

EXHIBIT BUILDER

The Magazine For The Trade Show & Museum Exhibit Design/Building Industry

Bulk Rate
U.S. Postage
PAID
Permit No. 194
Pontiac, IL



- COMPUTER RENTALS AT TRADE SHOWS
- AN EXHIBIT WORTHY OF THE CZARS
- SPECIAL EVENT BUSINESS



View of the Czar's throne room. Columns and archways are hard coated foam.

by
John Henningsen
Marketing Director
Futura Coatings, Inc.
St. Louis, MO

We all know how the story ended. A few dozen bullet holes in the wall of a Siberian basement effectively marked the end of 300 years of monarchy in Russia. Czar Nicholas II and his entire family (barring Anastasia, if you believe it) were victims of the Russian Revolution. Their architectural, cultural and artistic contributions had been the jewels of Europe for centuries.

When the Czar died, a veil of mystery and isolation quickly fell over the new Soviet Union. All the symbols of Imperial Russia, including the opulent treasures and cultural contributions of the Romanovs, were put on display by the Communists as the embodiment of decadence and anti-revolutionary ideals.

Today, with the window of openness and cooperation, many of the treasures of the royal family are making their first trip outside the walls of the Kremlin. How do you convey over 300 years of Imperial Russian art, architecture and ideals in one limited place?

The natural solution is a touring exhibit, one that would bring the architectural look and feel of Romanov Court life to the rest of the world. The challenge was to do this without having to tear down the Kremlin brick-by-brick and transport it from city to city in the U.S.

The Look And Feel Of Court Life

Connie Cone, David Fischer and a team of officials from the City of St. Petersburg, FL, have for years wanted to share a blockbuster exhibition with their sister and namesake city in Russia. They looked toward something on the scale of the famous Wonders Series

Using Modern Technology To Create An Exhibit Worthy Of The Czars

running in Memphis, TN. But what? Plans to work with the famous Hermitage Museum had constantly fallen through. Every attempt to organize an exhibition had been burdened by governmental hesitation about Russian art treasures leaving their homeland. Finally, following up on a whim, the organizers spoke to the Kremlin Museum and the exhibit was a go.

The question remains: How do you create the illusion of walking through the massive hallways of the Kremlin and the Czar's Winter Palace? Anything attempted would have to reflect the unbridled pursuit of beauty, craftsmanship and extravagance the old Russia was known for. You see, the old Russians believed God manifested Himself not only through truth, but beauty. This way, man could celebrate the Holy Spirit through artistic expression.

