

# THE TREATMENT OF A CAMPAIGN BANNER: AN OPTION FOR CONSOLIDATING POWDERY PAINT

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## EL TRATAMIENTO DE UN ESTANDARTE DE CAMPAÑA : UNA OPCIÓN PARA LA CONSOLIDACIÓN DE PINTURA QUE SE PULVERIZA

**RESUMEN** — El estandarte de Campaña de Lincoln y Johnson de la Sociedad Histórica North Collins tenía una ancha franja azul de pintura con falta de cohesión que se pulveriza. Para esto, se probaron diversos tipos de consolidantes convencionales de dos tipos acuosos y no acuosos para estabilizar el estrato de pintura. Todos los consolidantes seleccionados alteraron la apariencia de la pintura en algún grado. El consolidante provocaba que la pintura se oscureciera y al mismo tiempo se volviera exageradamente brillante. Para reducir el efecto adverso del consolidante, fue necesaria una atmósfera saturada de vapor. La solución a este problema fue hallada en un artículo de JAIC 32 (1993): 1-14 escrito por Eric Hansen, Rosa Lowinger, y Eileen Sadoff, el cual describía el empleo de Atmosbag, un método para la consolidación de pintura porosa en una atmósfera saturada de vapor. Otra ventaja de un medio ambiente saturado de vapor es la habilidad para lograr la penetración profunda de un consolidante a través del estrato de pintura, lo cual es beneficioso para materiales flexibles como los textiles.

El estrato de pintura fue total y satisfactoriamente consolidado dentro del micro ambiente saturado de xylene con una solución de Acryloid B-72 al 5% en xylene. Obteniendo un resultado positivo en el que la pintura no se oscureció ni aumentó su brillo.

### THE PROBLEM

This one-of-a-kind Lincoln and Johnson Campaign banner from the North Collins Historical Society was hand painted directly onto cotton fabric. The cotton fabric leached much of the oil medium from the blue border leaving a very friable and powdery paint film. A variety of conventional consolidants were tested on the paint layer. All of the selected consolidants strongly darkened the blue paint upon drying and produced a high gloss with tide-lines.

### THE SOLUTION

A probable solution to this problem was found in the JAIC article, written by Eric Hansen, Rosa Lowinger and Eileen Sadoff entitled, "Conservation of Porous Paint in a Vapor-Saturated Atmosphere, A Technique for Minimizing Changes in the Appearance of Powdering Matte Paint"<sup>1</sup>. The technique is based on the theory that, in the open air solvent evaporates from the consolidant causing it to become more viscous. The increased viscosity inhibits penetration into the paint film leading to a concentration of resin on the surface. This concentration of resin is the main cause of increased surface gloss and darkening of the paint layer. Therefore, the trick is to inhibit the evaporation of solvent, thus allowing the resin to penetrate and consolidate the paint layer without concentrating on the surface. This can be achieved if the resin is applied in an atmosphere saturated with the solvent used to dissolve

### TECHNIQUE

To test this theory a solvent saturated environment was created using an AtmosBag expanded with an armature of PVC pipe. The banner was placed into the AtmosBag with small jars of 3% w/v Acryloid B-72 in xylene, small sable brushes and an open shallow tray of xylene. The open end of the bag was folded and sealed with tape. The bag and its contents were left for approximately ½ hour to allow the xylene vapor to saturate the atmosphere<sup>2</sup> (fig. 1).

Working through the gloves of the AtmosBag<sup>3</sup>, a small area of the blue border was consolidated with two "dabbing" applications of the Acryloid B-72 and left in the bag for 10 minutes (fig. 2). The bag was then opened and the banner was removed and allowed to dry.

The treated area was examined and the powdery paint was well consolidated without an increase in gloss or any darkening. The procedure was successfully repeated to consolidate the entire blue border.

### NOTES

1. Hansen, Eric, Rosa Lowinger, & Eileen Sadoff, "Consolidation of Porous Paint in a Vapor-saturated Atmosphere. A technique for Minimizing Changes in the Appearance of Powdering, Matte Paint" *Journal of the American Institute for Conservation* 32 (1993): 1-14.
2. The AtmosBag should always be used in a fume hood or in a well ventilated area.



Figure 1. Detail of glove and consolidant set-up.

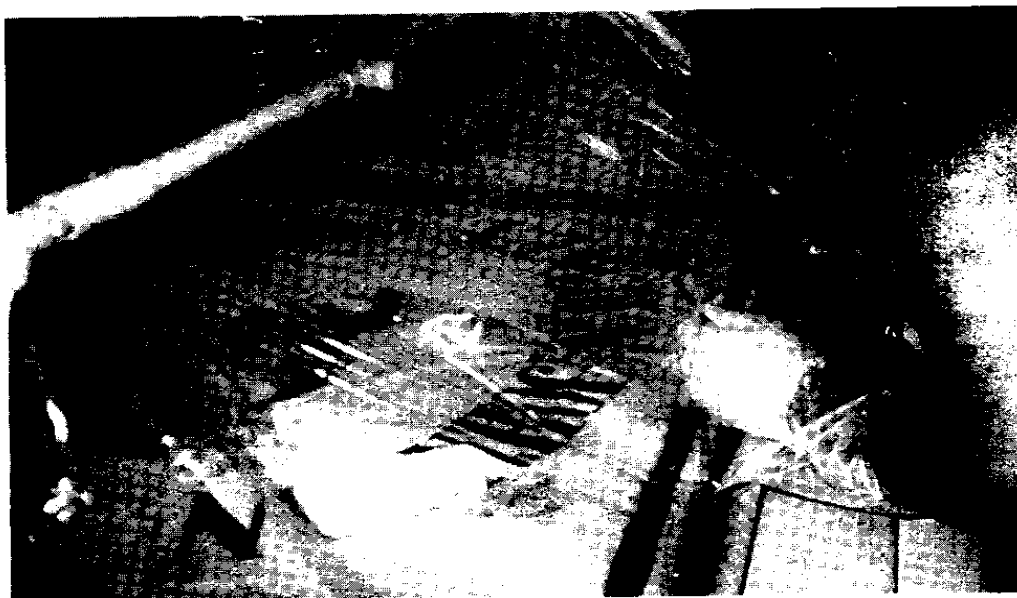


Figure 2. During consolidation of powdery paint layer.

3. The fingers of the attached gloves were made smaller by folding and securing with small rubber bands. Cotton gloves were worn to absorb sweat from fingers. Resin container stands with brush holders were made from Ethafoam and placed onto silicone Mylar interleaf. Cotton pads were used to clean the tip of the brush.

**SUPPLIER:**

Atmosbag — Aldrich Chemical Company, Inc., 1001 West St. Paul Ave, Milwaukee, WI 53233. Gloved .003 gauge polyethylene bag.

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