

U.S. Senate Conservation Treatment Report

Desk No: **66.00000.089**

Treatment Approach

The conservation project, which included this desk, was designed to treat all 100 Senate desks over a five to six year period of time. From a survey of the desks conducted by Robert Mussey Associates, Inc. in August, 1997, it was clear that most if not all of the desks shared many of the same problems. Therefore, a conservation treatment protocol was designed to address these common problems. In addition, each desk presented unique problems that were dealt with individually.

Treatment Rationale

Upon arrival at Robert Mussey Associates, each desk was examined thoroughly, and it was confirmed that there was a uniform set of problems among the desks that required treatment. These problems included:

- A. Dirt and grime on finished surfaces and metal grilles
- B. Highly figured veneers obscured by translucent, slightly degraded finishes
- C. Badly degraded and blackened finish on the feet underneath the metal grilles
- D. Poorly matched or damaged veneers, cockbeading, molding, or knobs
- E. Various scratches, abrasions, loss of surface detail, and screw holes
- F. Badly worn toes on the front feet

A treatment protocol was designed to address the problems listed above. A description of the treatment is outlined below. The letter in parentheses following each treatment refers to the problems mentioned above.

Treatment Description

This narrative description of the treatment is accompanied by a 9-page set of schematic drawings of each desk showing the condition of each desk and the problems dealt with during treatment. It is intended that these drawings be used along with the Condition Report and Treatment Report to fully understand each desk before, during, and after conservation.

Uniform Treatment Protocol

- Remove new writing top, top support blocks, drawer knobs, if possible, and metal grilles. (A)
- Clean finish surfaces on desk with non-ionic detergent (a 1% solution of Triton XL80-N [Sigma®] in deionized water); clear cleaning residue with deionized water. Clean desk with VM&P naphtha. (A)
- Clean metal grilles with a 2.5% solution of Triton XL80-N (Sigma®) in deionized water using a brass brush to remove surface grime and dirt. Rinse with deionized water, dry with a soft cloth and low heat to prevent rust, and apply one coat of clear paste wax (Butcher's®) with heat. (A)
- Remove degraded finish from feet with a solvent stripper; clear with denatured alcohol; apply oxalic acid (a mild bleach) to black marks left by grilles. Neutralize acid with sodium bicarbonate and clear with deionized water. (C)
- Refinish the feet by grain-filling the surface with custom-tinted, water-based filler (Mohawk®); brushing on 12 coats of 2 lb. orange shellac; rubbing-out the finish with 400 and 600 sandpaper; applying colorant in shellac binder with an airbrush or by padding to blend; sealing with 2 coats of 1 lb. orange shellac; and finally rubbing out with 600 dry sandpaper and 0000 steel wool. (C)
- Treat existing finish on exterior surfaces of desk by lightly abrading the surface with 400 and 600 stearated sandpaper and then rubbing out with 0000 steel wool; finally lightly polish the finish with orange shellac applied with a cloth pad to saturate and clarify finish. (B)
- Lightly abrade the top surface of the shelf with 0000 steel wool and brush-coat with 1 lb. cut of orange shellac. (B)
- Tone mismatched drawer knobs with tinted (Ciba-Geigy® Orasol and/or Homestead® TransTint dyes) shellac. (D)
- Refinish stable but mismatched veneer replacements, by applying several coats of orange or button shellac to fill grain completely, coloring to blend with surrounding area as above, and sealing with 2 clear coats of lb.. orange shellac. (D)
- Replace poorly matched veneers by removing old veneer and adhering new veneer with hide glue. Apply tinted water-based grain filler (Mohawk®), build finish as above, tone tinted shellac as above to blend, and apply sealer coats of orange or button shellac. (D)
- Replace damaged cockbeading as necessary by cutting out affected area and replacing with either solid mahogany, which is shaped with a scratch stock and attached with hot hide glue and/or Araldite epoxy (Ciba-Geigy®) after a hide-glue barrier coat has been applied. Grain-fill new stock with water-based grain filler (Mohawk®), finish and color with tinted and clear orange shellac. (D)

- Fill small holes with custom-tinted wax (beeswax tinted with dry pigments) or shellac stick. (E)
- Inpaint various scratches and abrasions with shellac tinted with Orasol dyes (Ciba-Geigy®), TransTint dyes (Homestead Products®) and/or dry pigments. (E)
- Polish all finished surfaces with Black Wax polishing wax (Pacific Engineering®) with a final application of brown paste wax (Staples®); apply untinted paste wax (Butcher's®) to drawer runners and case side runners. (E)
- Fabricate (by lost wax process) brass toe caps to fit over the worn toes, immerse in a patinating solution (Jax®) to produce a grey patina, spray apply one coat of orange shellac tinted with TransTint dyes (Homestead Products®) and one coat of clear orange shellac flatted with Syloid, and lightly abrade with 0000 steel wool to appropriate sheen. (F)

Individual Treatment Description

- The damaged double-beaded molding on the case was reshaped as necessary to minimize the denting.
- The damaged cockbeading on the drawer was replaced in two sections with mahogany.
- The losses on the lower front edge of the shelf were replaced with Araldite in three sections.
- The damaged solid face mahogany on the case front surrounding the drawer was planed to flatten the denting; these sections were then filled and toned to match the surrounding surfaces.
- The damage on the drawer front was first stripped of finish on the upper corners, and then steamed to minimize the dents. These surfaces were lightly scraped to flatten them and were filled, sealed, and toned to match.
- The spindle with a break at the top of the turning was repaired with Araldite.
- The previously repaired bead on the right side of the back of the case was reattached with hide glue.