

Textile Preservation Associates, Inc.

P.O. BOX 606 • SHARPSBURG, MARYLAND 21782 • PHONE (301) 432-4160 FAX (301) 432-8797

TREATMENT REPORT

Date January 5, 1999

TPA No. 916

Object Mansfield-Pleasant Hill Conf. battle flag

Catalog No M-26-80

Client Texas State Archives
1201 Brazos Street
Austin, TX 78711-2927

Contact Christopher LaPlante
Phone (512) 463-5467 FAX (512) 463-5436

REPORT OF EXAMINATION

Object submitted for examination.

DOCUMENTATION

6 Kodachrome 25, 35mm color slides were taken before and after treatment.
Analysis: See attached report.

Description

Size Leading edge 72 1/2" Fly 74 1/2"

The flag is constructed of silk in the pattern of a Taylor battle flag with a 17 1/2" wide red cross inserted between four blue quadrants. Each quadrant is made up of two layers of blue ribbed silk while the red cross consists of one layer of salmon colored ribbed silk. The cross is overlapped in the center forming a double layer of silk in the center only. Thirteen white silk stars are appliquéd to each side of the cross. The stars in the arms measure 11 1/2" point to point but the central star measures 15". Embroidered on the upper quadrant in a slight arc is "MANSFIELD" in 1 1/4" Roman lettering. Beneath this in a straight line is "APRIL 8TH 1864" in 1" Roman lettering. Embroidered on the bottom quadrant in a slight arc is "PLEASANT - HILL" in 1 1/4" Roman lettering. Beneath this in a straight line is

" APRIL 9TH 1864 " in 1" Roman lettering. All of the embroidery is sewn with a white silk thread except for "MANSFIELD" which is sewn with a gold metallic thread. On the reverse side, the top, bottom and fly edges are trimmed with a 7/8" gold colored metallic tape that extends beyond the silk. On the obverse side, a 1/4" gimp has been sewn over the silk edge. Combined with the gold tape that extends from the reverse, it forms a decorative pattern. There is a 2" pole sleeve lined with cotton on the leading edge for attachment. The pole sleeve and lettering produce a more finished look on the reverse side of the flag.

CONDITION

Previous Treatment

The cross was sandwiched between two layers of pink netting. Pieces of white cotton were inserted between the netting in the corners where the flag fabric was missing to allow attachment to the metallic tape. The entire cross was machine stitched with a double-locked zigzag in rows 1/2" apart. The quadrants were covered with blue netting on the reverse side only then stitched with rows of running stitches 1" apart.

The netting and stitches on the quadrants was documented and removed by Panhandle Plains in February 1980. Most of the stitching on the cross was removed but the netting remained in place.

Present Condition

The blue silk of the quadrants is relatively strong. The hoist quadrant has a 10" cut through both layers and several additional small tears. The top quadrant has one 5" and one 8" cut through both layers. The fly quadrant is intact with minor abraded areas at the fly edge. The bottom quadrant has one 8" cut and small tears down the center and along the bottom edge. The cotton lining in the pole sleeve is intact but there is only a 14" section of blue silk on the bottom of the reverse side remaining. The cross fabric is degraded and fragmented with some loss throughout. There are 2" to 5" sections at each corner missing. The red silk of the cross is badly faded. The cross has broken away from the quadrants in many areas. The star fabric is severely degraded with much loss. The two bottom hoist stars on the reverse have only seams remaining. All fabrics have damage and distortion from the previous treatment with a series of holes from the previous treatment. The 7/8" metallic tape is intact although detached along most of the top and bottom edges. The 1/4" gimp is intact on the fly end but has only 22" on the top and 14" on the bottom corners remaining. The embroidery is intact.

REPORT OF TREATMENT

Documentation

1. The flag, as received, was photographed on both sides (see photos 1-2).
2. The netting remaining on the cross from the previous treatment was removed by cutting each stitch, working under 10x magnification, then removing the thread fragments.
3. The fibers, fabrics, and sewing threads were analyzed. Information about the construction of the flag, and any evidence of alterations to the original was noted. Scale drawings were made of the flag and an analysis report was prepared. Particle samples were taken for the files.

