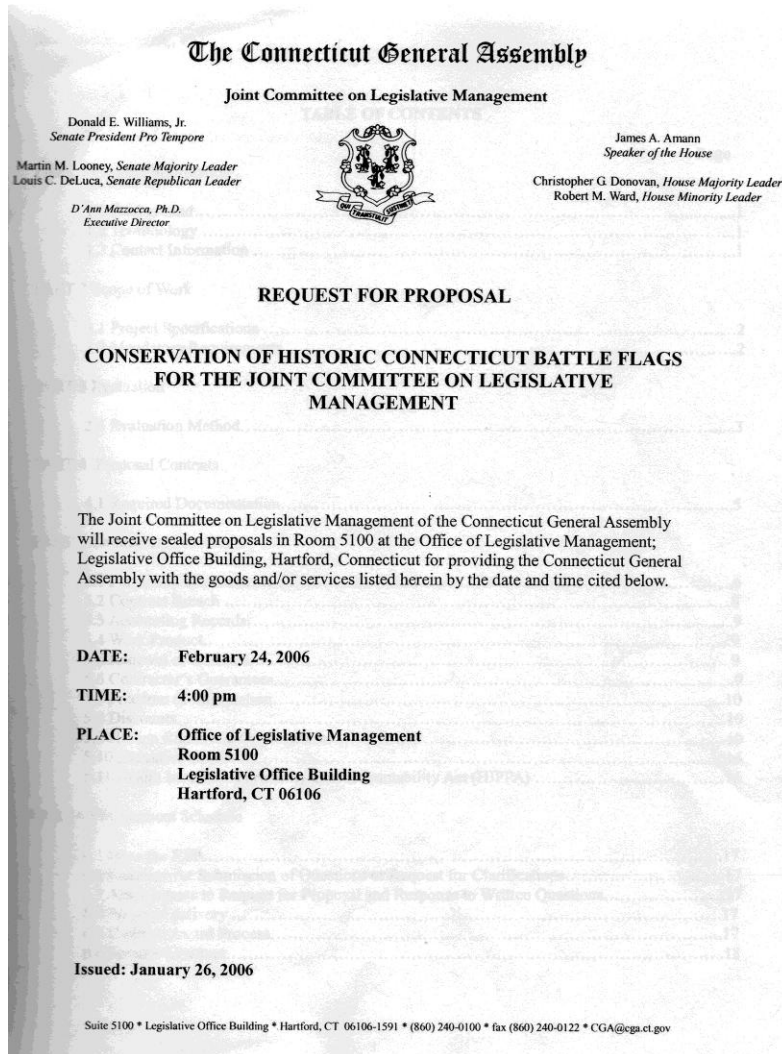
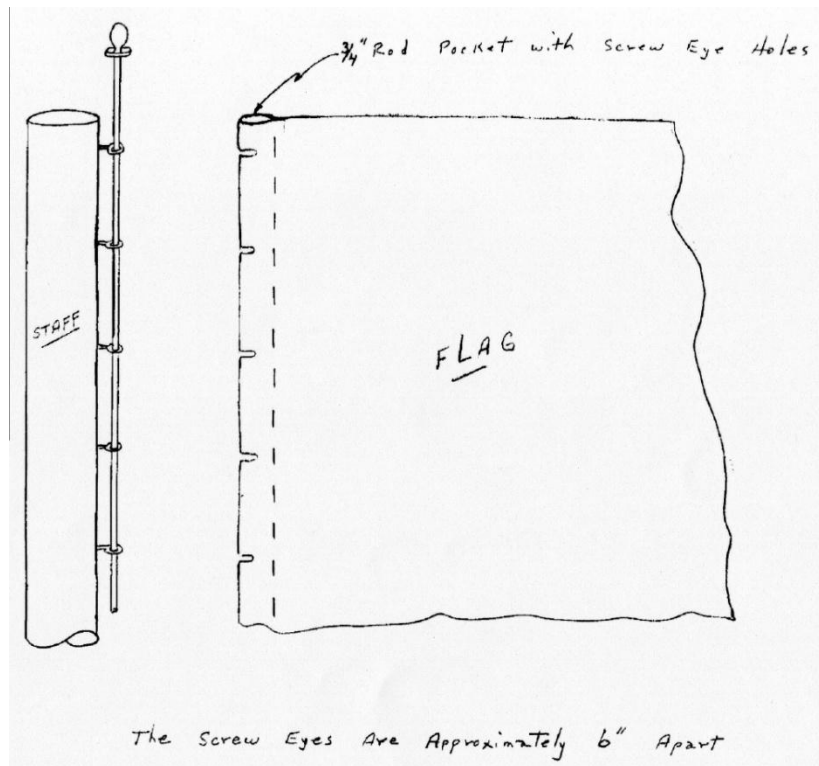


