the edge of the shelter so that rainwater does not seep into your shelter. In rain have the opening of the shelter pointing away from the wind.

Tie your rope horizontally about waist high (or lower). Spread the shelter-half and anchor it to the ground, putting sharpened sticks through the grommets and into the ground (if pegs are not available).

The snaps along the edges of the shelter-half are quite strong and will hold considerable strain. In this set-up I have used the snaps to encompass the rope I am using to support the open face of the shelter.



Simply wrap the shelter around the rope and snap it closed to form a strong bond that will not come loose in the wind or when heavy with rain.



Attach a 4-inch drip stick to the rope about 1-inch along the edge of the shelter opening. These drip sticks will keep rainwater from running down the ropes into the shelter.

Tying strings about 4 inches long to each grommet along the shelter-half's top edge will allow the water to run to and down the line without dripping into the shelter.

You will find it a little tight under the shelter but it will keep you out of the elements. A sustainable fire in front of you should allow you some degree of rest from the elements in relative comfort. Be sure to align your shelter with the wind (gusts coming from your feet or at your head) in order to avoid getting smoked out of your shelter. It is hard to sleep if you cannot breath.



### ***The Double Half Shelter***



You and three fellow Rangers were sent out to man an observation post for the night and will not be able to return to Field HQ until relieved. Like good Rangers you were wearing your 24hr packs and you're prepared for this eventuality so out come the shelter-halves. Piece of Cake!

1. Simply lay the two halves next to one another (snaps facing in).



2. Snap the shelter together.
3. Do not fasten the corners down until both poles are upright and tied down
4. You should be done in 5 minutes or so
5. Imagine having to do this in the dark (its not that hard)

### PROS:

- **No extra resources needed:** A One-piece and Two-piece Shelter can be set-up independent of available resources. For example you could set this system up on a rocky mountain ridge, grassy plain or tundra where there is little to no wood to help set-up a tarp shelter or lean-to.
- **Set-Up:** Shelter is up in five minutes. Easy to set-up in low light conditions so long as you are paying attention and have all of the components. Much faster and easier to set-up than a lean-to or tarp shelter;
- **Tear Down:** Easy to leave no trace that you were there compared to a lean-to;
- **Construction:** Double Stitching is very resilient, material is very strong and difficult to rip unless there is already a tear in the material;
- **Wind:** This Shelter System is preferred to lean-to's and tarp shelters when confronted with high winds or exposure situations;
- **Treated:** This material can be treated with water proofing treatments. You can even melt wax into the material to make its running surface more impermeable to water.
- **Applications:** Can be used for several different applications (Poncho, Hunting Blind, Cover on Observation Posts).
- **Tough:** You can place a fair amount of stress on the shelter to keep it taught and avoid sagging;
- **Quiet:** Due to the nature of the materials and construction this shelter is very quiet compared to polyvinyl tarps;

### CONS:

- **Dry weight vs Wet weight:** The dry weight of shelter-half, poles and rope is 2.5 lbs. When wet the weight increases to 5.0 lbs. If the material was made of a waterproof material this would be beneficial. This is an issue that does not affect the 10'X12' poly tarp;
- **Flammable:** The Cotton material is privy to smoldering burn holes if too close to a fire. Rangers should be wary of cinders in dry hot weather;
- **Water Repellent:** This material is a very tight weave but the material is certainly not waterproof;
- **Unwanted guests:** This Shelter system is not bug or rodent proof but neither is a lean-to or a tarp shelter;
- **No Floor:** You will have to make a field expedient floor to get you off wet ground ( 4 inch compressed carpet of conifer bows) same goes for the lean-to and tarp shelter. When at rest, you lose as much as 80 percent of your body heat to the ground so it is worth your effort to find an insulator.
- **Admin Area:** Cannot make a large admin area with this shelter.
- **Room:**
  - **Single Shelter:** Just enough room for you to be comfortable but little to no room for your gear. You are stuck in the semi-infant cradle position (most people sleep like this anyway).
  - **Double Shelter:** A little crowded with two people – little to no room for equipment or gear.
- **Roof Snaps:** If in driving sideways rain, water could seep through the roof and annoy the heck out of you – that is – is the rain is hitting the open end of the seam. Face your shelter with the roof seam away from the prevailing winds;



**Conclusion:**

If every Ranger in your Patrol had a Shelter-Half of the same design in his or her 24-hour pack you would be very compatible. Sometimes standardizing isn't a bad thing but there are arguments to that statement:

**“Rangers are expected to be self sufficient and not dependent on another person’s gear”.**

If you believe that standardizing shelter systems to a shelter-half will jeopardize a 24-hour pack then don't try it. However as you can see from this paper I do not believe anything has been jeopardized. Armies all over the world have adopted this system, including Canada so why not the Rangers?

**“Why do Rangers often utilize military surplus equipment?”**

Rangers often use military surplus gear because Rangers are only issued about 10% of their kit. The remaining 90% must be obtained at low cost to the Ranger, be field expedient and durable. Military Surplus equipment, when found in good condition, meets this requirement.

The Half-Shelter is a cost effective way to retrofit your Rangers and to standardize your 24-hour kits. You are expected to be able to sustain yourself for a 24-hour period using primitive means and disciplined wit. I believe the shelter-half system falls into this category very effectively.

Buy one and try it out!

**STAY ROOTED!**

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