



# Two Alumni **LAY DOWN THE LAW** at New D.C. Museum

*The National Law Enforcement Museum opened to the public in October. At the helm of its design and construction were an architecture alumnus and an engineering alumnus, who worked together to bring light and an open feel to the underground space.*

By Ellen N. Woods

**A**s construction at the National Law Enforcement Museum was in the final push to completion last July, one of 20,000 artifacts acquired for its collection arrived — in pieces and with a United States Park Police escort. Eagle One, a Bell helicopter that has a special place in law enforcement history, was transported from a National Park Service hangar to the museum’s site in Washington, D.C.’s Judiciary Square.

Americans of a certain age remember the daring 1982 rescue mission made with the helicopter. On Jan. 13 of that year, Air Florida Flight 90 took off late in the afternoon from National Airport during a winter blizzard. Seconds later it crashed into the 14th Street Bridge, plummeting into the ice-filled Potomac River. Four motorists and 74 of the 79 passengers on the plane were killed.

Eagle One was on the scene within 19 minutes to rescue the few survivors. In what many consider one of the most heroic aviation rescues in police history, pilot Don Usher maneuvered the helicopter dangerously close to the river, at one point dipping the skids into the water to allow his rescue technician, Gene Windsor, to grab the last survivor.

Eagle One served the National Park Service until 1998, when it was transferred to the Department of the Interior in Boise, Idaho. In recent years, the new museum’s curators learned it was due to be scrapped and instead arranged for it to be donated, restored, and installed as the centerpiece of the permanent collection. Because the museum is underground, the helicopter had to be taken apart to fit inside the nearly completed building. It was then painstakingly reassembled and hoisted from the ceiling, where it now hovers, visible from nearly every location in the museum.

Tom Striegel, B.S.Arch. 1984, B.Arch. 1985, the lead architect on the museum, remembers the day of that air disaster. “I was a sophomore at Catholic University. I was arriving back in D.C. from Christmas break and I remember getting off my train at Union Station where everyone was talking about it.”

Mike Geraghty, B.C.E. 2008, the senior project manager for the museum, was born three years after the Air Florida tragedy. While he doesn’t have a memory of the courageous rescue, he understood the significance of Eagle One in law enforcement history and made sure the helicopter arrived safely within the museum’s walls.

Striegel is the vice president of Davis Buckley Architects and Planners; Geraghty is a senior project manager with Clark Construction. They come from different generations and they attended the University during different eras. Two and a half years ago, when construction began, they became colleagues and friends.

## **A Design and Construction Challenge**

The National Law Enforcement Museum is a project 20 years in the making. In 1998, Striegel and his team at Davis Buckley were called in by the National Law Enforcement Officers Memorial Fund as the group began fundraising and planning. In 2000, the museum was officially authorized by an act of Congress. Geraghty set up shop at the construction site on E Street, N.W., in April 2016, when Clark Construction began the project’s 70-foot-deep excavation.

Striegel and Geraghty had a difficult design and construction challenge ahead of them. The land was deeded to the museum with a number of restrictions in order to maintain the visual impact of Judiciary Square. Directly

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Courtesy of the National Law Enforcement Museum



Below, left: Architect Tom Striegel and engineer Mike Geraghty at the construction site of the National Law Enforcement Museum last summer. Below, right: From the National Law Enforcement Officers Memorial, Tom Striegel points to the museum, located in front of the District of Columbia Court of Appeals in Judiciary Square.

across from the museum property is the National Law Enforcement Officers Memorial, a three-acre park dedicated to law enforcement officers who died in the line of duty. Striegel has a special connection to the memorial. He was part of the Davis Buckley team that designed it and he managed the project. The tree-filled memorial, which opened to the public in fall 1991, features a reflecting pool surrounded by winding walkways lined with three-foot-high stone walls bearing the names of more than 21,000 law enforcement officers who lost their lives serving their communities and country.

The memorial is surrounded by historic municipal and federal court buildings. Across F Street at the north end of the memorial is the National Building Museum, and across E Street at the south end is the District of Columbia Court of Appeals. The National Law Enforcement Museum is located in front of that court building.

