FORMAL - AIRE COAT SPECIFICATIONS

1. PATTERNS
   a. Patterns are to be marked, graded, and cut using a computerized system to insure accuracy.

   b. Patterns are to cover a full range of sizes, including male, female, short, regular, long, and extra long from size 26 to 60.

2. INNERLINING
   a. The front of the Formal-Aire concert coat is to be stabilized by a coat front of Pellon 8488 fused to the shell fabric. The application of this coat front is to be according to the Freudenburg/Pellon instructions for temperature pressure, and dwell time on an electrically heated fusing machine specifically designed for coat front fusing. Application by a steam heated pressing machine or other alternative methods is not acceptable.

   b. The chest piece is to be constructed of 5.9 oz. / sq. yd. 47 x 30 canvas with the warp 50%/50% poly/rayon and the filling 75% rayon and 25% hair at 30 picks/inch. This is to be covered with Pellon 954 100% polyester felt. Non-woven chest pieces are not acceptable.

3. SHOULDER PADS
   a. Shoulder Pads are to consist of heavy density, 100% PREMIUM grade preshrunk "Harsh" quality combed Indian cotton ("Harsh" quality being resilient, bouncy).

   b. It is a large semi-oval shape, approximately 10" x 7" on extended shoulder patterns. Dimensions for regular shoulder patterns are to be approximately 4 1/2" x 7 1/2".

   c. The entire pad is covered on top with spray-bonded polyester, and on bottom with non-woven rayon, then quilt stitched throughout to prevent wadding.

   d. Shoulder Pads consisting of multiple layers of needle-punched preformed polyester are not acceptable.

4. SLEEVEHEAD PADS
   a. There is a 1 3/4" sleeve head pad composed of a 65/35 Poly/Cotton woven cover sewn into the armhole of the coat assembly.

   b. It is reinforced with soft white 100% Polyester needle punch filler.

   c. Strips of coat canvas are unacceptable for use as sleevehead padding.

5. LINING
a. Coat linings are to be cut from a separate set of patterns designed specifically to fit the particular style of coat. Linings will **not** be cut from coat patterns and then cut down.

b. Lining material is to be the highest quality polyester twill, non-toxic, perspiration resistant, color fast, and non-shrinkable. It is to be fully dry-cleanable.

c. Its composition is to be 124 warp x 72 fill and it is to meet government specifications.

d. There is a pleat down the center back in the shoulder area to allow fullness.

e. The lining is COMPLETELY sewn around the armhole, **NOT** just tacked.

6. **PERSPIRATION SHIELD** (see illustration #1)
   a. The perspiration shield is secured in the lower part of the armhole and is approximately 4" square.

   b. It is made of an absorbent wool flannel, consisting of 85% wool and 15% nylon material. It is to be double sponged to prevent shrinkage.

   c. The shield is edged all around with a preshrunk bias poly/cotton finishing tape and completely sewn into the armhole area. Merely "tacking" the shield to the lining is **not** acceptable.

   d. Shields made of scraps from cutting the outer coat whipcord fabric are **not** acceptable.

7. **POCKETS** (see illustration #1)
   a. All inside pockets are to be cut, sewn, and turned automatically with a double piped lock-stitch machine and reinforced with a non-woven fabric.

   b. Pockets are to be constructed with hidden inside bartacks with welts of the same outer fabric as the coat.

   c. There is a 1 1/2" whipcord fabric extension down into the pocket, from the opening edges.

   d. Pocketing material is to be 70/30 poly/cotton 50/50 in the warp and 100% poly in the fill.

   e. Pocket is to be "bagged" with no open seams at the bottom.

   f. Pockets made of lining or lightweight material are not acceptable.
8. **SLEEVES**
   a. The sleeve is to be "felled" into the top of the armhole, using a special felling stitch, which allows fullness, evenness, flexibility and strength.
   
   b. The bottom half of the armhole is machine lock-stitched to give the greatest strength in this high stress area.
   
   c. Sleeves are to be cut utilizing a 60/40 pattern per fine tailoring. They will be pitched forward 3-4 degrees in the armhole to allow for the arm-lift associated with playing a musical instrument.
   
   d. The cuff, or hem, is to have a generous 2 1/2" turn-under consisting of fabric and lining secured and constructed to allow easy altering of sleeve length. This is done utilizing an "easy alter" chain stitch.

9. **COLLAR / LAPEL**
   a. The collar is to be reinforced with an under-collar felt of pre-biased 50% wool / 50% Rayon composite. Regular coat fabric is unacceptable for the under collar.
   
   b. The lapel is to be stabilized with fusible Pellon #5136, extending from the front edge past the break line.
   
   c. Bridle tape is to be placed at the lapel roll to retain smooth lines and maintain a permanent roll and shape.

10. **THREADS**
    a. Threads for seaming are to be 50/3 cotton wrap core thread, 70/2 poly wrap core thread, or 100/2 poly wrap core thread based on the strength requirements of the type of seam.
    
    b. All threads are to be heat-resistant, vat dyed, sunfast, dry-cleanable and moisture proof.

11. **BUTTONS / BUTTONHOLES**
    a. Buttons are to be phenol or bone and attached with machine stitching.
    
    b. Buttonholes are to be manufactured using the cut-first method. The hole is to be cut first and the edges are to be covered with gimp and twist to cover the fabric and edge. The back of the buttonhole is to be closed with a bartack reinforcement.