## Exhibit Solutions at the National Archives: New Materials for Display Supports

At the National Archives and Records Administration, we have been experimenting with ragboard, acid-free corrugated board and paper honeycomb panels to fabricate supports for paper-based objects in our display cases. We were motivated to select these materials because of cost and conservation imperatives to employ stable materials within the display case interior. Access to the interior of the permanent display cases in the rotunda of the National Archives and Records Administration building in Washington, D.C. is from the top. The depth of the cases and the fixed angle of the lid opening make installation of large or heavy display supports awkward. The use of structurally sound but lightweight materials was also desirable for oversize supports, such as the deck in one of our free-standing cases which measures over 60 inches in length.

Many conservation technicians and conservators are familiar with the potential of ragboard, corrugated cardboard and other archival quality boards to create three-dimensional supports for custom storage housings and book cradles for display. Book cradles constructed of ragboard meet both design and conservation requirements successfully in many institutions. Simple book cradles made by crimping 20 point folder stock or scoring ragboard and folding to the appropriate shape function well for both heavy volumes and pamphlets and are quickly made. At the National Archives and Records Administration, nineteenth-century rolled petitions have been displayed on supports constructed of archival corrugated board and folder stock, covered with fabric. For an institution with support staff available for exhibit activities, use of these materials makes it possible to produce exhibit supports in house. This allows for more precise measurement and fitting and could mean considerable savings on the total exhibit budget. The results are costeffective, structurally sound, rigid, lightweight and easy to install.

At the National Archives and Records Administration, contractors are employed to fabricate exhibit display cases

as well as mounts for each object. It was a challenge to convey our requirements and experience with archival boards to our contractors. For one exhibit, neutral pH museum board was used to face acid-free corrugated board to create display supports for the permanent cases. Label copy was screened directly onto the board. The exhibit designers were pleased with the range of colors and the surface texture of the museum board. The contractor was not familiar with techniques widely used in libraries, archives and museums to fashion lightweight, three dimensional shapes with archival quality boards and the results were not totally satisfactory on the underside of the support. It is helpful to supply a model.

For our latest exhibit, we were fortunate to find a contractor who understood conservation and design requirements and was willing to experiment with new materials. Paper honeycomb panel was used to create rigid, lightweight display supports for the permanent cases and several large free-standing cases. The panel is available in 1/2 and 3/4 inch thicknesses from several suppliers of conservation materials. The contractor found it could be milled and joined with tools and techniques generally used for wood. The strength and stability of the supports was enhanced by using a double thickness of honeycomb panel on all sides. The panel is covered with fabric, an unbleached, undyed cotton/linen mix without coatings or formaldehyde.

Prior to fabrication, all materials proposed for use were tested and approved for this application. Testing was completed at the National Archives and Records Administration Research and Testing Laboratory following published guidelines for standardized Oddy testing. Samples were tested at 100% relative humidity and aged at 60 degrees for 28 days.

SARAH BERTALAN
Senior Paper Conservator
Document Conservation Branch
National Archives and Records Administration