A GRAND CANYON ADVENTURE

By George Davis, Professor Emeritus — Mathematics and Statistics

What happens when three 61-year-old guys decide to explore a remote region of the Grand Canyon? Nothing less than the trip of a lifetime!

Emeritus George Davis (Mathematics and Statistics), Paul Burks (a GSU alum and retiree from Georgia state government) and Steve Orsary (George’s longtime friend from the Bay Area) recently returned from a six-day backpacking trip in the Bass Canyon area of Grand Canyon National Park.

George is a Grand Canyon fanatic, having visited on 28 different occasions and spending now 96 days below the rim. Paul is an experienced Appalachian Trail hiker, having completed more than 1,600 miles. Steve has hiked more than 1,500 miles of the Pacific Crest Trail, as well as the Bass Trail with George 37 years ago. So they took their combined expertise, some positive thoughts and a lot of water out to the South Bass Trailhead last September.

The drive to the trailhead is advertised as an adventure in itself, and indeed it was. It took two and a half hours to navigate about 30 miles of ‘road’ that traversed national park, national forest and Havasupai Indian land. Three heads were often required to scout routes around washes, washouts and many uncooperative rocks.

Finally, the day arrived for the descent into the canyon. More than two years of planning and many more years of dreaming were bearing fruit at last. The route would take the team down the Bass Trail to the Colorado River, and then west along the Tonto Trail to its end at Garnet Canyon. The Tonto Trail is about 90 miles long, and runs from Hance Rapids in the eastern Grand Canyon to Garnet Canyon in the west. George had hiked all of it except this last 12-mile segment. Steve and George had done significant portions of the Tonto in that 1975 trip.

For those accustomed to strolling in their neighborhood, or climbing up to the top of Stone Mountain, the ruggedness of this hike is difficult to comprehend. The team was able to average just about one mile per hour over the terrain. None of the trails have been maintained for almost 100 years, and washouts and rockslides have taken their toll. Perhaps the greatest obstacle to making good time is the vagueness of the Tonto Trail. Many times it is just a faint path over a vast plain. In a ‘good’ section, one can see the trail for just 10 to 20 yards. Tracks lead off in all directions and losing the trail completely was very common. Several side canyons had to be traversed and the trail was particularly difficult to find in these crossings. Sometimes the trail would be perched just a few feet from a significant drop-off, while at other times it would safely cross a plain with wide open views.

It was these views that made the whole trip such a stunning adventure. Imagine camping under the stars after a perfect sunset inside the Grand Canyon. This is not the typical tourist vantage: you are in and part of the canyon itself. You have felt those rock layers, one by one, and gotten to know the side canyons. You have seen and felt the power of the Colorado River, and its waters have kept you alive. Throw in a rainbow one evening and the feeling is indescribable.

The six days came to a close much too quickly. On the rim the detailed views fade, but the satisfaction of completing the hike and the memories it has produced has changed these three travelers. Their bond with each other and with the Grand Canyon will stay with them forever.
A decision made in October 1942 determined the course of my whole life, bringing me ultimately to Georgia State University in 1960, and resurfacing 10 years ago to fill my time almost as a ‘second’ profession.

Shortly after Pearl Harbor, the U.S. Navy organized a new division for women. Goucher College in Baltimore was one of seven leading women’s colleges where the Navy sponsored a SECRET course in cryptology to attract recent graduates to become regular line officers. In October 1942, English Professor Winslow invited me, a senior Latin major, to take the SECRET course as preparation for communications intelligence work in Washington, D.C. I accepted.

In July 1943, our group went on active duty for eight weeks of indoctrination in Massachusetts. As ensigns with Top Secret clearance, many of us were sent to Washington, D.C., where we all received individual orders. One ensign from Radcliffe, two others from Goucher and I were assigned to the most highly classified office at the Naval Communications Annex. We would be handling Top Secret ULTRA material. People did not know that level existed. Any talk about it, even in the annex, would be treason. We never talked, we never knew why we were chosen and we never used that course in cryptology!

In that office we handled the already-decoded Top Secret ULTRA German Naval ENIGMA messages between the German High Command and the U-boats. We sent the information up one step to the U.S. Submarine Tracking Room and Admiral King. There it was turned into intelligence used defensively to reroute convoys away from U-boats, and offensively to locate and sink U-boats.

The Germans, nevertheless, continued to believe the Allies could not possibly read these messages encoded on the Navy’s ENIGMA machine. It was a portable electro-mechanical typewriter with 59,000,000 possibilities for each letter key as it was struck. In order to decode the message back into German, the receiver had to have various parts of his machine set in the same way as the sender. My active duty as a lieutenant (junior grade) ended in May 1946, still sworn to absolute secrecy. WAVE officers were not permanently discharged until 1955. Before that time I used my four years of GI Bill at The Johns Hopkins University, graduating with a Ph.D. in classical languages (Latin and Greek). It was there I met Herbert W. Benario in the same department; we married in 1957. Three years later we moved to Atlanta for Herb to teach at Emory University and I at the then Georgia State College of Business Administration. Our two sons were born soon thereafter.

It was not until 1974 that Top Secret ULTRA was declassified. Only then did the world learn, for the very first time, that the Allies had been reading the German Naval ENIGMA messages. ULTRA is now considered the greatest World War II secret after the atom bomb.

In 1984 I retired from Georgia State University, still not speaking freely about my World War II experience. That changed for me, however, in 1991. The
Every time I walk past our dining room and see my wife Julie wearing a microphone, earphones and sitting in front of the computer screen like she’s piloting a 747, I know it’s a new day in class. My wife, a professor in early childhood education, was not an early adopter of technology (nor was I). But by using the program Elluminate she now has the tools to see and communicate with students anywhere in the world. For this session, she follows a preset protocol in which Teach for America students take turns presenting problems they encounter in their kindergarten through 12th-grade classrooms. Their classmates, logged in from different locations, use the microphone to ask for more information and then, in pre-set groups, discuss and present possible interventions. All sessions are recorded so any student can revisit desired segments.