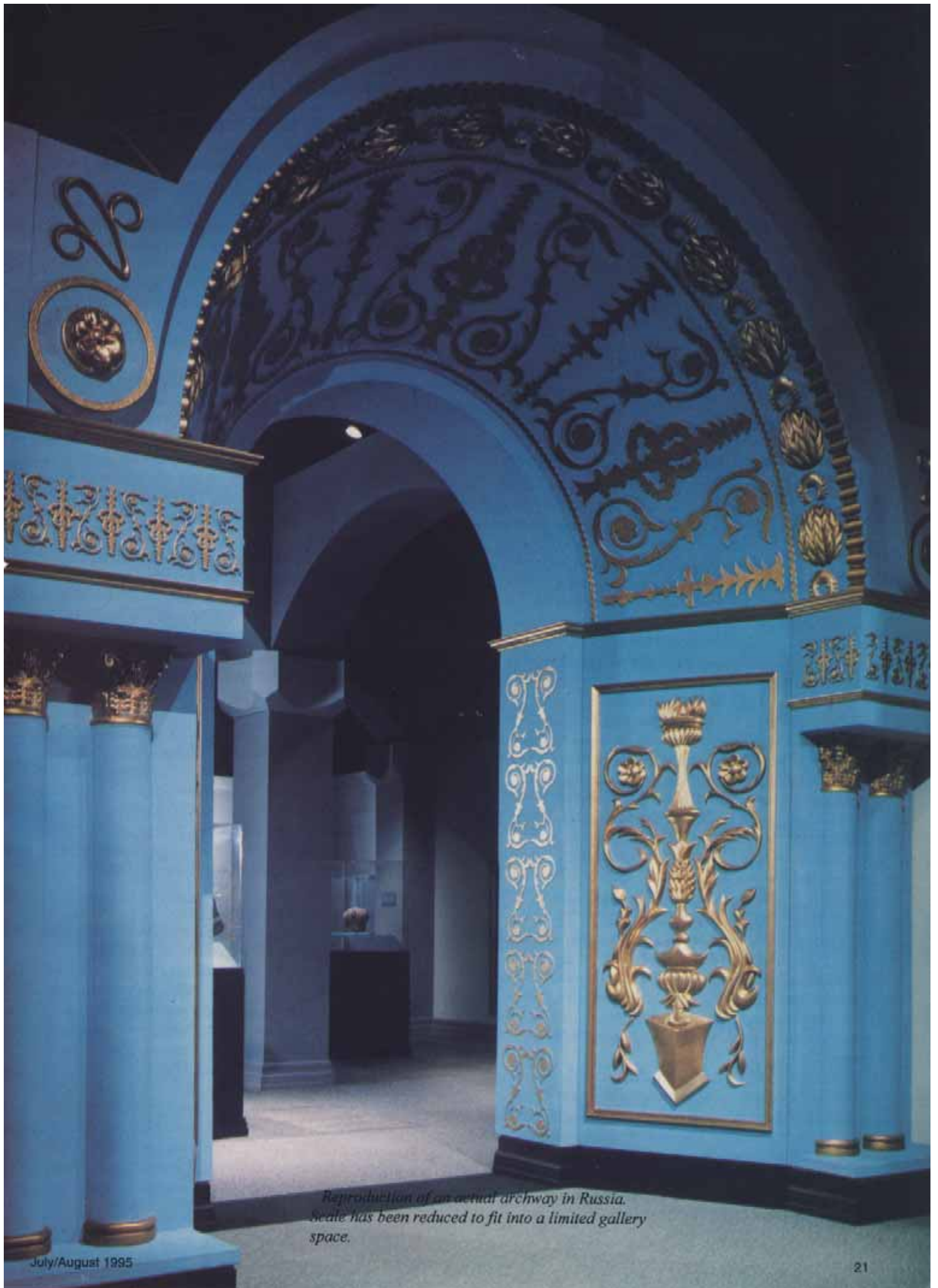
The architectural firm of Harvard Jolly Clees Toppe, St. Petersburg, were given the responsibility of designing a touring exhibit that would re-create the look and feel of court life in Imperial Russia. This firm worked closely with the Russian curators and American design-fabrication firm Creative Arts Unlimited, Inc.®, St. Petersburg, to produce the architectural art concept of the exhibit.

Designing A Unique Background

Just as the first awe-struck adventurers crossed the Russian frontier in ancient times, Harvard Jolly Clees Toppe began the daunting task of designing a world-class exhibition hall for thousands of visitors to enjoy.

Step one, of course, was research. John Toppe, the principle architect from Florida, was in on the planning from the very beginning, traveling to Moscow to photograph key architectural pieces and locations of the Romanov's and their surroundings.

Step two involved working with Creative Arts' design team to transform architectural drawings and photos into CAD (Computer Aided Design) programs. These would act as blue prints for the "fabricating" of the exhibit pieces. The architects realized that only by using modern



*Reproduction of an actual archway in Russia.
Scale has been reduced to fit into a limited gallery
space.*

foam and hard coat polyurethane fabrication technology would they be able to produce the size and quality exhibit they desired. These new processes effectively eliminated the need for huge, expensive molding of original parts and opened the door to efficient and affordable architectural fabrication on any scale.

According to the mandates of the Russians, within the exhibition hall the decorations for each display had to be just right. Displays wouldn't be exact duplications of the original location. After all, how do you rebuild the Royal Thrown Room, a room greater than the size of a football field, within a limited gallery. Consequently, the architectural pieces and decorative accents had to be smaller scale reproductions, creating the visual effect of actual pieces. So as visitors pass through elaborate archways and colonnades, they can still get a sense of the grandeur and opulence of the times. All this without distracting, from the treasures on display.

