

OLATHE UNION GUARD

Early War Federal Shelter Tent

Construction Instructions and Specifications



The shelter tent described herein is based on the early war (ca. May, 1862) versions. It is a three-panel, cotton drill shelter referred to in Frederick Gaede's monograph as a Type II-a. I have adopted his nomenclature for consistency and simplicity. See End Notes.

Materials:

- 4 yards of 8 oz cotton drill, natural color, not bleached. JoAnn, Inc. 40" drill is very close. It is usually kept in the "utility" fabric section. Cotton duck (canvas) can be used, but it was in short supply early in the war due to the need for the navy's sails, and rare on this tent type.
- 10 feet of ¼" hemp or Manila line.
- 23 bone or reproduction bone buttons.
- Heavy waxed cotton or linen thread for grommets.
- Medium weight cotton or linen thread for buttonholes - preferably waxed. You can wax your thread by dragging it through paraffin or beeswax.
- Medium weight cotton thread for hems and seams.

Cutting:

Drill:

- Cut two panels 28 ½" wide by 64 ½" long. Leave the selvedge along the long edge of these pieces. It saves making a hem.
- Cut one panel 12" wide by 64 ½" long. You may have one selvedge edge on this center panel.
- Cut 4 reinforcements 4 ¼" square. Make sure that one edge is the selvedge edge. This doesn't have to be exact – the originals weren't.
- Cut 23 scrap pieces about 1" square for button reinforcement//backing.

Hemp Rope:

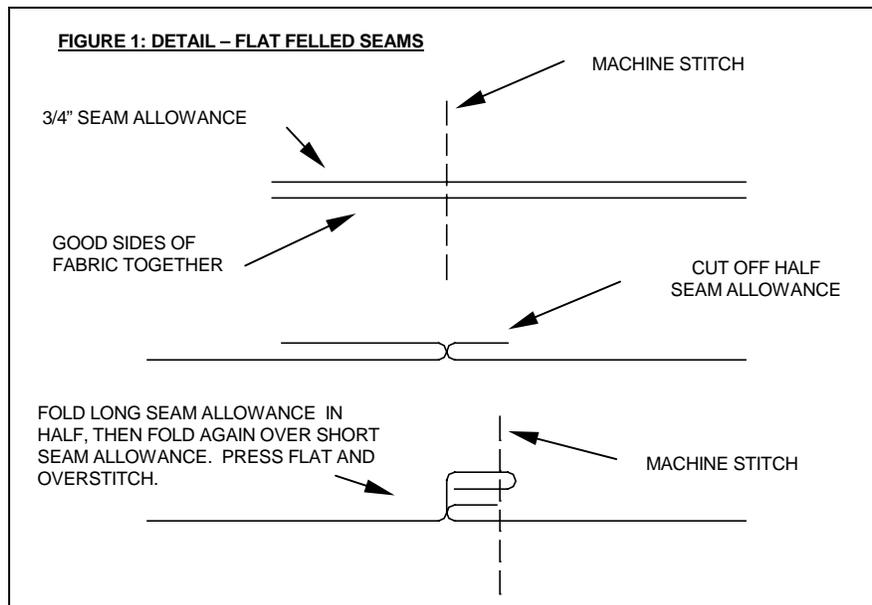
- Cut one piece 6' – 10" long for guy lines.
- Cut 2 pieces about 12" long for tent loops



ASSEMBLY:

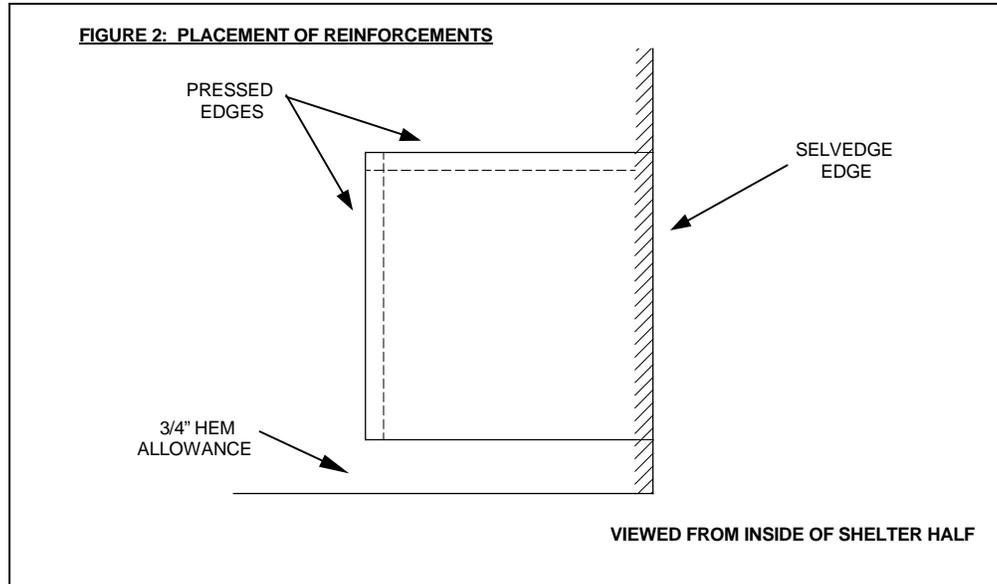
Machine sewing is used (as on the originals) unless otherwise noted. A few were totally hand stitched. If you have the desire to do that, go for it.

1. With the good sides facing each other, align and pin the raw edge of one of the wide panels to the narrow center panel. Using a $\frac{3}{4}$ " seam allowance. (that means sew $\frac{3}{4}$ " from the edge) sew the two panels together
2. Sew the second wide panel to the narrow center panel using the same seam allowance. Make sure that the selvedge edge of the wide panel is to the outside.
3. Flat fell these two seams (Figure 1).
 - a. Press seam open.
 - b. Cut off half of one seam allowance.
 - c. Fold long seam allowance slightly less than in half and press flat.
 - d. Fold long seam allowance over cut seam allowance and press flat.
 - e. Machine overstretch through all 4 layers of fabric.

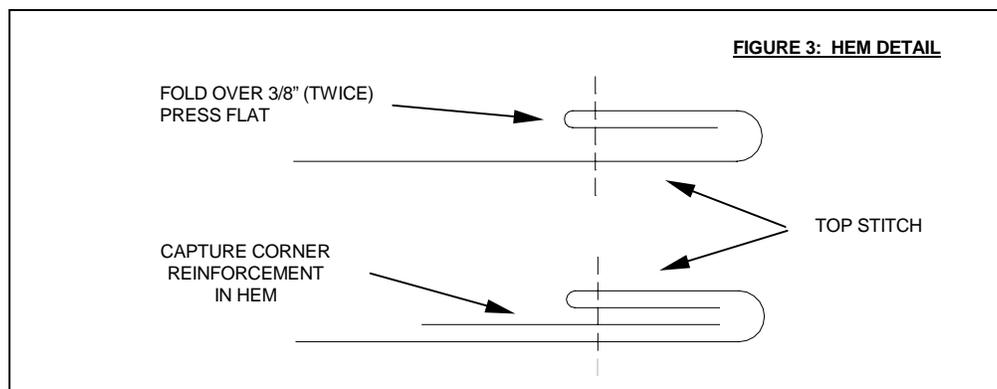


4. Prepare the reinforcement squares.
 - a. With the selvedge edge to your left, press over a $\frac{1}{4}$ " hem on the top and right sides of two (2) squares.
 - b. With the selvedge edge still to your left, press over a $\frac{1}{4}$ " hem on the bottom and right sides of the other two (2) squares.
5. Attach the reinforcement squares (See Figure 2).

- a. Place the selvedge edge of the reinforcement along the selvedge edge of the shelter. Position the raw edge of the reinforcement along the raw edge of the shelter, but $\frac{3}{4}$ " away to allow for the hem to be sewn later. Make sure that the two pressed edges are to the center of the shelter and are turned under.