# The Connecticut State Battle Flag Project: an Exercise in Compromise

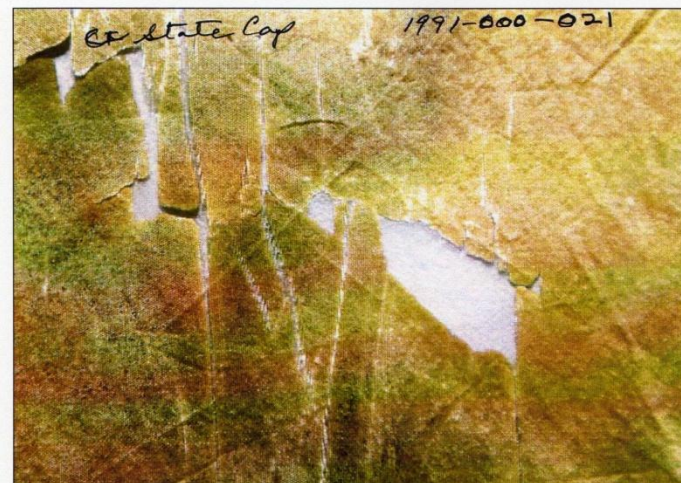


by Cara Jordan

**Conservation Assistant  
Museum Textile Services**



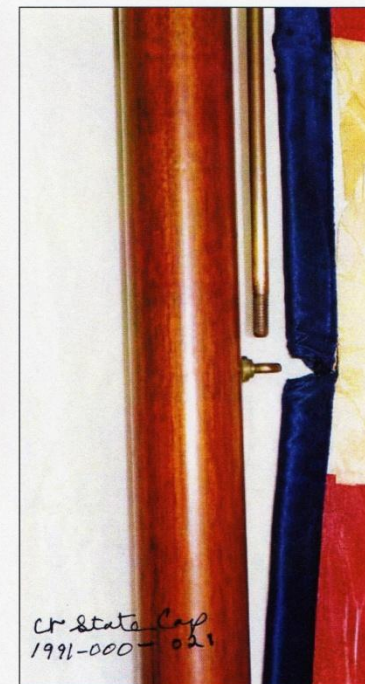
This flag conservation project stipulated that the flags must be hung again on their flag poles, regardless of their condition.



Enlargement of a small part of the white silk.

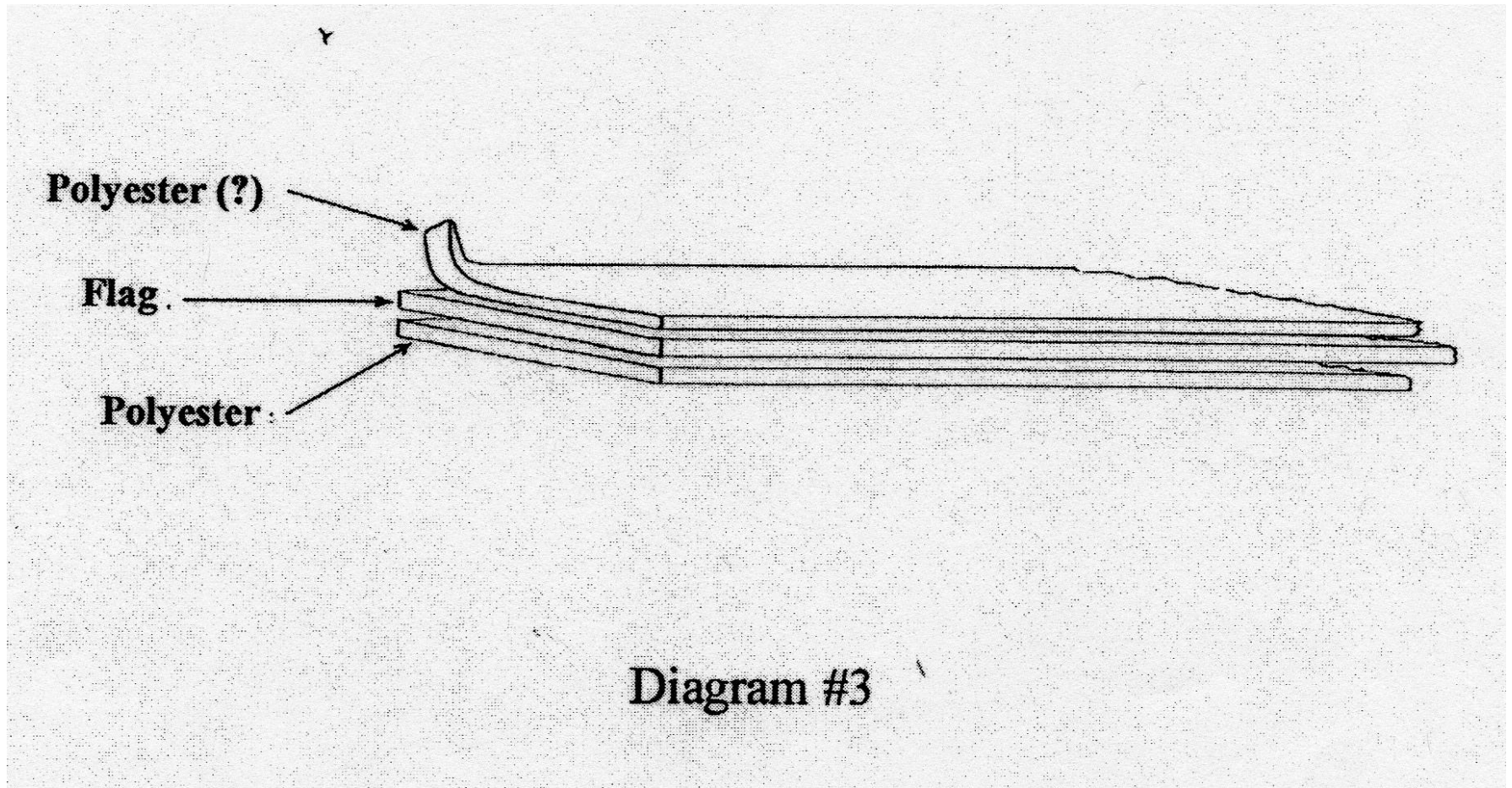


Above: Spontaneous fracturing of the silk.



Right: Mounting arrangement.





We were provided with this simple diagram of how they expected this conservation miracle to be accomplished.





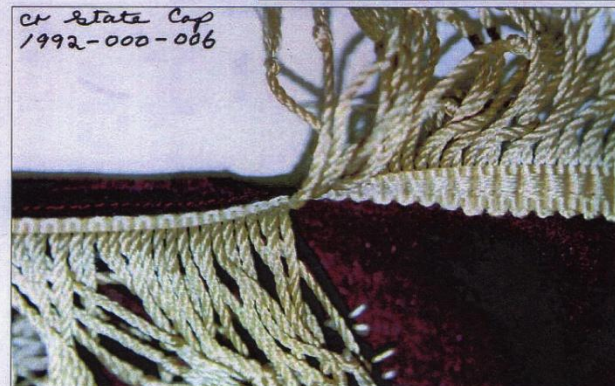
2

The flag of the 118<sup>th</sup> CT Medical Regiment.