Stabilization

4. To relax the fabrics and remove distortions caused by the previous treatment, the flag was humidified by light misting with distilled water. When relaxed, the fabrics were flattened and dried under glass weights. Separated pieces were returned to their original location.
5. The cross was sandwiched between two layers of Cherry red Stabiltex¹, a multifilament polyester crepeline. The layers were attached by sewing through the voids. Fragments were aligned and sewn around their perimeter to hold them in place. Care was taken to eliminate sewing through the fabric where possible, but in large areas with no damage, the fabrics were secured with random rows of vertical running stitch through all three layers. Sewing was carried out with thread pulled from the Stabiltex. The Stabiltex was cut away from over the stars on the obverse side. The stars were covered with yellow Stabiltex and the Stabiltex fixed in place with running stitches. The flag was photographed on both sides after the encapsulation was complete (see photos 3-4).

Preparation for Exhibition

6. A buffered, acid-free panel² was prepared then covered with nonwoven polyester batting³ and a previously washed, unbleached, airwing grade, fine cotton fabric⁴.
7. The flag was attached to the padded panel with one row of stitching across the top using a 3 ply Z silk thread of appropriate color. The flag was photographed on the panel (see photo 5).
8. Ultra-violet filtering Lexan SG-100⁵ was laid over the flag, applying a light

pressure to the fabric. The entire unit was placed in a large aluminum frame (painted a Light Chestnut Metallic #35080) with an aluminum back.

9.A final photo was taken and a treatment report prepared (see photo 6).

PROGNOSIS

The object should be exhibited under less than five foot-candles of light. Because any light is damaging, it is recommended that the piece be rotated between exhibit and storage, or covered with a dense cloth when not being viewed. Maximum effort should be made to reduce the total exposure to light. Care should be taken to avoid aiming lights directly on the case, which can cause a "greenhouse" effect, or heat build up within the unit.

To best preserve the object, the temperature and humidity level should be kept fairly constant, with temperatures of less than 70 degrees Fahrenheit and a relative humidity of 45% plus or minus 5%. Avoid hanging the object against an outside wall, or place spacers between the wall and the frame to prevent humidity transfer.

If this object is ever stored, it can be placed flat or vertical. We recommend storage in the frame, since it is part of the conservation treatment and will provide a more stable environment.

HANGING THE FRAME

There are two metal tabs along the top of the frame for hooking onto a screw or bolt. A phillips head screwdriver may be used for opening the frame if it is ever necessary. A bottle of touch up paint that incorporates a brush is also included.

CARE OF THE LEXAN

The lexan is soft and may scratch so care must be taken during handling. Lexan should not be cleaned with ammonia based window cleaners. Either lexan cleaner should be purchased, or water with a drop of liquid dishwasher detergent can be used along with very soft rags (diapers or gauze). If paper towels are used they should be extremely soft.

Total treatment hours: 155

Signed: Fonda Ghiardi Thomsen Date: 1/5/99

Fonda Ghiardi Thomsen, Fellow AIC,
Director, Textile Preservation Associates, Inc.

Work on the object was carried out by Cathy Heffner, Conservation Technician, Textile Preservation Associates, Inc. under the supervision of Fonda G. Thomsen, Conservator.

Reference list of materials used in the conservation of this object.

1. Stabiltex, a sheer, multifilament, plain weave, polyester: Talas, 568 Broadway, New York, NY 10012 (212) 219-0770.

2. Corrugated Board, buffered, acid free: Holinger Corporation, P.O. Box 8360, Fredricksburg, VA 22404 (800) 634-0491.

3. Batting: "Jasztex" a thermo bonded polyester batting: Museum Services Corporation, 1107 East Cliff Road, Burnsville, MN 55337.

"Poly-fil Traditional Batting" a non-woven, needle punched batting: Fairfield Processing Corporation, 88 Rose Hill Avenue, Danbury, CT. 06810.

4. Cotton, a 100% airwing grade fabric: Fox Reich Textiles, Inc., 54 Danbury Road, Suite 228, Ridgefield, CN 06877 (914) 533-2445.