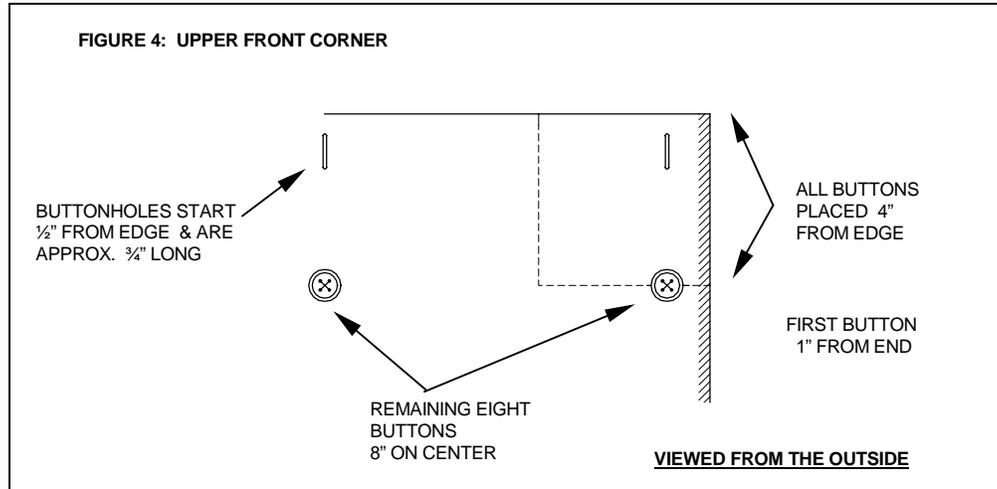


- b. Hand sew the three edges marked “pressed edges” and “selvedge edge.” You can use an overcast stitch, running stitch or back stitch.
6. Hem the ends of the shelter half (See Figure 3).
 - a. Fold the raw edges up $\frac{3}{8}$ " and press flat.
 - b. Fold again, same $\frac{3}{8}$ " and press flat.
 - c. Make sure that the raw edges of the corner reinforcements are captured in the hem. (See Figure 3)
 - d. Machine stitch the hem $\frac{1}{4}$ " from the edge.

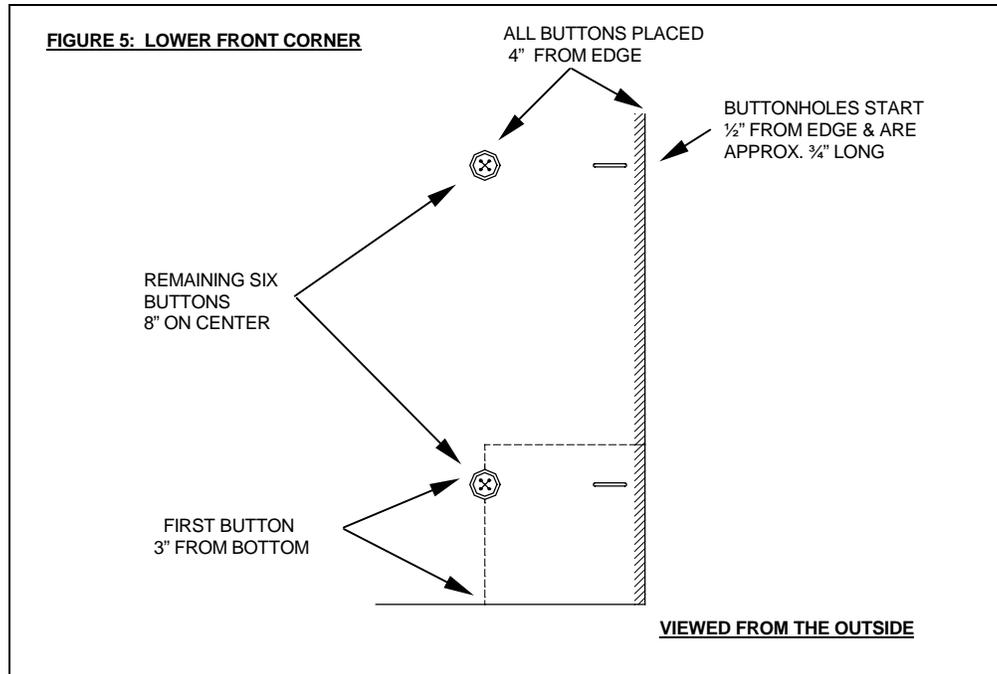


7. Mark locations of buttons.

- a. All buttons are spaced 4" in from the edge of the shelter half.
- b. Along the top edge (ridge line), mark nine (9) button locations. (See Figure 4). The end buttons are 1" from the end of the shelter half. Mark the remaining buttons on 8" centers.



