



A Sunday Morning Walk

By Ed Huston, P.E., S.E., NCSEA Past President

Recently, I was in San Francisco and took the opportunity to walk across the Golden Gate Bridge. I wasn't alone on that Sunday morning as the fog was lifting off the superstructure. There were thousands of people, walking, jogging, riding bicycles, or driving over the bridge. Many of the walkers, like me, were taking pictures. It's a walk that I've made several times before, and one that I really enjoy. While I was walking, I ruminated on the joys and benefits of visiting significant structures.

I've walked the River Walk several times, with its diverting weirs that created the canal and urban renewal for downtown San Antonio. In past visits to New York City, I've toured the World Trade Center, the Empire State Building, and the Brooklyn Bridge, ridden the Subway, and climbed to the top of the Statue of Liberty. In Upper New York State, I've marveled at the bridges at Niagara Falls and walked along the Erie Canal. In Chicago, I've watched a game in Wrigley Field, been to the historic Palmer House Hotel, and to the top of the Sears Tower. I've taken a boat tour on the Chicago River, whose flow was reversed to provide water supply, pollution control, transportation and power. In St. Louis, I've seen the Eads Bridge, ridden to the top of the Arch, and walked through Union Station. In Washington DC, I've visited the many monuments, the National Building Museum, and the U.S. Capitol Building.

When other engineers visit me in Washington State, I drag them to the Lake Washington Ship Canal and Hiram M. Chittenden Locks, and show off Seattle's many bridges, including our unique floating bridges. I take them to some of *our* significant buildings or, if more time is available, to the Grand Coulee Dam.

Further afield, I've ridden on the White Pass & Yukon Railroad which runs from Skagway, Alaska to White Horse in the Yukon Territory. Its trestles and bridges and hairpin turns are truly amazing. I've walked across the Millennium Bridge in London and visited the Tower of London, the Guild Hall, St. Paul's Church and a host of other significant structures. In Paris, I've been to the top of the Eiffel Tower (originally characterized as Eiffel's folly), Notre Dame Cathedral, and the Arc de Triomphe. I've laid down on the floor of the Musee D'Orsay and taken photographs looking straight up the riveted iron arches of the old railway station, which is what that building was before its adaptive renovation into a museum. I believe the building is as much a piece of art as the incredible paintings and sculpture it contains.

I've sat in the Roman Coliseum in Arles, France, which is still in use today as a civic stadium almost 2,000 years after it was constructed, and stood under the Pont du Gard Roman Aqueduct in Southern France. In Florence, Italy, I've been inside Brunelleschi's Dome over the Duomo Cathedral, reflecting that the church stood open to the elements until someone could design a way of bridging the massive span. In Sydney, I've climbed to the top of the Sydney Harbour Bridge and visited the Sydney Opera House.

A few days ago, I was returning from a vacation in Australia and marveled at the robustness of the structure of the 747 which was being thrown all over the sky by turbulence; and I silently thanked the engineers who designed the structure of that airframe.

The list could go on and on, but you get the idea. I believe that as structural engineers, we gain much by visiting significant structures, whether they are bridges, buildings, dams or tunnels. It doesn't matter whether they are listed in a guide book, or are just being built. We can visit them in our own towns and cities, and when we are "on the road". We should go out of our way to know about these gems before we leave home, and plan extra time in our hectic schedules so that these visits are possible.

We would do well to remember the histories of these significant structures. We can think about the engineering challenges the designers faced. We can be inspired by their beauty, strength, simplicity or novelty, whether they are thousands of years old, or under construction. We can expand our awareness of design options, and return to our own designs more motivated and better prepared to tackle the challenges we face on a day-to-day basis. Or we can step back and watch other people, sometimes thousands of other people, interact with significant structures, smile, and know that it's structural engineers who make that interaction possible. ■