5. Lexan SG-100: made by General Electric Company, 812 Moorefield Drive, Suite 121, Richmond, VA 23236, (804) 323-4880.

TPA # 916

Mansfield - Pleasant Hill Confederate Battle Flag

REVERSE

Drawing #3

Cof # M-26-80

Scale: 1" = 10" 0 2 1/2 5 7 1/2 10 = inches

SELVAGE EDGES

← 74 1/2 →

SE - Both layers blue

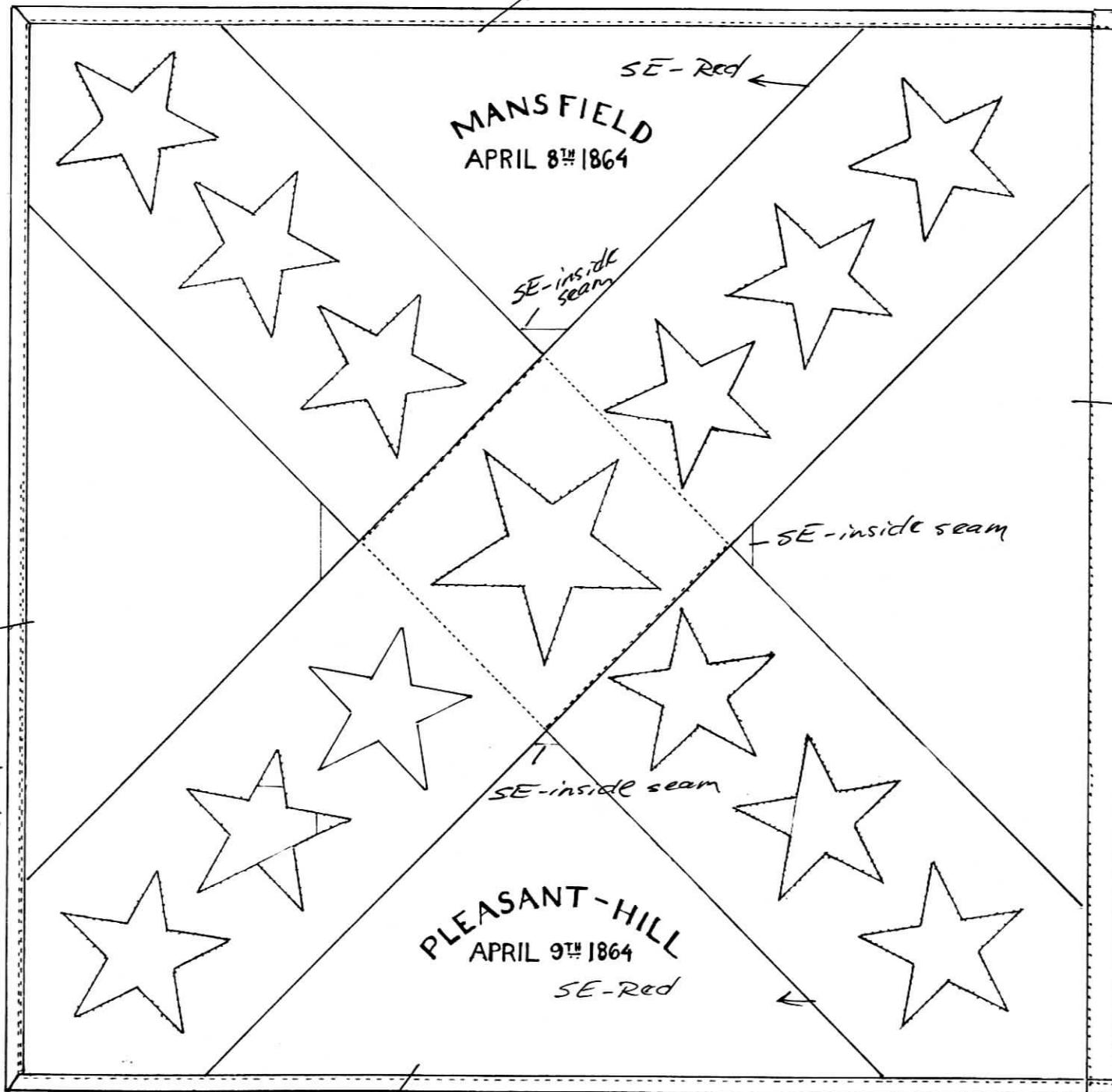
- Center Star - 15"
- Stars - 11 1/2"
- Cross - 17 1/2"
- Gimp - 1/4"
- Metallic - 7/8" trim