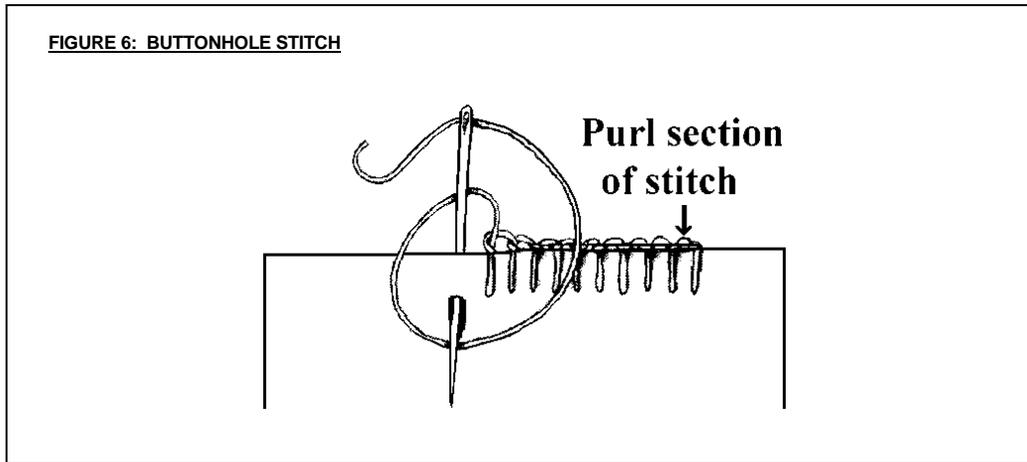
- c. Along the ends, mark the first button 3" from the foot of the shelter half. Mark the remaining 6 buttons on 8" centers. (See Figure 5).



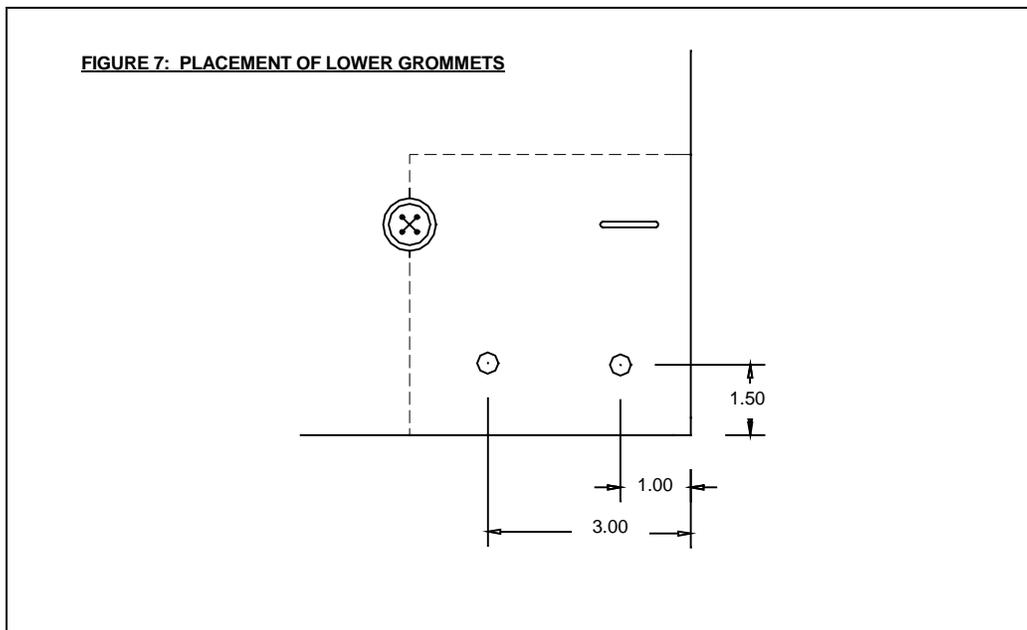
8. Mark the locations of the buttonholes. (See Figures 4 and 5)