“One of the most important restrictions in designing the museum building was that we could not block the visual axis from the Building Museum through the memorial to the Court of Appeals,” says Striegel. The museum is largely underground, with two above-ground structures, one for entry and one for exit.

“We set out to design structures that would keep the open feel of the square and that would allow natural light into the museum. We felt it was critical that museum visitors didn’t feel like they were going down into a dark Metro station.”

The architects designed two glass pavilions, 100 feet apart. “At the highest point, each pavilion is 25 feet, but to reduce their visual mass and have them sit comfortably amid the court buildings, the tops are curved, bringing the lowest point to 16 feet around the perimeter,” says Striegel. “We used low-iron glass, which is the most transparent kind of glass. Allowing natural light into

the museum came with the challenge to do so in a way that the sunlight would not damage any of the artifacts.” The answer to that challenge was a series of custom-designed shades that filter light and automatically adjust to the sunlight at different times of day and year.

The glass roof was designed using a curved, diamond-patterned steel frame to reflect the pattern in the trellises across the street at the memorial. Mirrors in the patterned glass rooftops hide a compartment at the top of each pavilion containing electrical and mechanical equipment and create the illusion of a continuing glass trellis. “With an above-ground building you can hide the mechanical equipment in a penthouse on the roof,” Striegel says. “This project required aesthetically creative technical solutions.”

The glass pavilions were fabricated and preassembled in Europe by a German company known for their intricate custom designs. They were then taken apart and shipped to the museum, where they were reassembled. “I tell people these are the biggest, most expensive LEGO sets you will ever find,” says Geraghty, who made a few trips to Europe with Striegel and other members of the design and construction teams to supervise the production of the glass structures.

In September 2016 they went to Germany to make sure the structures were airtight and watertight. “The biggest test came when we put a jet airplane engine 15 feet from the structure to blow water at it,” says Geraghty.

Another challenge with the underground design and construction of the museum was simply making sure the hole in the ground stayed intact during two years of construction. “We drilled 467 65- to 70-foot steel piles from grade level down into the ground about five feet past the bottom floor of

the museum,” says Geraghty. “We are right up against the courthouse and the Metro Red Line tracks. We have this very narrow, limited footprint of 29,000 square feet and we used every single square inch we possibly could. We placed underpinning pits to support the nearby buildings’ foundations during construction. We put monitors on the buildings to ensure there was no settling or cracking as a result of our work on the museum.”

Once the concrete structure of the underground building was in place, the engineers had to plan well in advance for materials that would have to come in before the building was complete. “With this being underground, anything that wasn’t going to fit on the service elevator had to go in first,” says Geraghty. “The biggest pieces to go in early were the escalators and grand staircases.”

## Laying an Education Foundation

The approach to education in the School of Architecture and Planning has served him well in his career, says Striegel, a member of the Alumni Association Board of Governors. “Some schools are known for training architects who are more technically capable. Others turn out great designers that may not have as strong an understanding of how buildings are put together. I always felt Catholic had the perfect balance. Early on we had classes that focused on designing projects without encumbering us with the technical side of how they would stand. Separately, at first, we also had classes that introduced us to the technical aspects. Gradually the two sides of architecture came together, and by senior year we felt comfortable with both the technical and the creative.”

Similarly, Geraghty appreciates the balance in his civil engineering education. “I would be taking technical classes in concrete design and steel design and then we would go out to construction sites and see what we were learning firsthand. It was a great blend of technical and practical.” He recalls a construction class with Gunnar Lucko, professor of civil engineering, in which they took a field trip to the Woodrow Wilson Bridge, then under construction. “We climbed one of the arcs of the bridge and watched concrete being poured. You don’t forget something like that.”

Geraghty played football and was captain of the baseball team while at Catholic. “An assistant coach made an introduction that helped me get a summer internship with Clark working on the construction of Nationals Park,” says Geraghty. “That was pretty awesome for a college kid who loves construction and loves baseball. I stayed on with Clark during the school year two days a week and I’ve been with them ever since.”

