# A CREATIVE SHADOWBOX FOR NEWSPAPERS 

By James Miller, MCPF, GCF

> Direct contact overlay framing, using acrylic glazing, is a cost-effective method of attractively displaying an entire newspaper using preservation techniques.

When a customer orders framing for a newspaper, it probably has significant personal value, if not monetary value. If it were also considered collectible, then keeping the entire newspaper intact would help retain its value for the future. Keep in mind that newspapers are printed on highly acidic paper that discolors and weakens quickly, especially when exposed to light, so dark storage in a sealed, chemically stable container would provide the best preservation of a newspaper. Displaying a newspaper in any way can hasten its deterioration, and it is important to inform your customers of this fact. If a newspaper is to be framed, it is important to use preservation methods and materials. This provides a degree of protection from light, slows the deterioration, and fully supports it to minimize mechanical stresses on the fragile paper.

## DIRECT CONTACT OVERLAY FRAMING

For customers who want an attractive presentation as well as protective features but also need to keep the cost to a minimum, direct contact overlay (DCO) shadowbox with acrylic glazing can offer a good design choice. Acrylic DCO is a float mounting technique that can display the entire face and all four sides of a newspaper. Elevating the paper off the background provides a three-dimensional visual presentation,


Acrylic DCO framing provides a cost-effective, visually pleasing presentation for an entire newspaper, including protective features.
too. Construction is simple and easy, using readily available framing materials. The framing is completely reversible, relatively non-invasive, and provides protective features.

DCO construction involves stacking certain materials in a certain order. In this preservation-framing package, the stack of materials includes, from the bottom up:

1. Rigid reinforcement using aluminum composite material (ACM), such as ePanel, DiBond, or AlucoBond. This composite of PVC with aluminum covering is thin, lightweight, chemically stable, and suitable for preservation framing. Other reinforcement materials may be used as well. Acrylic sheeting is a suitable alternative, but ACM is more durable, rigid, and preservation-worthy than hardboard, Gatorfoam, and most other rigid board materials of similar thickness.
2. A frame-sized background board of buffered alphacellulose, conservation-grade matboard. In this example, Peterboro Designer Fabrics, Weave DF901 Graphite, was used. This


The DCO stack of materials includes (from bottom to top): aluminum composite material reinforcement, frame-sized background of matboard, needle-punched polyester batting, Coroplast mounting board, newspaper, decorative linen mat, acrylic, 1 1/4" deep frame.
board layer, cut to the size of the frame, does not contact the newspaper directly. But like all the other framing materials, it is acid-free, lignin-free, and chemically stable to resist the destructive chemistry inside a frame's closed environment.
3. Traditional needle-punched polyester batting in several layers to provide spring tension in the final assembly. This essential element of the DCO assures that the acrylic will press against the newspaper with controlled force, compensating for the slight movement caused by normal expansion and contraction cycles.
4. Direct-support mounting substrate of archival, 4 mm fluted polypropylene, a.k.a. Coroplast, lined with 4-ply con-servation-grade matboard. This layer is in direct contact with the bottom of the newspaper, so it should include buffered, lignin-free, conservation-grade materials.
5. The newspaper, attached to the direct-support mounting substrate by an internal sling and a horizontal wrap of clear polyester film. These provide the primary support. To keep a newspaper as close to its original condition as possible, no adhesive of any kind should touch the newspaper, and it must be fully supported. The non-invasive, chemically stable clear film provides support for all but the front page, which is supported by the acrylic DCO.
6. A decorative perimeter mat. Peterboro Designer Fabrics, Weave DF901 Slate, with custom-designed corners cut on the computerized mat cutter was used for this example. Aside from its decorative value, this conservation-grade mat also hides the spacers trimmed to precise depth, which support the overlay of acrylic.
7. Acrylic glazing, in direct contact with the newspaper, to support the front page and keep it flat. For this project,


Reverse-bevel the edges of the fluted polypropylene board, trimmed to the size of the newspaper, and then cover it with 4-ply conservationgrade matboard. Sand the edges.


The back of the mounted newspaper assembly is ready to attach to a frame-sized background board.


The newspaper is supported by a clear film sling under its front page plus a horizontal clear film sheet through the middle.

Museum Optium Acrylic was used. It is 99 percent UV filtering to slow the damage from light exposure. It is also abrasion-resistant, not only to avoid scratches from routine cleaning and handling but also to avoid abrasions on the inside from the newspaper. Its anti-reflection optical coatings make it nearly invisible in a properly lighted display.

Glass is not acceptable for DCO framing. Due to its poor thermal insulation properties, glass condenses moisture readily, which can soak directly into the paper. Acrylic has much better insulation properties and would not condense moisture except in extreme environmental conditions.