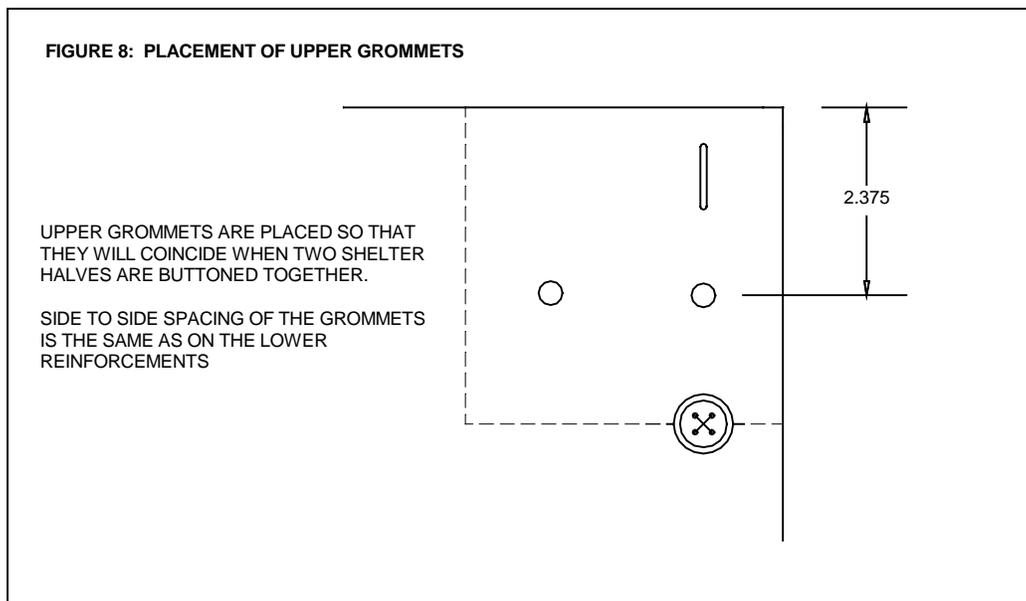
- a. Buttonholes should start $\frac{1}{2}$ " from the edge of the shelter half.

- b. Buttonholes should be approximately $\frac{3}{4}$ " long – but check your button size before cutting.
- 9. Cut the buttonholes with an X-acto knife and hand finish. There are a couple of stitch types, but one of the strongest is shown in Figure 6. Use a moderately heavy, waxed cotton or linen thread. Some buttonholes were done with a simple overcast stitch.



- 10. Locate Grommets for tent loops. See Figures 7 and 8.





11. Hand finish the grommets.

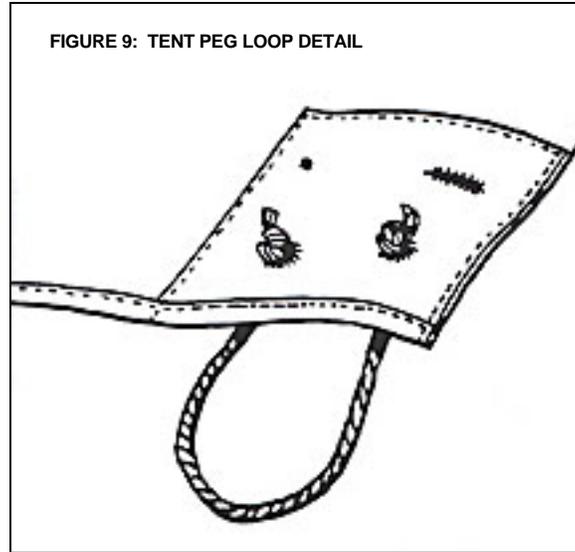
- a. Cut out grommet holes in all four corners. The holes should be cut to approximately $\frac{1}{4}$ " diameter. They will enlarge as they are hand finished. They can be cut by hand, but it is best to use a sharpened tool such as a leather punch.
- b. Hand work all of the grommets with a heavy, waxed cotton twine. Use a simple overcast stitch, no buttonhole or other fancy stitching.

12. Sew on the buttons.

- a. Use a good strong waxed linen or cotton thread.
- b. Place one of the 1" square button reinforcements behind each button.
- c. Attach the buttons using an "X" pattern.