Bottom of sleeve

Liner of sleeve.  
If a new liner is made, re-  
turn the old liner to the  
Capitol. It has the date the  
flag was issued and other  
historic information.



The fringe is sewn to the  
top side of the flag—not  
sandwiched between two  
bindings.

3



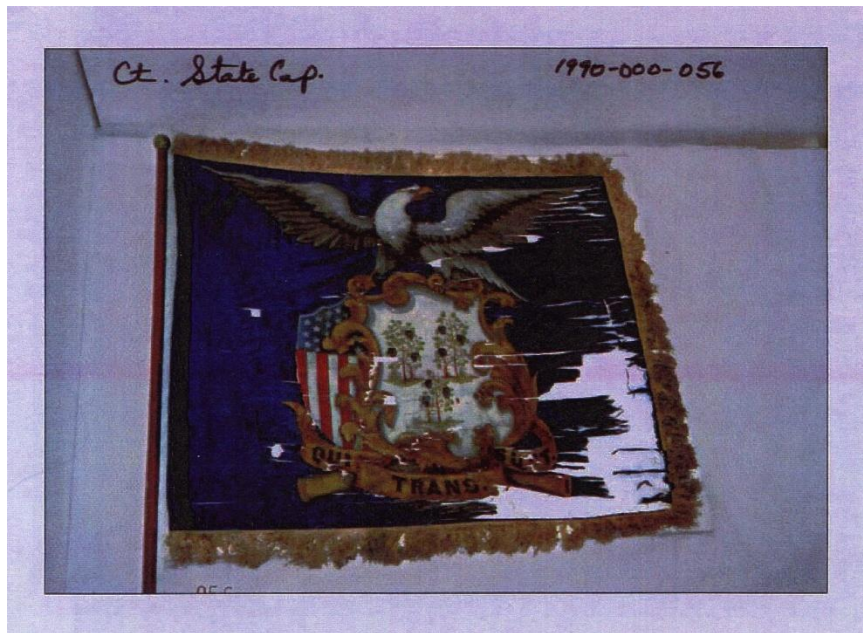
**Information Specific To The Flag of the 1<sup>st</sup> Battalion, Connecticut Volunteer Cavalry**  
**In Addition To The General Specifications**

This cavalry flag is split in more places than are evident in the pictures. Some of the blue silk is soiled with dirt from an unknown source.

Since it is a painted flag, which measures approximately 36" x 40" (not including the fringe), silk crepline can be used on both sides. Do not fill in the missing areas with an opaque fabric. The sleeve must be re-formed so that a card measuring 1¾" wide will slide in easily.

Both sides of the flag must be easily visible to the viewer.

Since Beva and Lascaux have been used for relining paintings, either adhesive might be a good choice for this application.



The Flag of the 1<sup>st</sup> Battalion CT Volunteers.

VISUAL FLAG SURVEY

DATE October 2, 1990

CONNECTICUT STATE CAPITOL

NAME OF FLAG/OBJECT: First Regt. Conn. Vol. Cavalry, State Regimental Flag, (Civil War)

ACCESSION NUMBER 1990-000-056-A

LOCATION ON ABOVE DATE: Conn. State Capitol, Room 4½. Detached from its staff and stored in a wood crate with its staff

MATERIAL AND SIZE: Blue silk - Hoist: 36", fly: 40"

PAINTED OR EMBROIDERED: The painted central device is the Connecticut pattern of a split shield and eagle, but scaled proportionately to the smaller flag

CORD AND TASSELS: None

ACCESSION NUMBER N/A

FRINGE DESCRIPTION: ¾" gold - Cotton blend - Good condition, but powdering in some places

FINIAL DESCRIPTION: None, but there is a wooden, gold-painted, 1½" ball, with a slot in the top, in place of the finial

ACCESSION NUMBER N/A

STAFF DESCRIPTION One-piece pine, painted red - 54" long - Bottom three inches whittled down to fit a holder of some kind - Sleeve mount

ACCESSION NUMBER 1990-000-056-B

REVERSE SIDE OF FLAG: Mirror image with exception of the scroll which has the unit designation instead of the State Motto

ON INVENTORY OF 1879? Unknown ARSENAL TAG? None, but 1941 label reads: "Civil War 1861-1865, 1st Conn. Cavalry"

CONSERVATION HISTORY: UConn Ca. 1985 - See Survey Report #1.5 R.C., dated 3-4-87

APPEARANCE OF FLAG: This flag had a sleeve when it was new, but all of the stitching had come undone and the flag was tacked to the staff in five places. The blue silk is dirty and fragile, and about 1/10 is missing from the bottom fly corner.



