



STRICTLY COMMERCIAL

By Francis S. Lestingi

Wanted: An Elegant Sign

A "government agency" requests a sign to conceal covert operations.

Francis S. Lestingi, a former physics professor, owns Williamsville, NY-based Signs of Gold.

An operative from a federal agency called me to ask if I could produce a handcarved, gilded sign similar to those I fabricated for the government's General Services Administration (GSA) a few years ago. In that project, we were asked to produce signage that would help return the lobby of a 65-year-old, federal courthouse to its yesteryear elegance. This beautiful, Depression-era lobby, rich in handcrafted features, had fallen victim to plastic and vinyl.

I assumed the agent was calling for additional courthouse or GSA facility signage – not so. The proposed sign was destined for an undisclosed location, but in the style of the aforementioned courthouse. Thereafter, I communicated with the agent strictly via email and phone regarding design selection, prices and the purchase contract. We never met the agent until the installation day (more on that later).

Coating and masking

Before beginning production, I considered the substrate. Because it was for interior use, we chose



This sign program, which Francis fabricated for a 65-year-old federal courthouse, helped inspire a sign panel for a certain government agency's covert location. Why no pictures of the new sign? Read on to find out.

mahogany's rich beauty, which we accented with a clearcoat finish. For exterior installations, wood requires a sign-compatible paint; clearcoats won't survive the elements.

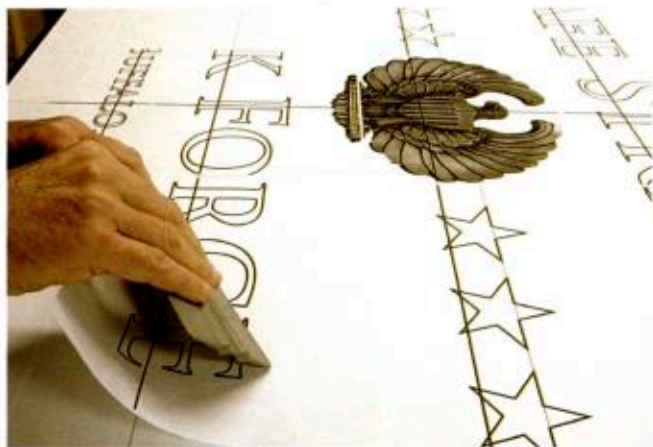
I applied red mahogany stain to the 35 x 45-in. panel with cheesecloth and let it dry overnight. Although I could've used any stain, this particular product amplifies mahogany's beautiful texture and grain. Usually one coat of stain

suffices; more will produce a deeper color. Once the stain dried, I could apply clearcoat. I applied three to five coats of high-gloss, oil-based spar varnish and allowed overnight drying after each coat. Between coats, I lightly sanded with 320-grit sandpaper.

After the clearcoating, I applied a removable vinyl mask to the entire panel. I produced the design using Adobe Illustrator®, which allowed us



After having stained the 35 x 45-in. panel with Minwax® wood stain, Francis applied four coats of high-gloss, oil-based, spar varnish to create a brilliant sheen.



Once he'd created "tile" segments using Adobe® Illustrator® and applied 3M's Spra-Ment adhesive to them, Francis laid out the vinyl-decorated panel with registration lines to ensure accurate surface layout.

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Using a No. 2 sweep gouge, Francis made rough cuts into the letters' surface. To refine his dimensional carving, he used a #1 sweep straight chisel.



After having coated the letters with spar varnish, Francis smoothed them with a palm sander and 120-grit sandpaper.



After having dusted the letters with kaolin powder and vacuumed away excess, Francis applied LeFranc Charbonnel's 24-hour, slow size to prepare them for gilding.



Francis used a gilder's knife to cut partial 23k-gold sheets, which he said was less awkward when applying goldleaf to intricate surfaces.



Using a gilder's tip, Francis applied the cut sheets to the surface.



After having gilded the letters, Francis carefully removed the vinyl mask. He strongly advises against pulling the film towards the letters' edges – rather, he said the fabricator should pull the media away at an upright, 90° angle.

to print out "tile" segments of the full design on 8½ x 11-in., vellum paper. We then sprayed the reverse side of these printed "tiles" with an adhesive. The "tiles" were assembled on the vinyl-clad panel using registration lines that ensure level surfaces.

The carve

I began handcarving with a v-parting tool to cut "root lines" for each letter. Next, I shaped each

letter with a No. 2, sweep-gouge chisel, which I followed with a No.1, straight chisel that refines gouge cuts. For a complete guide to handcarving techniques, read my feature, "The Importance of Being Shallow" (see ST, October 2006, page 90).

After having carved the letters, I coated the bare wood surfaces with varnish. I could've used the same spar varnish I used on the panel

surface, but, to save time, I used a faster-drying, waterbased varnish. Once this varnish dried, I removed the overlapping varnish around each letter by sanding them with 120-grit paper.

To prepare the carved letters for sizing, I dusted them with kaolin powder. I spread it out smoothly and vacuumed off any excess. Normally, at this stage of exterior-sign fabrication, I would've painted

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Using Smooth-On's moldmaking and casting compounds, Francis created molded stars for the signface. This molding system allows him to replicate designs.