## The Must-Attend Industry Event



TRADE SHOW: FEBRUARY 5-6, 2024 • CONFERENCE: FEBRUARY 4-6, 2024


TRADE SHOW


SHOW SPECIALS


CONFERENCE


NETWORKING


EQUIPMENT DEMOS


SPECIAL ROOM RATES

# Register Early and Save \$25! <br> WCAF EXPO 

THE ART AND CUSTOM FRAMING EVENT


- Use polyester batting between the mounted newspaper and the framesized background board to provide spring tension to the DCO framing assembly.


Attach the spacers to the back of the decorative perimeter mat.


Add the decorative perimeter mat to the stack, which also hides the precisely measured spacers.

## CONSTRUCTION

After trimming all of the board materials to size and cutting the decorative perimeter mat, prepare the newspaper's directsupport mounting board. Reverse-bevel cut the Coroplast to fit the dimensions of the newspaper, then cover it with 4-ply conservation-grade matboard to avoid imparting the board's surface texture to the back of the newspaper. Sand the edges.

Fully open the newspaper's front page to insert a sheet of clear polyester film, a.k.a. Mylar-D or Melinex 516. This film is trimmed slightly narrower than the width of the newspaper and about $6^{\prime \prime}$ to $8^{\prime \prime}$ longer than its unfolded height. Place it snugly under the front page, then refold the entire newspaper so that the ends of this clear-film internal sling protrude out the top of the fully folded newspaper. Neatly fold the ends of the clear film sling to the back of the newspaper.

Next, trim another sheet of clear film to the height of the folded newspaper and $6^{\prime \prime}$ to $8^{\prime \prime}$ wider, and run it through the middle of the folded newspaper horizontally. Attach this horizontal clear-film sheet and the ends of the sling to the back of the direct-support mounting substrate using double-sided polyester tape (not ATG), securely holding the newspaper's pages together.

Position the layers of polyester batting in the center of the frame-sized background board (no adhesive needed) and place the mounted newspaper on top of the batting. Attach the mounted newspaper to the background board by running $11 / 2^{\prime \prime}$ wide clear film straps through the folded newspaper horizontally. Push them through slots in the background board, pull them tight to slightly compress the batting, and attach the straps to the back of the board using double-sided polyester tape.

Lay the acrylic glazing on top of the mounted newspaper, but do not remove the masking yet. Place weights on the assembled stack, and measure the depth from the acrylic to the frame-sized mounting board. In this example, the depth is $5 / 8^{\prime \prime}$. Trim spacers out of sturdy board, such as acid-free foamboard, acrylic, or fluted polypropylene, and attach them to the back of the decorative perimeter mat. These spacers must withstand the pressure of the fitting and prevent the assembly from collapsing. They must also be visually presentable, since they can be seen under the mat.

Position the perimeter mat, with spacers attached, on the frame-sized backing board and make sure all surfaces are free of dust and debris in preparation for final fit-
ting. Remove the masking from the acrylic glazing, clean it thoroughly, and position it on the stack. Add the frame to the stack of materials, and then turn the entire assembly over on a clean, flat, sturdy fitting table.

Add the rigid reinforcement and, while pressing down on the back, install the fitting points. It is important to fit most frames loosely enough that all of the materials in the frame can expand and contract freely. Note that in a DCO using acrylic, this general rule does not apply. Instead, this DCO assembly must be fitted tightly enough to maintain pressure by the acrylic on the face of the newspaper. Finish as usual with filler boards if needed, dustcover, and hanging hardware.

This DCO using acrylic provides a protective, visually pleasing presentation for the whole newspaper at reasonable cost, even when using premium glazing. If standard acrylic were used instead, this construction technique might actually be the lowest-cost way to frame an entire newspaper using preservation features. PFM

This project is further described in Jim's new book, "The Complete Guide to Direct Contact Overlays - DCO." In addition to acrylic DCO mounting, the book also includes instructions for mounting newspapers and many other items using direct contact overlays of clear polyester film and fine-mesh fabrics.


## James Miller, MCPF, GCF

James founded retail framing business ARTFRAME, Inc. in 1988 and sold it in 2015. His business specialized in protective framing, with emphasis on creative framing of three-dimensional objects. He continues in the industry as an author, educator, and consultant. He has co-authored several PPFA publications, is a longtime PFM contributor, and has authored two other instructional books for picture framers; "Mounting Objects with Clear Film" and "The Complete Guide to Direct Contact Overlays."


Remove the masking from the acrylic glazing just before final assembly.


Place the frame on the stack, and then turn over the entire assembly for final fitting.


Unlike typical framing, the acrylic DCO framing must be tightly fitted. Use weights to compress the batting and provide spring tension to hold the newspaper against the acrylic glazing.