Loom width:
Approx. 22"

↑
72 1/2"
↓

SE Both layers
blue

BOTH RED & BLUE
Have 8 white threads
1/8" from edge



SE - Both layers blue

→ SE
3 layers blue

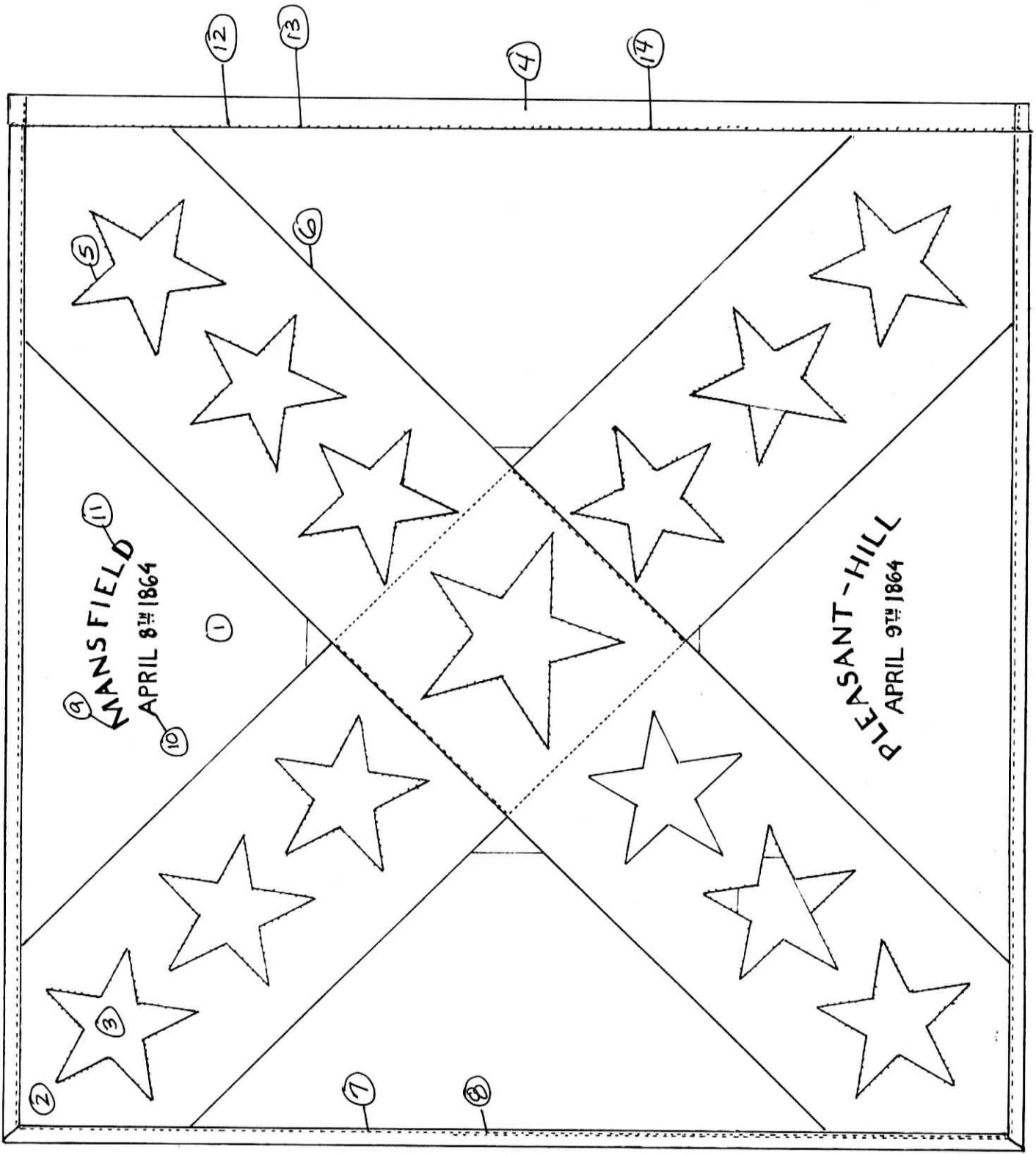
TPH # 916
 Cot # M-26-80

Mansfield - Pleasant Hill Confederate Battle Flag

REVERSE

Drawing # 4
 SAMPLING

Scale: 1" = 10"
 ← 7 1/2" →



- Center Star - 15"
- Stars - 1 1/2"
- Cross - 17 1/2"
- Gimp - 1/4"
- Metallic trim - 7/8"