Julie’s class stands in sharp contrast to an article I read a decade ago. The author observed that, although Copernicus would be amazed by our modern ability to explore the heavens and physicians from the 16th century would be speechless in modern operating rooms, university professors from the 16th century would be right at home in the lecture halls of U.S. universities. While university teaching may not have changed much in those 400 years through the 20th century, that is not the case for the 21st century. Effective student learning today requires rethinking teaching.

If you visit a large lecture class at Georgia State today, you might find the instructor using a student response system (clickers) to continuously assess students. For example, after short lecture or demonstration the instructor asks students to answer a question, predict an outcome, or express an opinion. Based on how students respond, the instructor can choose to reteach a concept, correct an apparent misunderstanding or ask another question to further engage and challenge students. Instructors can take attendance and even administer quizzes using clickers because each is registered to an individual student.

If you stop in the bookstore you’ll find that textbook publishers are rapidly moving to e-book formats that integrate online resources and multimedia presentations to augment the text. You can imagine how learning a science lesson changes as students watch the life cycle of an amphibian or how history comes to life by hearing Roosevelt’s fireside chats. Some Georgia State faculty members are creating their own e-books and resources with tools such as iAuthor.

The sense of a class being in a specified place held only at a scheduled time is also rapidly changing. Some programs have expanded the sense of class by using lecture-capture technology to enable students to easily find and review parts of class sessions online (and no, attendance has not become a problem). Some Georgia State faculty members teach “flipped” classes that meet face-to-face for one session and the next session online. Others expand the class beyond walls and time by using tools such as Twitter to engage students in ongoing discussions about readings or projects or online video tutorials that provide remedial assistance in solving problems. One Georgia State instructor manages a massive open online course (MOOC) in biology, which has more than 1,400 participants from around the world. (Only GSU students get course credit).

The keys to promoting learning haven’t changed—faculty interacting with students, providing helpful feedback, motivating them to do their best work and making instruction relevant and challenging. What’s changed is that we now have more tools to use. We can only imagine what the next decade will bring.
1942: A Decision  cont. from page 2

story of our Washington, D.C. naval office, with a picture of the naval officers involved, appeared in David Kahn’s book, “Seizing the ENIGMA.” At that time, my thoughts and reading turned back again to the war. During the past 10 years I have told the story many times, to many groups of people.

In May 2010, Goucher College again became a significant part of my life by presenting me with an honorary doctorate of humane letters. This was a most unexpected recognition of my “two professions.”

There is still much interest in World War II as many people wish to learn more and new details, and each year so many elderly veterans die. Historians now conclude that if we had not been reading ULTRA successfully, D-Day would have taken place at least one year later; V-E Day and V-J Day two years later. The atom bomb might have been dropped on Berlin. ENIGMA and our decoding efforts saved the world two years of war, billions of dollars and millions of lives. October 2012 marks the 70th year from October 1942, when I made the momentous decision to take the Navy course as a senior at Goucher.
SPRING’S LUNCHEON MEETINGS will take emeriti behind the scenes of the Petit Science Center for state-of-the-art science integrated with a variety of other disciplines, including art, geography and health. The March 28 program will feature Dr. Jian Dong Li, the director for Georgia State’s first university-level multidisciplinary research center – The Center for Inflammation, Immunity & Infection. Our May program will take us to the Visualization Wall, which helps artists, chemists, geographers and others view items on a macro level.

Dr. Li’s presentation will focus on novel research that is helping us to learn about chronic conditions related to inflammation. Inflammation is one of the body’s major defense mechanisms in response to infection or injury. However, when it is uncontrolled, it causes diseases such as COPD (chronic obstructive pulmonary disorder), asthma, rheumatoid arthritis, gastrointestinal conditions, cancer and more. Come see what your body has been doing over the past 60+ years to help shape your health profile.

The Visualization Wall has a resolution of more than 200 million pixels (the smallest unit within an image) that can display maps, pictures, molecules and other images in large-scale high resolution. We’ll see pigments and brush strokes from paintings that help to determine authenticity, complex data to establish geographic and health informatics markers and other big-to-small applications. This is a unique tool for the southeast, and it is on our campus.

Professor Emeritus of English
Ted R. Spivey died on Dec. 7, 2012, at Hospice of Golden Isles in St. Simons, Ga. Spivey was a highly respected professor and scholar of Southern literature. He joined the faculty at GSU in 1956 and retired in 1989 as a Regents’ Professor of English. Spivey wrote 24 books and dozens of essays, many of them about Southern literature. Students remember him as a helpful, inspiring teacher; colleagues remember him as a “skilled and insightful commentator,” according to the AJC (December 10, 2012).
FALL AUTHOR SERIES
LARRY BERMAN

By emerita Anne Page Mosby, chair of Author Series

The emeriti audience enjoyed a varied presentation on November 29 when Larry Berman, founding dean of the Honors College, discussed his biography, “Zumwalt: The Life and Times of Admiral Elmo Russell ‘Bud’ Zumwalt, Jr.” The book details the life of the charismatic chief of naval operations who expanded opportunities for women and minorities, modernized technology in the U.S. Navy and fought a war against the secrecy of the Nixon White House. Our featured writer described a fascinating tale of exhaustive research involving access to classified and declassified documents, research in archives and libraries and in-depth interviews. Additionally, he shared information about building the GSU Honors College, which recognizes high-achieving students with unique academics in the classroom, student life outside of the classroom and opportunities for global experiences.