He decorated the carved, painted eagle with 23k goldleaf.



Francis inserted three, threaded, aluminum studs to the eagle applique's underside.

the lettering black, and the kaolin film would make the black paint appear grey. I dust-varnished letters with kaolin in lieu of adding a "tint," such as yellow paint or another colored foreign material. The size remains pure and uncontaminated, yet quite discernible, when applied.

The gilded age

To create an attractive border, I hand-routed a bead-and-cove profile along the panel's entire periphery. After having applied the size, I gilded the border with 23k, patent gold. For all other applications, I use 23½k, loose goldleaf. Generally, full goldleaf sheets can't

be conveniently used, so we cut the sheets with a gilder's knife and apply the cut sheets with a gilder's tip. When the gilding is complete, we carefully remove the vinyl mask using scissors, tweezers and an X-Acto® knife. The vinyl must never be pulled toward the letter's edge, because this could

Equipment and Materials

Brushes: Lettering quills, available from Andrew Mack & Son Brush Co. (Jonesville, MD), (517) 849-9272 or www.mackbrush.com.

Casting: Smooth-On OOMOO-30 moldmaking compound, SmoothCast 300 casting material and So-Strong® color dyes, available from Smooth-On. (Easton, PA), (800) 762-0744 or www.smooth-on.com.

Coatings: Minwax wood-finish stain, McCloskey Man O' War spar varnish, and General Finishes high-performance, waterbased varnish, available from home-improvement stores.

Design: Macintosh PowerMac G5, from Apple Inc. (Cupertino, CA), (408) 996-1010 or www.apple.com; Adobe Illustrator® software, from Adobe (San Jose, CA), (408) 536-6000, or www.adobe.com; Laserjet 2200d inkjet printer, from HP (Palo Alto, CA), (650) 857-1501 or www.hp.com; Clearprint drafting and design vellum, available from Dick Blick Art Materials (Galesburg, IL), (800) 828-4548 or www.dickblick.com.

Gilding: LeFranc Charbonnel slow size, 23½k ducat, loose-leaf double gold, gilder's tip and knife, available from Sepp Leaf Products (NYC), (800) 971-7377 or www.seppleaf.com; USP-grade kaolin, available from Soap Crafters Co. (Salt Lake City), (801) 484-5121 or www.soapcrafters.com.

Substrate: Mahogany sign panel, available from Kenco (Buffalo), (800) 757-9142 or www.kenco-woodproducts.com; Gerber Mask I, available from Garston Sign Supply (Rochester, NY), (800) 825-8808 or www.garston.com.

Tools: Saber saw; power drill and bits, and Visegrip®, sandpaper, available from home-improvement stores; No. 1 straight chisels and No. 2 sweep gouges, available from Woodcraft Supply LLC (Parkersburg, WV), (800) 535-4482 or www.woodcraft.com; aluminum studs, available from Gemini Inc. (Cannon Falls, MN), (800) 538-8377 or www.signletters.com.

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remove the goldleaf. One should pull the mask only at a 90° angle to the edge.

We incorporated a carved American eagle appliqué and six stars to the design. Fortunately, producing them was relatively easy, because we'd previously made molds of these appliques for the earlier GSA project. We needed only to make castings of these items and gild them (*see ST, May 2003, page 40*). Dusting the black eagle and star appliques helped reveal the colorless size as I applied it.

After the slow size had cured for 48 hours, I began gilding. I used loose-leaf gold for this sign face because patent gold wouldn't have produced satisfactory results.

I attached appliques to the panel with studs and silicone. I made measurements for attaching



Francis applied silicone to affix the cast stars onto the panel's surface.

the appliques prior to gilding to avoid touching gilded areas. For the eagle, I twisted three, threaded, aluminum studs into pre-drilled holes. Fortunately, the studs self-tap into the polyurethane, plastic-resin castings. I

positioned the appliques and studs over the design pattern, marked the stud locations and drilled holes into the panel. I poured silicone into the drilled holes and on the studs, and attached the appliques.



The intact sign. Francis didn't take a completed photo in his shop because he presumed he could do so at the installation site. However, when he attempted to snap his handiwork, an agitated "G-Man" emphatically forbade it. Alas, he's satisfied that the FBI agents with access to the restricted area are very appreciative.

A private sign

Ready for the installation, I called the agent for instructions. We were to call him when we reached a pre-determined location. At this point, he instructed us to meet him on a particular street. After I parked, he

led me and my installation gear to a door with a secure-entry keypad.

An elevator took us to a floor with unmarked doors, save one with a modest sign that read, "Smith and Associates." I couldn't resist asking, "Is that a cover name?" "Affirmative,"

he replied as he punched numbers into the keypad.

We entered the office, made our measurements, drilled into the wall and installed the panel. The people in the office were all very pleased. Then, as I always do for a completed installation, I set up my tripod and digital camera.

Seeing these preparations, the agent appeared and stated emphatically that no photographs were permitted. "Why?" I sheepishly inquired. He bellowed, "Because the FBI does not allow photographs in here!"

There you have it. The FBI got the elegant sign it wanted, but I was left without a completed installation shot! ■

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