1. The flags must be conserved in such a manner that, at the option of the CGA, they can be returned to their staffs and placed in the cabinets in the Hall of Flags. The staffs will be in a vertical position and the flags will be draped as the public is accustomed to viewing flags.
2. The flags must be conserved in such a manner that the finished product is strong enough to be removed from the cabinets in the Hall of Flags and used in a rotating display in other locations at the option of the CGA.
3. The flags will be supported (sandwiched) between two pieces of sheer fabric, one of which must be woven polyester such as chiffon, organdy, or voile. The other fabric can be tulle, Stabiltex, or another similar product. (Attachment E, Diagram #3.) The weight of the material must be of the finest available in order to protect the aesthetic appearance of the flag. The material must also be fine enough to allow researchers to view the reverse side of the flag.
4. The support material must be extended to the full-length of the flag when it was originally issued. This will give the public a picture of how badly the flag was damaged in battle.
5. The support material against the reverse side (bottom) must be positioned diagonally to the flag. (Attachment E, Diagram #4.) This will help to keep the flag from stretching when hanging on its staff.
6. The sleeve of the flag must be opened and laid out flat in order to facilitate supporting the material for the entire length of both sides of the flag before reforming the sleeve, thereby giving the sleeve area full support. (Attachment E, Diagram #1 and #3.) Reforming the sleeve will be the last step in the conservation process. The CGA will provide the size of the sleeve to the conservator.
7. The fringe must be removed which will allow the silk fabric to relax so that the warp and weft can be aligned and puckers removed. The Contractor must decide whether to encase the fringe in support material after the conservator views the flag.
8. Since thread is especially vulnerable to breaking, the weight of the thread must be adequate to support the materials, but soft enough so as not to abrade the material.
9. An additional 3-inch polyester band must be placed against the full length of the top edge of the flag on the reverse side, which will give support to the area of the most stress when the flag is returned to the cabinets in the Hall of Flags. (Attachment E, Diagram #2.) This band can be a separate piece of material, or a hem made from the support material.
10. All decisions on adhesives will be made in conference with representatives of the CGA. The flags will likely need both stitching and adhesives.
11. The decision whether to dry clean (vacuum only), or to wet clean the flag must be made after the conservator examines the flag. The acidity of the silk, stability of the dyes and the potential for shrinkage must be considered before making a final decision. The conservator could choose to simply sponge the flag rather than to do a complete immersion.

12. The three layers of fabric (polyester-flag- polyester) must be held together by hand stitching through the three layers throughout the flag. A simple running stitch is acceptable. The vertical lines of stitching which start at the top hoist corner of the canton must be kept one half to one inch apart at the apex, depending on the number of rows the stitches needed to support the flag.

13. The rows of stitches are to fan out from the top hoist corner of the flag to the bottom fly corner. The curved horizontal lines of stitches are to complete the pattern. For extra strength, a backstitch must be taken at the intersection of vertical and horizontal lines. A backstitch will also be taken every twelve inches in any row of stitching that does not intersect with another. (These backstitches will protect the rows of stitching should any thread break in the future.)

14. The exact pattern of stitches can be at the option of the conservator, but some vertical lines of stitching must be made on the true bias of the fabric. This will preclude stretching while hanging from the staff.

15. Enough stitching through the three layers must be done to keep the support fabric flat against the original silk. Loose fabric cannot support the silk on full-size flags if the flags are raised to a vertical position. A box-pattern of 1 or 2 inches in size is suggested.

16. The CGA are aware that conservators would prefer to stitch as little as possible, however, in the CGA's experience, more damage has been done by too little stitching than by too much stitching. (Attachment E, Diagram #2 and #3.)

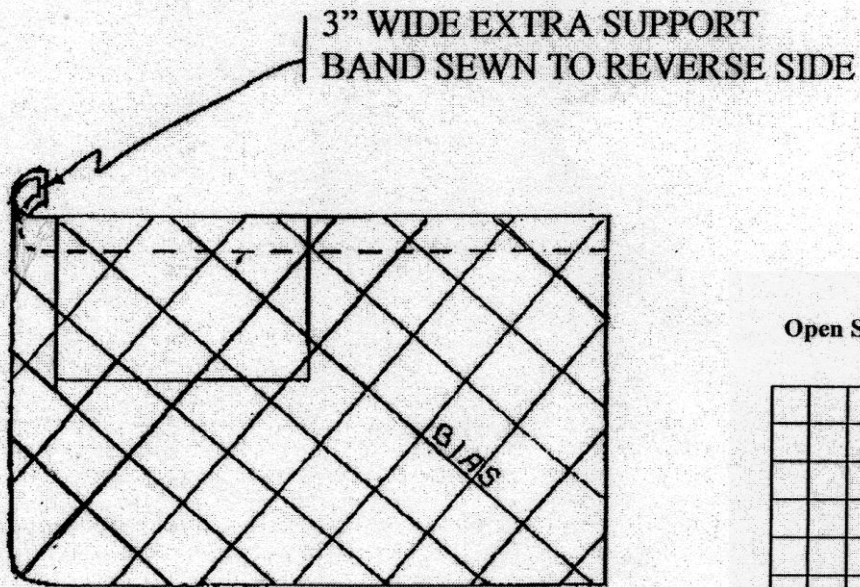
17. The fringe must be reattached to the flag before the sleeve is reformed. When the stitching is finished, the sleeve must be reformed to fit the staff it belongs to. The size is provided for in the "Special Instructions" for each flag. For those flags that use a sleeve mount, add 1 inch extra to the circumference of the sleeve pocket for ease. For those flags, which have a rod and screw eye arrangement, a diagram is attached. This is the Tiffany mounting arrangement. (Attachment E)

18. The CGA will accept the responsibility for mounting the flags on their staffs; however, the conservator will sew a doubled, six-inch, twill tape or grosgrain ribbon to the top of the sleeve. (Attachment E, Diagram #5 for the proper position.) The ribbon will protrude 1/4" above the top of the sleeve and will extend 4 1/4" into the sleeve.

19. Submitting historic documentation is not necessary because it would be redundant. The State Library, the State Museum and the State Capitol have copious materials on Connecticut flags and military history. Pictures are not necessary because the collection has been surveyed, documented and photographed within the last fifteen years.

