

## Custom housing for an oversize antiphony

The Kenneth Spencer Research Library at the University of Kansas holds an oversize 16th-century (probable) German antiphony (MS J1:4) that is frequently used in classes and requested by researchers. It had been housed in a double-wall cloth-covered clamshell box, but the box was unwieldy and heavy, adding to the already considerable weight of the volume itself. In addition, the box was not well fitted to the volume, unnecessarily increasing its bulk. An updated housing was designed to be lighter and less bulky while improving ease of removing and replacing the volume. Among the changes:

- Corrugated board was used for a strong but lightweight box.
- Handles were added to the base of the box to aid in taking the box off the shelf and moving between trucks and tabletops.
- A sliding inner tray with handles supports the volume in the box and makes removing the heavy volume from the box much easier.

### Components

1 Inner tray with handles

1 2-piece corrugated archival cardboard box

### Tools and materials used

Archival corrugated B-flute board

¾" Scotch 924 double-sided tape

Linen book tape

Archival corrugated E-flute board

Cutting mat

Board shear

Triangle

Polyester film

Pencil

Straightedge

Scotch ATG 700 tape gun

Soft Tyvek™ fabric

⅛" black plastazote foam

Compass or divider

Fine point permanent pen

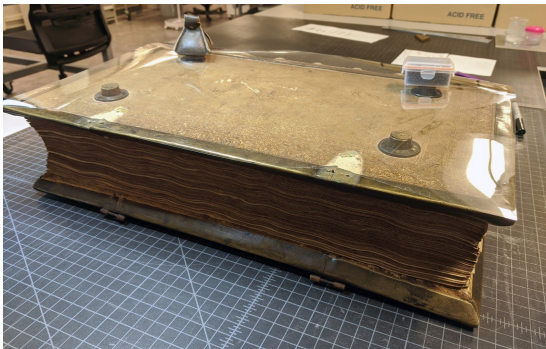
¼" 3M 415 double-sided tape

Scalpel or Olfa knife

Bone or teflon folder

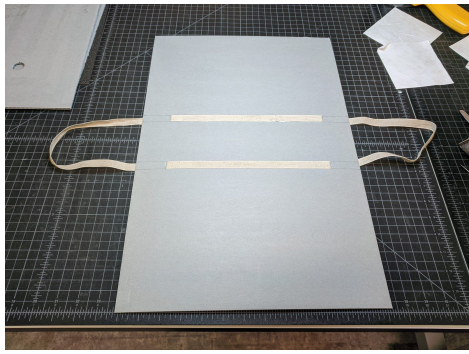
### Step 1: Construct the tray

A template for the tray was made by first tracing the outline of the bosses on the lower board of the volume onto a sheet of polyester film.

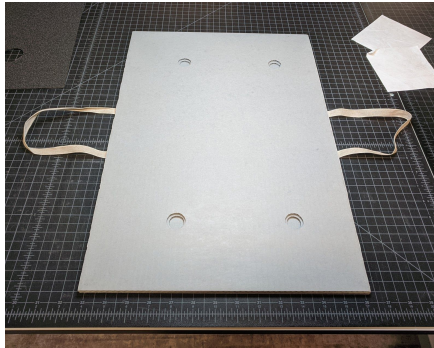
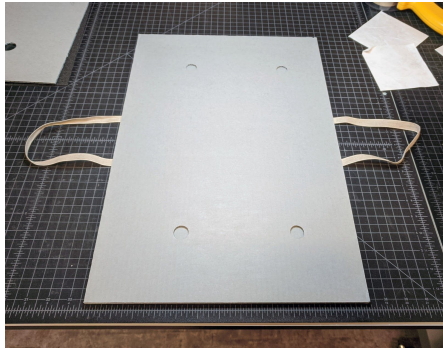


Next the depth of the bosses was measured to determine the layers of board and foam needed for the tray. Layers (cut to exact width and length of the volume) were assembled in the following order, bottom to top, and adhered to one another with Scotch 924 tape:

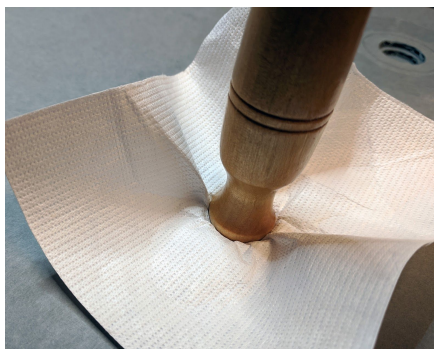
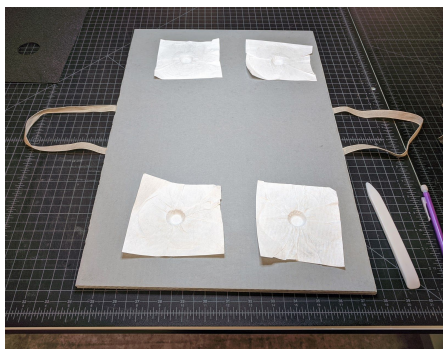
1. E-flute bottom layer
2. E-flute layer with linen book tape handles laced through



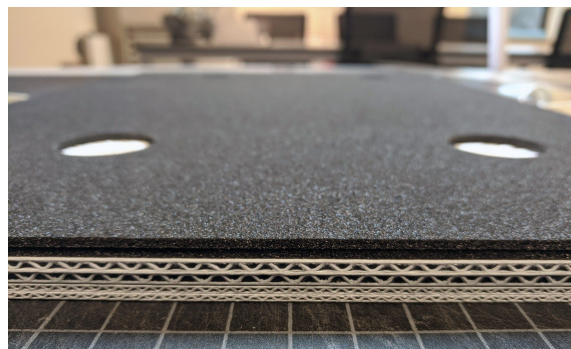
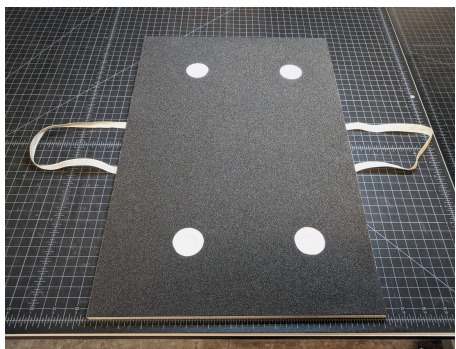
3. 2 B-flute middle layers with cutouts

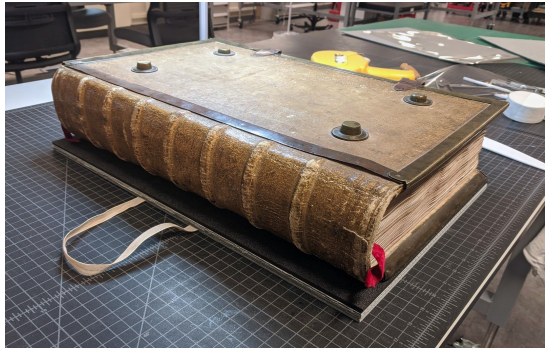


4. Tyvek™ linings for bosses, adhered around the outside of the depression with 3M 415 tape and worked into the depression with the handle of an awl.



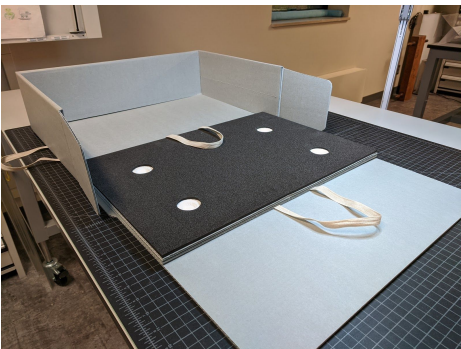
5. 2 layers of 1/8" plastazote foam with cutouts





## Step 2: Make the box

Working off a standard two-piece corrugated box pattern, a modified lower half was made (B-flute) with one long side consisting of a wide flap that serves as a box wall and inner lid when closed, and a surface for the tray to slide onto when open.



Finally a standard B-flute lid was built to fit the lower half. Not pictured are final labels to support better handling, i.e. "HEAVY," "Please lift this box using the handles," etc.