↑ 7 1/2" ↓

TPA # 916

Mansfield - Pleasant Hill Confederate Battle Flag

REVERSE

Drawing # 7
CONDITION

Cot # M-26-80

Scale: 1" = 10"

0 2 1/2 5 7 1/2 10 = inches

← 74 1/2 →

Center Star - 15"

Stars - 11 1/2"

Cross - 17 1/2"

Gimp - 1/4"

Metallic - 7/8"
trim

↑
72 1/2"
↓

Damage to stars
through white
silk only



— Cotton lining intact
Blue silk missing
on pole sleeve

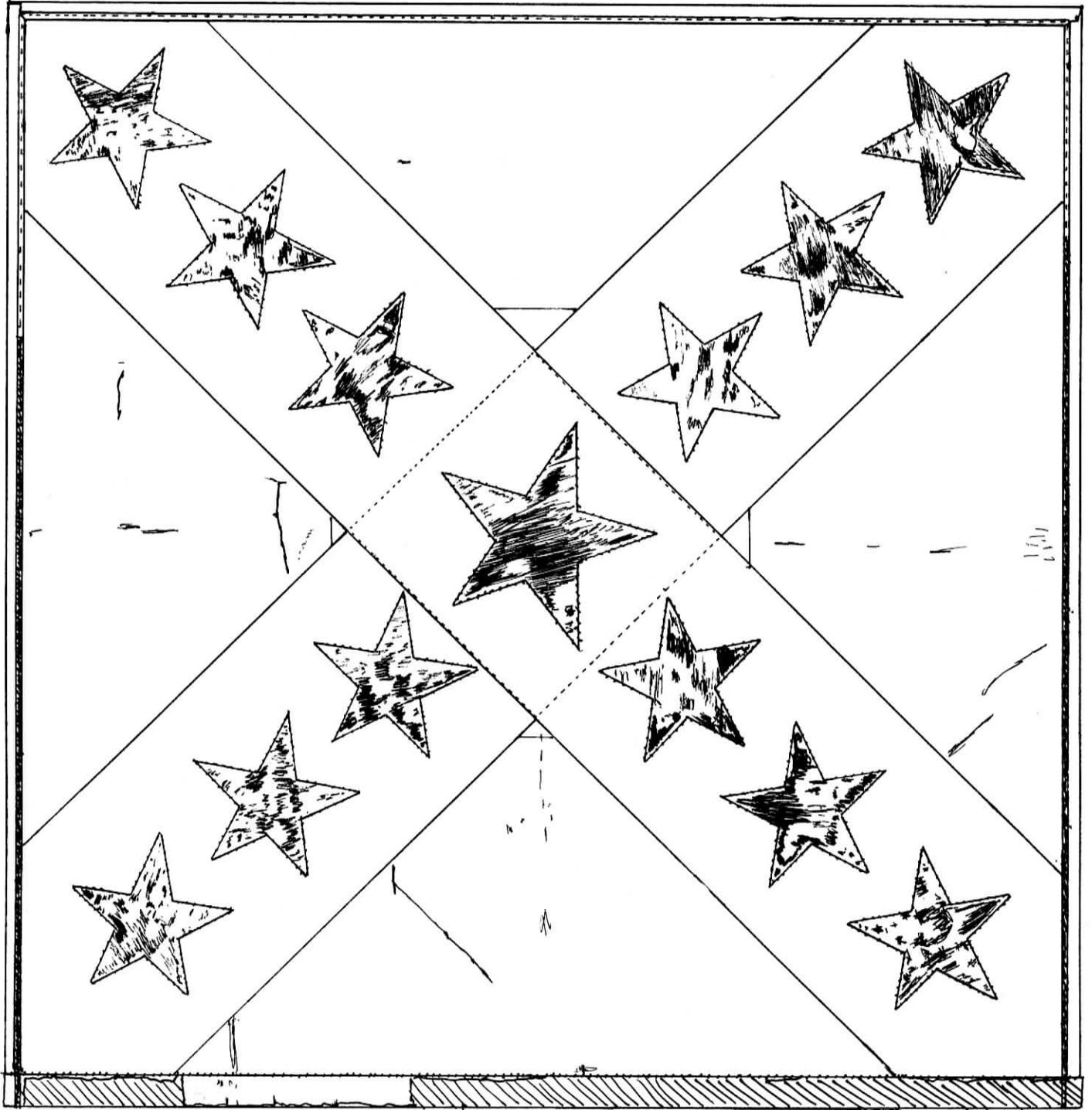
Drawing # 8
CONDITION

OBVERSE

TPA # 916 Mansfield - Pleasant Hill Confederate Battle Flag

Cat. # M-26-80 Scale: 1" = 10" 0 2 1/2 5 7 1/2 10 = inches

← 74 1/2" →



↑ 72 1/2" ↓

Blue silk
missing
Cotton
lining
intact

Analysis Technical Information

TPA No. 0916.....

Date of Analysis: December 11, 1998.....

Catalogue No.: M-26-80.....

Client Name: Texas State Archives.....

Unit Designation: Mansfield-Pleasant Hill Confederate Battle..... Provenance:

Pattern: Taylor's Battle Flag..... Status: Full Analysis.....

Configuration: Standard..... Conclusion: Civil War.....

Manufacturer:

Date of Piece: Civil War.....

UV Light: No fluorescence of any materials was observed.....

Sampling:

Fabric Samples:

Sample Number:	Location:	Color:	Weave Pattern:	Fiber Type:	Ply/Twist:	Thread Count per inch:	Weave:
1. Quadrant		Blue	Warp/Weft	Silk/Silk	1ply0/1ply0	176/120	1/1 Ribbed Twill
2. Cross		Red	Warp/Weft	Silk/Silk	1ply0/1ply0	176/120	1/1 Ribbed Twill
3. Star		White	Vert./Horiz.	Silk/Silk	1ply0/1ply0	136/112	Satin
4. Pole Sleeve Lining		Tan	Vert./Horiz.	Cotton/Cotton	1plyZ/1plyS	48/72	1/2 Twill.

Loom Width: Unable to determine.....

Selvage Pattern:

Both red and blue silks have 8 white threads woven into the selvage
1/8" from the edge.....

Dye Analysis:

Analysis Technical Information

Thread Samples:

Sample Number:	Location:	Color:	Fiber:	Ply /Twist:	Method of Stitching:	Stitches per inch:
5.	Stars	White	Cotton	3 ply S	Whip Stitch, Hand	13
6.	Quadrant to cross	Blue	Silk	2 ply S	Running Stitch Hand	9
7.	Gimp to fly	Gold	Silk	2 ply S	Running Stitch Hand	6
8.	Metallic trim	Off White	Cotton	2/2 cabled S	Running Stitch Hand	5
9.	Embroidery/base	White	Silk	2 ply S	Embroidery, Hand	
10.	Embroidery	White	Silk	2 ply S	Embroidery, Hand	
11.	Embroidery/metallic	Off White	Cotton		Hand	
12.	Hoist repair	Off White	Cotton	3 ply S	Whip Stitch, Hand	5
13.	Hoist repair	Blue	Silk	2 ply S	Running Stitch Hand	8
14.	Hoist ribbon	Blue	Silk	2 ply S	Running Stitch Hand	8