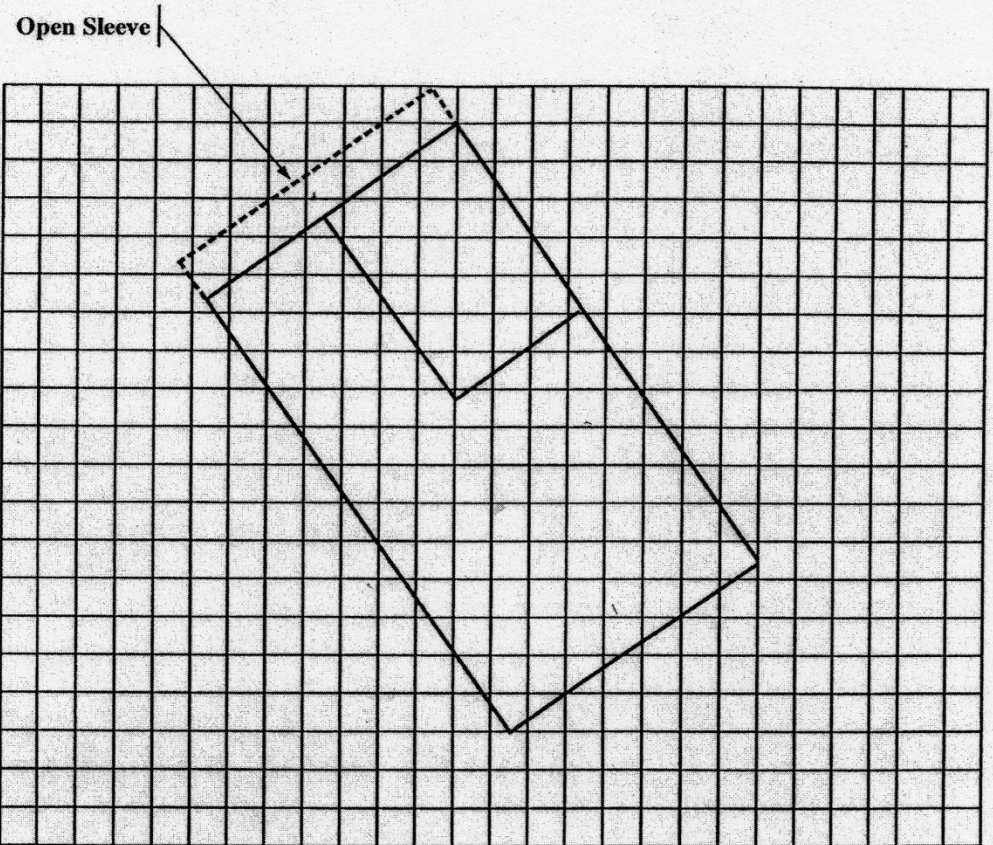
20. The conservator will not be asked to treat peripheral items such as staffs and finials. (c) Please refer to the detailed description of the individual flags contained in this Request for Proposal (Attachment F).

## Instructions provided by the Connecticut General Assembly.



**Diagram #2**

The support fabric was to be placed on the bias in order to provide optimal support while the flag hangs.