Both men met their wives at the University. Striegel is married to Maureen Harzinski, B.A. 1986, J.D. 1992, a landlord-tenant investigator with Montgomery County Department of Housing and Community Affairs. They have three children ages 21, 19, and 15. Geraghty is married to Erin Kelly, B.A. 2009. She is currently a stay-at-home parent to the couple’s three children, ages 5, 4, and 1.

“My wife was a field hockey player,” says Geraghty. “We met at the ‘Duf’ [DuFour Athletic Center]. We spent a lot of time there with so many mutual friends. Athletics was such a big part of our college life. I look back on it now and I realize the skills I learned playing team sports have been essential to me as an engineer leading projects. Construction is all about teamwork.”



Photos courtesy of the National Law Enforcement Museum

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### A Museum that Offers Experiences

In addition to the regular players on any design and construction team, this project brought exhibit designers and curators into the mix. “We had to work closely with them to bring their exhibits to life,” says Striegel. “They envisioned a museum where citizens would have a chance to walk in the shoes of law enforcement officers. They wanted a visit to this museum to be about experiences.”

Interactive exhibits allow visitors to “take” a 911 call, ride along with officers, make split-second life-and-death decisions in a training simulator, and become a detective by using clues to solve crimes. The “Reel to Real” exhibit explores the differences between reality and entertainment in the depiction of law enforcement in movies and television. Time capsules contain iconic artifacts. The “Web of Law Enforcement” shows how some 18,000 agencies work together. The museum is also equipped with a gift shop, café, a theater, and the Hall of Remembrance, dedicated to the fallen officers listed at the memorial.

Though it’s not an overarching theme, the museum does not shy away from negative law enforcement stories in the news. Headlines from the Michael Brown shooting in Ferguson, Mo., are featured in one exhibit.

“There’s never been a more important time to not only help everyday citizens understand the importance of law enforcement to our society,” says David Brant, the executive director of the museum, “but also to help law enforcement understand the historical, cultural, and socio-economic factors that can cause a divide between citizens and those who’ve sworn to protect them. Our ‘Five Communities’ exhibit is a small but important piece of how we want to share what some communities are doing to help strengthen relationships between citizens and law enforcement.”

Beyond the exhibits, museum leaders have launched a pilot affinity project in Prince George’s County, Md., bringing together citizens, community leaders, and the police department.

“You feel a sense of pride with any project you design,” says Striegel. “But with a museum it’s an even deeper pride. I feel connected to the museum’s mission and grateful to play a role in something that will help citizens appreciate law enforcement.”

For Striegel, the connection to law enforcement started when he helped design the National Law Enforcement Officers Memorial. “I try to come down here every May for Police Week. Thousands of people come in from all over the country and there are all kinds of activities. I’ve been here at the memorial countless times as I’ve watched family members rub the names of their loved ones onto paper. When you see a small child do that, you don’t forget it.

“About 15 years ago, our close friend and my wife’s roommate at Catholic, Jane Mattingly Blackwell, lost her brother in the line of duty in Montgomery, Co., Md. His name is now on the wall. It hits home.”

When Geraghty learned he would be the project manager for the museum, he immediately thought of his late grandfather, William Geraghty, who served as the deputy chief of police in Newark, N.J.

On the mezzanine level of the museum overlooking the exhibit floor is a glass railing that includes a “Thin Blue Line” of inscriptions made on behalf of donors who have contributed \$1,000. The inscribed names can be read from the mezzanine level, but from below it appears as a continuous thin blue line. Geraghty made a donation, adding his grandfather’s name to the railing.

As the construction was nearing completion, Geraghty brought his four-year-old son, Mason William, to work. “I showed him the thin blue line panel with my grandfather’s name on it,” says Geraghty. “His face lit up and he yelled ‘That’s like my name!’ I then explained to him that his middle name was because of his great-grandfather who was an incredible man and a policeman. He couldn’t have been more excited. He immediately wanted to call my dad. It was an amazing moment to be able to share that with my son and my dad.

“That’s the great thing about building a museum — you are preserving history,” says Geraghty. “I’m just happy I got to be part of it.” **CU**