TPA # 916

Mansfield - Pleasant Hill Confederate Battle Flag

REVERSE

Drawing # 5

Cot # M-26-80

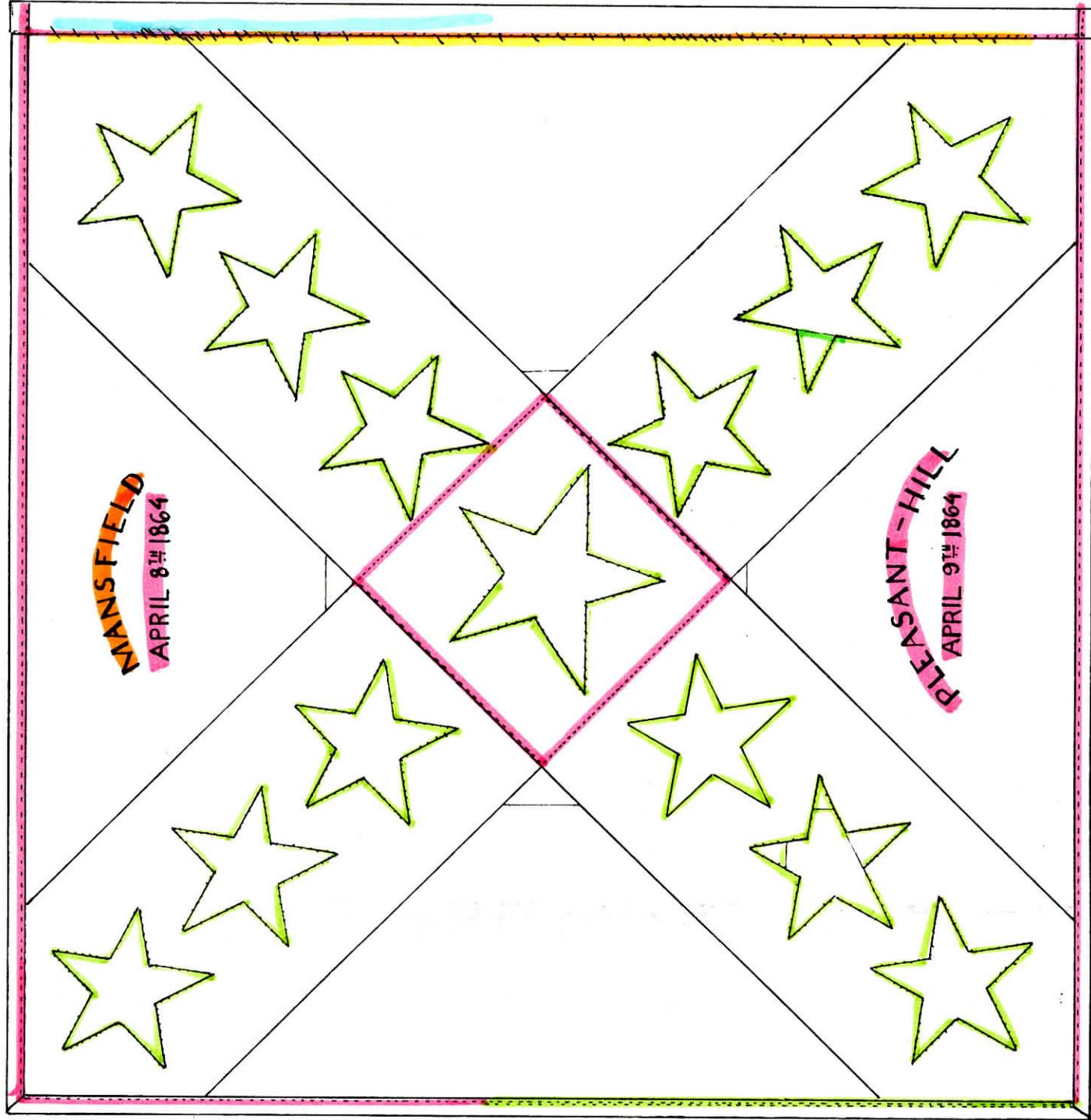
Scale: 1" = 10"

6 2 1/2 5 7 1/2 10 = inches

← 74 1/2" →

- Center Star - 15"
- Stars - 11 1/2"
- Cross - 17 1/2"
- Gimp - 1/4"
- Metallic trim - 7/8"

↑ 72 1/2" ↓



2 Ply S. Silk

2/2 Cob S. Cot.