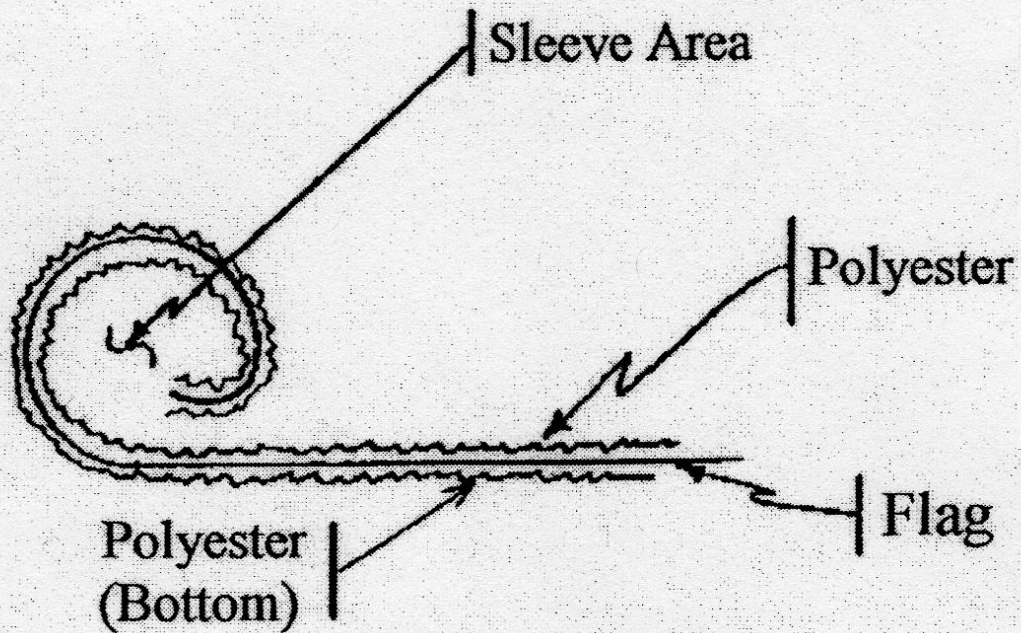


**Diagram #4**

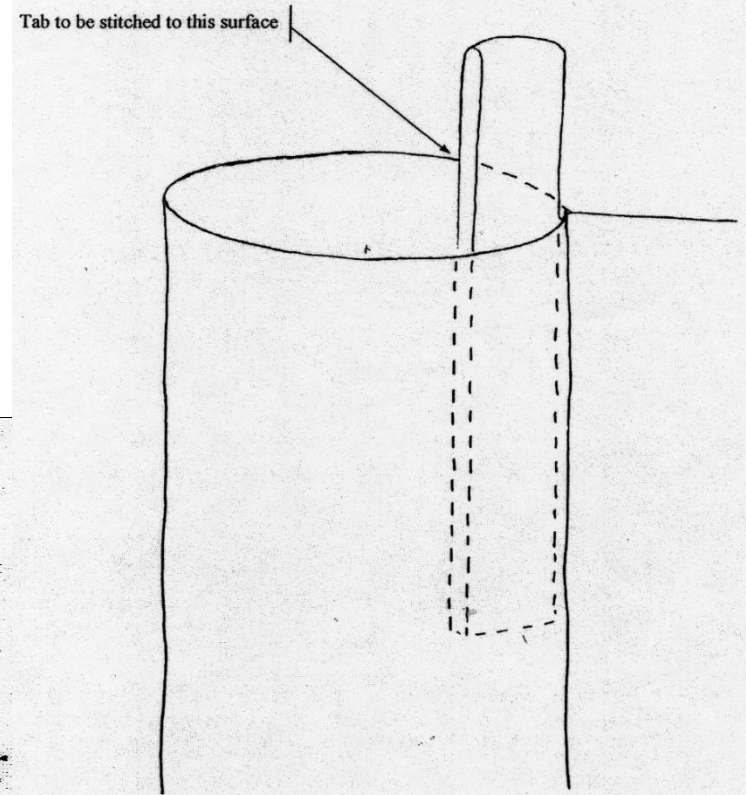


Diagram for making a sleeve to attach the flag to the flag pole.

Armed with all of this information, we started examining the flags.



**Diagram #1**



**Diagram #5**



## 118th Medical Regiment flag, c. 1938



The fly end of the flag had been folded, glued and stapled.



The staples were removed.





The fringe was carefully separated and all scraps of silk were retained.





The flag and fringe were finally separated.





The fly end was humidified to allow the folds to be opened.





The flag was gently unfolded.





The line of adhesive was reduced with acetone.

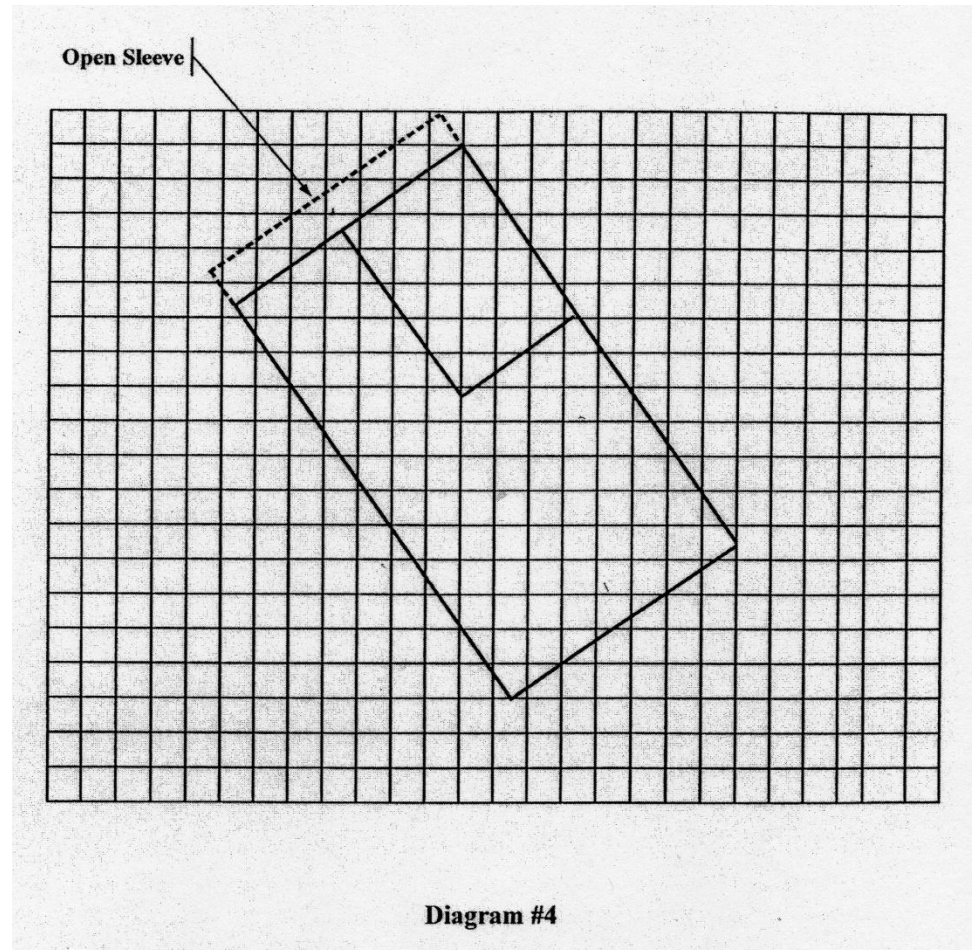




# Choosing support fabric

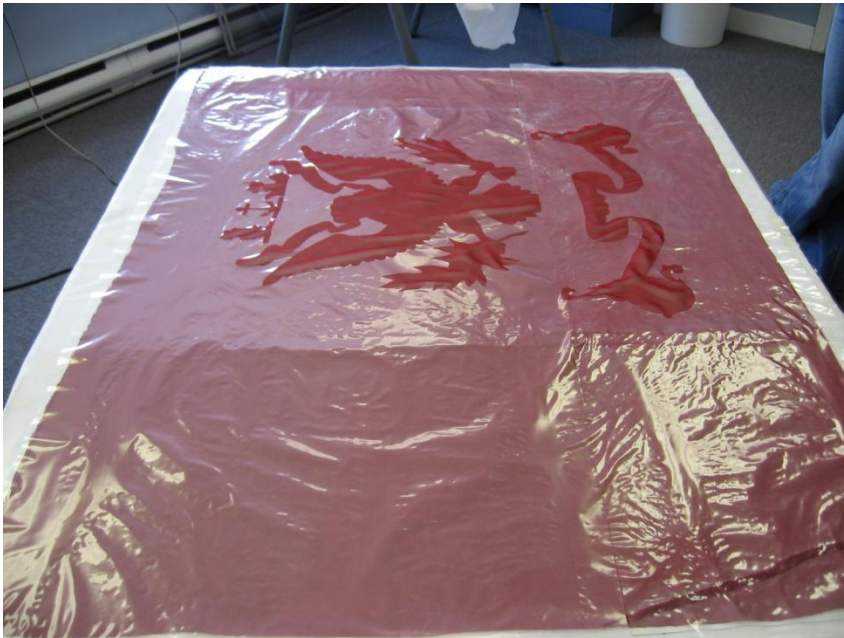


A burgundy polyester sheer was chosen as the support fabric.