13. Install the tent peg loops.

- a. Tie a simple overhand knot near the end of the 12" hemp rope.
- b. Insert the rope through a grommet from the inside of the tent then back through the other grommet.
- c. Tie another overhand knot.
- d. The loop should like Figure 9 when completed.



14. **STAND BACK AND ADMIRE YOUR WORK** . . . It was worth it, wasn't it?

END NOTES

General Comments:

This type of tent was produced in the Eastern depots from approximately March 1862 through May 1864. It is designated Type II-a in Gaede's monograph. It is characterized by the use of three panels, with the seams running vertically, four corner reinforcements and two tent peg loops. The panels varied in width, but a common configuration was two panels 28 inches wide and one panel ten inches wide. Because of the wide variety of tents, this specification represents a "common use" tent – not necessarily a reproduction of a specific original tent.

Size:

These specifications are for a tent 66" long by 63" wide. This was the *DESIRED* size - within one-half inch - of shelter tents prior the issuance of General Order 60 in December, 1864. G.O. 60 inadvertently changed the size specification due to two typographical errors. The real size of the original tents is difficult to determine exactly because of shrinkage (both before and after issue) and because of the use of many contractors. I chose to specify the tents to 66" rather than 66 ½" so that all types used by our unit would be compatible.

Materials:

These tents were most commonly made from cotton drill, per this specification, due to the scarcity of cotton duck (canvas). The corner reinforcements were also made from drill – with some exceptions. Buttons were bone. Guy lines and tent loops were mostly hemp, although some Manilla (sic) was used. Thread for sewing was waxed cotton or linen.

Reinforcements:

Reinforcements were placed on the inside of the tent at each corner, a total of only four. They were approximately 4" x 4" in size - although by no means uniform.

Grommets:

Eight grommets were made in each tent, two in each corner reinforcement. The grommets in the top of the tent were placed so that the holes would coincide when two halves were buttoned together. The outermost grommet hole was approximately one inch from the end of the tent. Innermost grommets varied somewhat. Some grommets were more like slits than circles, in order to accommodate tent poles.

Buttons:

Each shelter half has twenty-three bone buttons, arranged as follows:

Along the top (ridge line) of the shelter half, nine buttons. The line of buttons is four inches from the top. The first button is placed one inch from

the end, and subsequent buttons at eight inch intervals, placing the 9th button one inch from the other end.

Both ends of the tent have the same seven button configuration. As on the top, the buttons are set in four inches from the edge. The first button is placed three inches from the bottom, and the remaining six were at eight inch intervals.

Buttonholes:

The buttonholes were set in line with the buttons, with the edge of the buttonhole approximately one-half inch from the edge of the fabric. Buttonholes were about three-fourths inch long.

Construction:

Almost all tents of this vintage have machine sewn long seams and hems. The selvedge edges of the fabric were used to reduce manufacturing labor wherever possible. The only seams in the body were for joining the three panels. The only hems were at the top (ridge pole edge) and the bottom (tent peg loop edge.) The reinforcements, grommets and buttonholes were hand sewn. Buttons were sewed using an "X" pattern in the stitching.

Other Notes:

I specified a flat-felled seam for joining the panels. The originals often used an interlocked seam, or simply joined the selvedge edges. However, the interlocked seam is more complex to execute. After sewing, it is virtually impossible to tell the difference between the two methods. We can't always join selvedge edges since modern fabric is much wider than 1860's material

Both hemp and Manilla (sic) line were used with shelter halves, but it appears that hemp was accepted and the most common prior to the revised specifications of 1864. Therefore, this specification uses hemp line.

I cannot verify the spacing of the grommet holes in the corner reinforcements. However, based on the buttonhole and button spacing, the grommets in the upper corners must be placed at the specified dimension in order for the grommets to match when the halves are buttoned together. The grommets may have been closer together than the 2.0" specified, but the outside grommet always appeared to be about 1" from the edge.

A valuable reference for this "how-to" specification was: "The Federal Civil War Shelter Tent," Frederick C. Gaede, O'Donnell Publications, 7217 Popkins Farm Road, Alexandria Virginia 22306. I highly recommend this monograph to anyone wishing to do further research.

Jack Cox
Olathe Union Guard
9 July, 2001



FIGURE 10: Detailed Dimensions