Turns out, however, the architecture of the exhibit is a wonder in its own right.

Choosing The Right People For The Job

Creative Artists is a company specializing in the design and fabrication of visuals for major retail, theme park and entertainment applications around the world. The architectural firm was drawn to Creative Arts for its successes using lightweight fabrication materials like polyurethane foam and expanded polystyrene (EPS). According to John Toppe, "We're excited about the idea of working with foam, because of its low cost, it's lightweight and because of the ease with which it can be shaped by hand and with computer-driven cutting machines."

Expanded polystyrene allowed Creative Arts to manufacture large, lightweight pieces to fit the gallery floor plan. These materials also meant the piece could be easily taken down, crated up and shipped to the next city (Topeka, KS). Other materials like fiberglass, wood or EIFS and plaster would have not only weighed considerably more, the cost of shipping and structural supports for the exhibition hall would have been prohibitive. Besides, foam can be manipulated and coated to look and feel just like wood, masonry or even steel.

Standing The Test Of Time

"Being just a mile apart made working with the architectural firm on the Czars exhibit much easier," commented Chuck Stanmore, CEO of Creative Arts. He continued, "As we produced a piece, they came over to inspect the work. Russian artists were also flown in to paint special frescos on some of our pieces."

While the foam substrates are easy to work with, until recently they could never stand up to the rigors of public exposure without an extremely durable protective coating. This made unprotected foam only usable on such applications as theatrical sets and motion picture props. However, today's advances in polyurethane technology headed by such companies as Futura Coatings, St. Louis, MO, meant foam could now be used in practically any

specialty architectural or entertainment application.

Using the photographs of the original architecture and floor plans supplied by the architect, Creative Arts used computer controlled foam cutting machinery to carve each shape. Any shape that was more ornamental or biomorphic in design was rough cut by the computer and then carved and finished by Creative Arts' sculptors.

A spray-applied fast-set structural polyurethane coating, Styrothane®, manufactured by Futura Coatings, was used, on one and two pound density foam to produce the many unique architectural pieces. The Styrothane coating provided the architectural pieces with an extremely hard, plastic-like finish. This, essentially, preserves the pieces without losing any fine contours and details. John Toppe commented, "They [Creative Arts] were able to achieve superior surface characteristics thanks to the [Futura] coating system."

The Styrothane coating didn't add excess weight to the exhibit pieces. What's more, since Creative Arts used the fire rated (FR) version of Futura's Styrothane, the foam complied 100% with stringent fire codes. Best of all, the hard coating system over the foam means the pieces will resist the abuse faced by any exhibit or museum piece -- the curious hands of the public. The realistic finishes of the architectural pieces naturally draws the patrons in; they want to know what it's made of.

Using both smooth and faux marble painted and textured columns in the galleries, Creative Arts was able to produce architecture that set certain moods befitting the history of the period. According to John Toppe, "Making an impression was the goal in capturing the character of each room." Creative Arts succeeded by having the best designers and artisans, as well as using the advanced computer technology and highest quality fabrication materials."

According to Rod Jarboe, president of Futura Coatings, "Creative Arts, like many other fabricators around the world, have embraced the benefits of computer aided design and fabrication. The architectural result produced with this exhibit proves the possibilities offered to exhibit and display designers are limitless. If the Czars' court life can be brought to life, imagine what else is waiting to be produced using foam and hard coating fabrication."

A Lasting Impression

From 1613 and the crowning of 16-year old Michael, through the epochs of Peter and Catherine the Great, until 1917 and the death of Nicholas II at the hands of Bolsheviks, the entire history of the Russian golden age is portrayed in one touring exhibit. All of the passions, poetry and politics that held the world in its thrall are put on exhibit by the Moscow Kremlin Museum through August 1995 in St. Petersburg, FL.

The architectural pieces that form a perfectly blended backdrop for the treasures are, in their own way, works of art. Using the most innovative fabrication materials and computer aided design technology, Harvard Jolly Clees Toppe, Creative Arts and Futura Coatings were able to create a truly awesome exhibition. □