The “underlay” was adhered to a sheet of BEVA adhesive film, which was voided where the flag is embroidered.



The underlay was then placed on the back side of the flag.



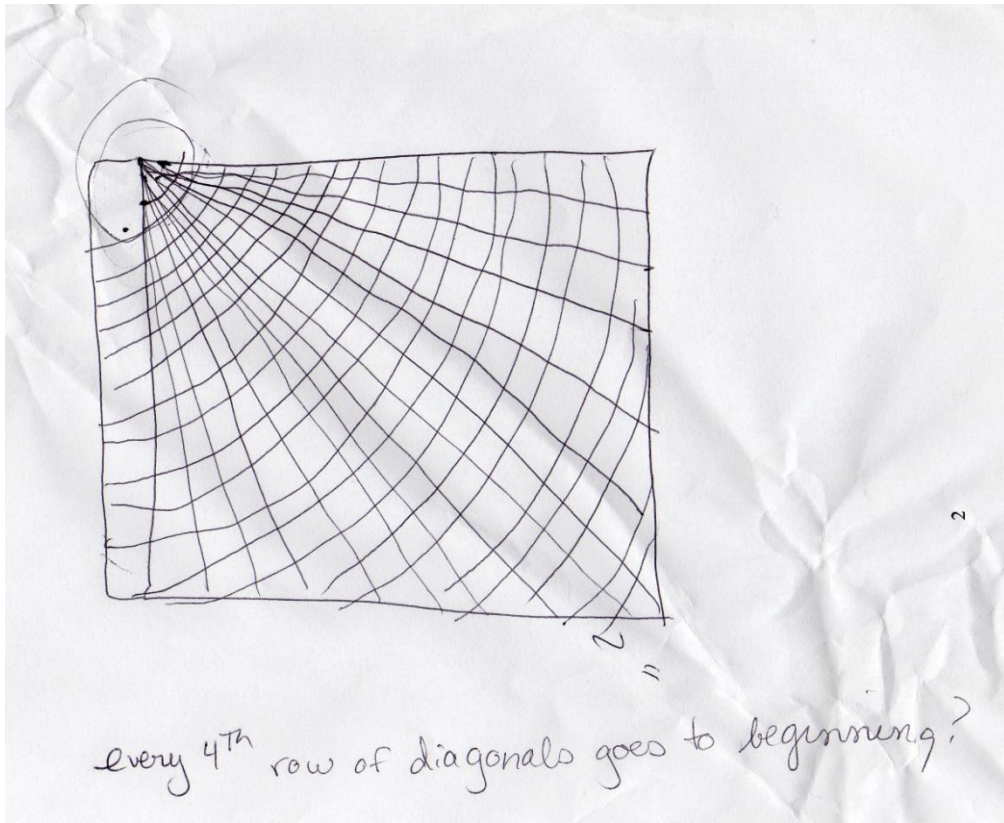
The underlay was heat set from the front of the flag.  
Scraps of silk were inserted in their correct location.



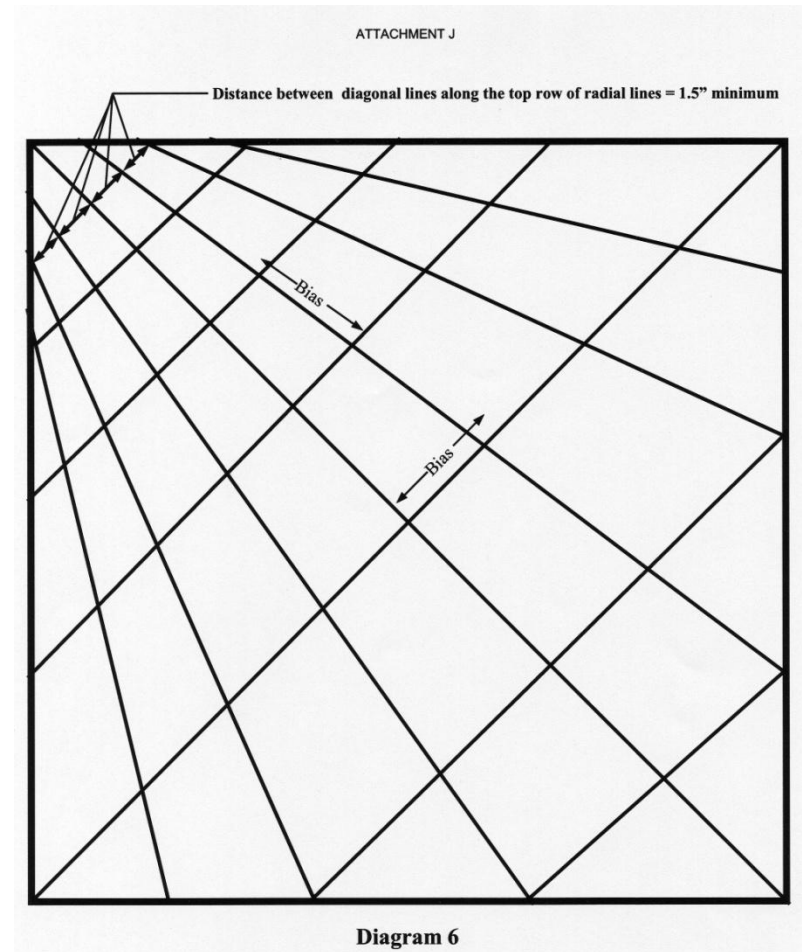


An “overlay” of bronze polyester sheer was placed over the adhered flag.