Metallic (gimp)

REPAIRS

3 Ply S. Cotton

2 Ply S. Silk

TPA # 916

Mansfield-Pleasant Hill Confederate Battle Flag

OBVERSE

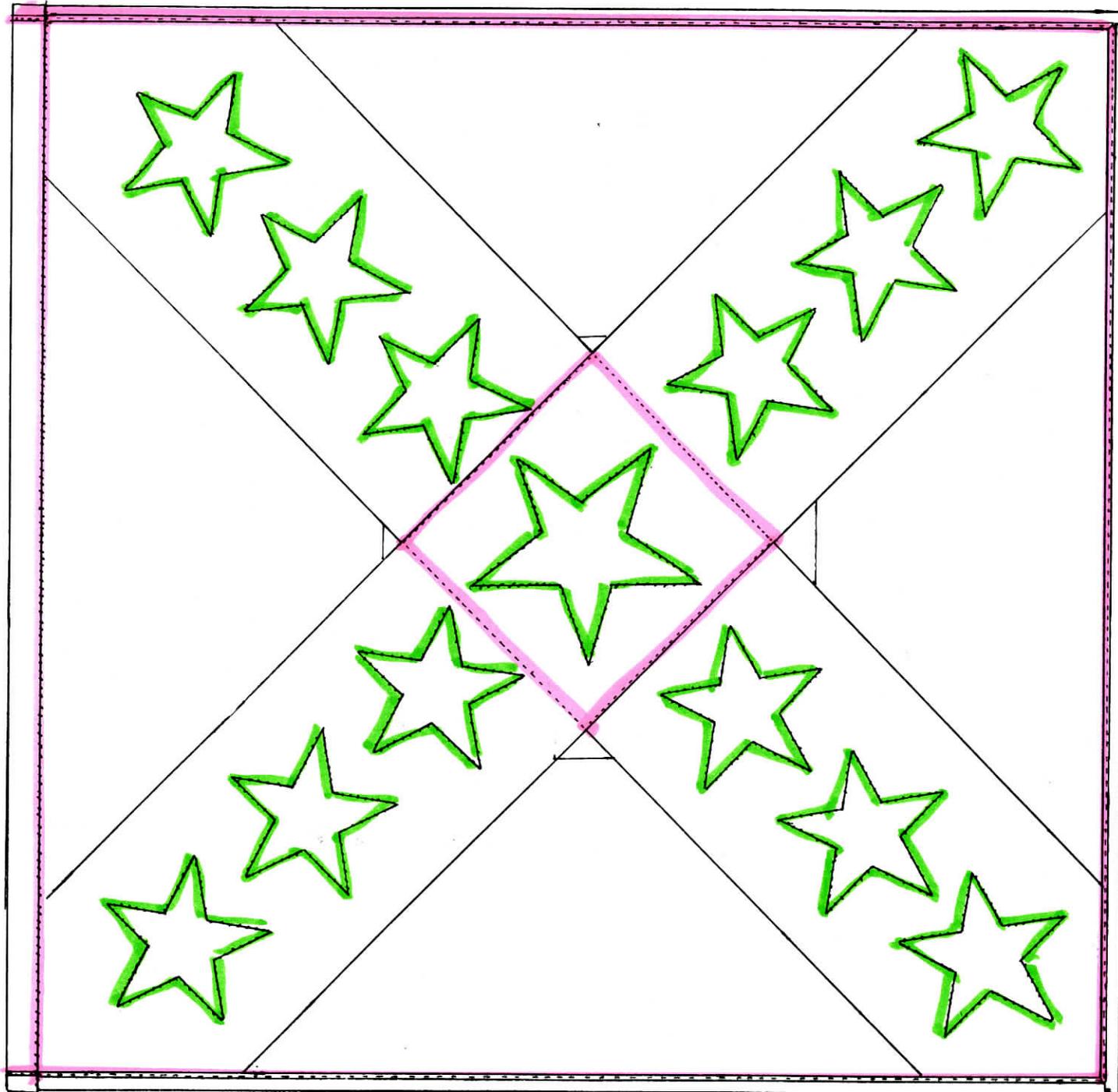
Drawing # 6
SEWING THREADS

Cat. # M-26-80

Scale: 1" = 10" 0 2 1/2 5 7 1/2 10 = inches

← 74 1/2" →

↑
72 1/2"
↓



2 PLY S SKK
2/2 Cabled S Cotton