Rows of hand stitching were placed radiating out from the top corner.





The hoist end of the flag was attached to a new cotton sleeve.





Before conservation



After conservation



## 1st Battalion Volunteer Cavalry Civil War Flag



The silk was splitting in one direction and chunks of painted silk were falling out.





The fringe was removed and the chunks of painted silk were transferred to a diagram of the flag to retain their original location.



A blue polyester sheer was cut on the bias for the underlay. It was attached using BEVA adhesive film in the same way as the red flag.





Loose fragments were relocated and heat set into place.



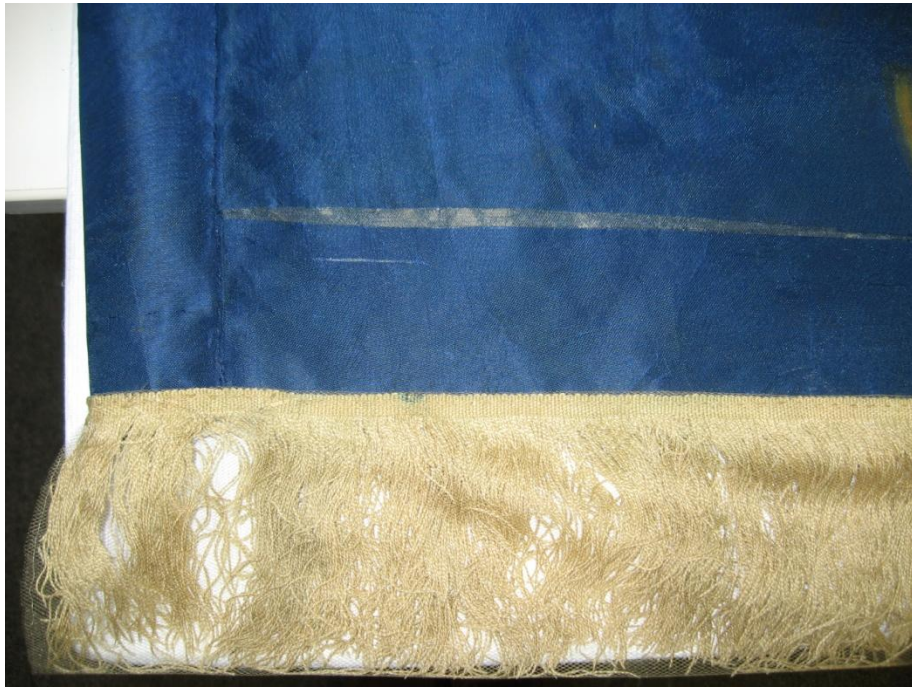
A new sleeve of polyester fabric was constructed and the flag was hand stitched to the sleeve.





The sheer overlay was hand stitched in place and the fringe was reattached.





Because the fringe was extremely weak, it was first encapsulated in sheer nylon net.

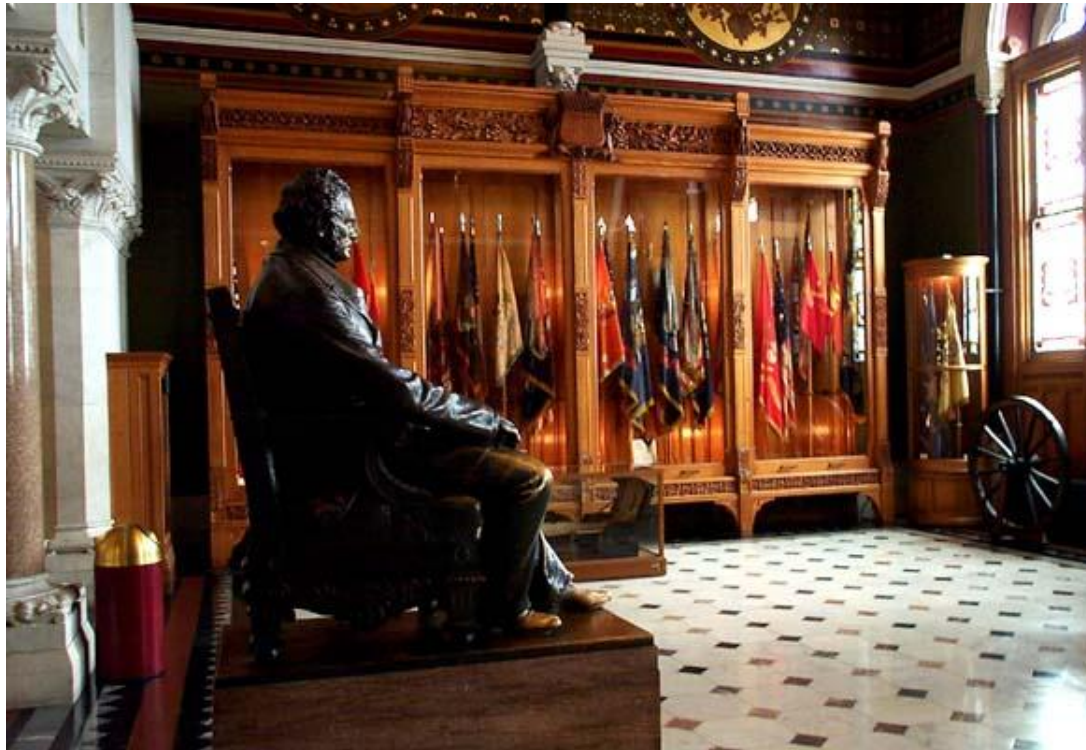






Testing the flags to see how they would hang on their poles.

The flags are now on rotational display in the Hall of Flags at the Connecticut State House in Hartford, CT.



Thanks to our project team: Camille Breeze, Cara Jordan, Angela Pacheco, Mary Walter, Shane Clarke, Gerry Caughman, Eric Connery.