



HFC *on* MEDIA

May / June | 2007

Issue 18



This handheld multimedia device was one of many such models on display at the 2007 annual meeting of the American Association of Museums (AAM) in Chicago. HFC media specialists sampled handheld audio devices, video devices, cell phone programs, and other new media devices. Devices for disabled users were also prominently featured. (NPS Photo by David Guiney)

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From the Editor

HFC media specialists joined 6,000 attendees at this year's annual meeting of the American Association of Museums (AAM) in Chicago. Among the exhibitors HFC staff spoke with were exhibit designers and fabricators, audio tour producers, lighting specialists, filmmakers, and mannequin sculptors. Guide by Cell, which has produced cell-phone audio tours for Valley Forge, had a booth (www.guidebycell.com). So did Solid Terrain Modeling, a National Park Service IDIQ contractor (www.stm-usa.com).

Exhibit producer Anita Smith attended sessions related to accessibility. At one presentation, she listened to Steven Landau of Touch Graphics, who demonstrated products for the visually impaired (www.touchgraphics.com). Another accessibility session focused on new technologies for people with hearing loss. One of the presenters, Sarah Blannett, comes from the NPS affiliated Lower East Side Tenement Museum.

Podcasting was a hot topic at the conference, and exhibit planner Caitlin McQuade attended several related sessions. At one of them, staff from the Chicago History Museum described their experience working with the Second City comedy troupe to produce downloadable audio tours for the exhibition *Crossroads of America*. Check out the results, including a special tour for teens, at www.chicagohs.org/planavisit/exhibitions.

Exhibit planner David Guiney has collected brochures and contact information for several of the AAM vendors. Feel free to contact him by email at David_Guiney@nps.gov.

The Clara Barton Interactive Experience

Creating Engaging Web Content with Flash

Clara Barton National Historic Site recently unveiled a new online virtual tour of the Clara Barton house in Glen Echo, Maryland. Called "The Clara Barton Interactive Experience," the virtual tour and related online activities are designed to engage school children and general audiences alike in the story of Clara Barton and the early history of the American Red Cross.

Clara Barton National Historic Site commemorates the life of Clara Barton, founder of the American Red Cross. The Clara Barton home served as the headquarters and warehouse for the organization. From this house, Miss Barton organized American Red Cross relief efforts for victims of natural disasters, epidemics, and war. The site tells the story of the early American Red Cross and its founder Clara Barton through the acquisition and use of museum objects, library and archival material, and associated records. The site also tells the story of Miss Barton's final home—the first permanent office of the American Red Cross, in Glen Echo, Maryland—and makes the home and its collections accessible in historically furnished rooms, short-term exhibitions,

special events, and school programs for the education and enlightenment of visitors and researchers.

The interactive program was the brainchild of Clara Barton staff, who first submitted the concept as a Parks as Classroom grant request in August 2004. The idea evolved through several iterations to become a Web-based Flash application that would engage school children and general audiences alike in the story of Clara Barton and the American Red Cross. The interactive program, according to the park's grant application, would permit both students and general audiences to retrieve and read historic letters, newspaper articles, and other related documents; type letters or solicitations

on behalf of Clara Barton and the American Red Cross; view historic photographs; listen to audio files in Clara Barton's "voice" and by some of her closest associates; and visit and explore rooms

Dr. Julian Hubbell, Clara Barton's chief field agent for the American Red Cross, introduces the student activities in this screenshot from the "Clara Barton Interactive Experience."



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Send questions and comments to David T. Gilbert either by email at david_t_gilbert@nps.gov or call 304 535 6102.

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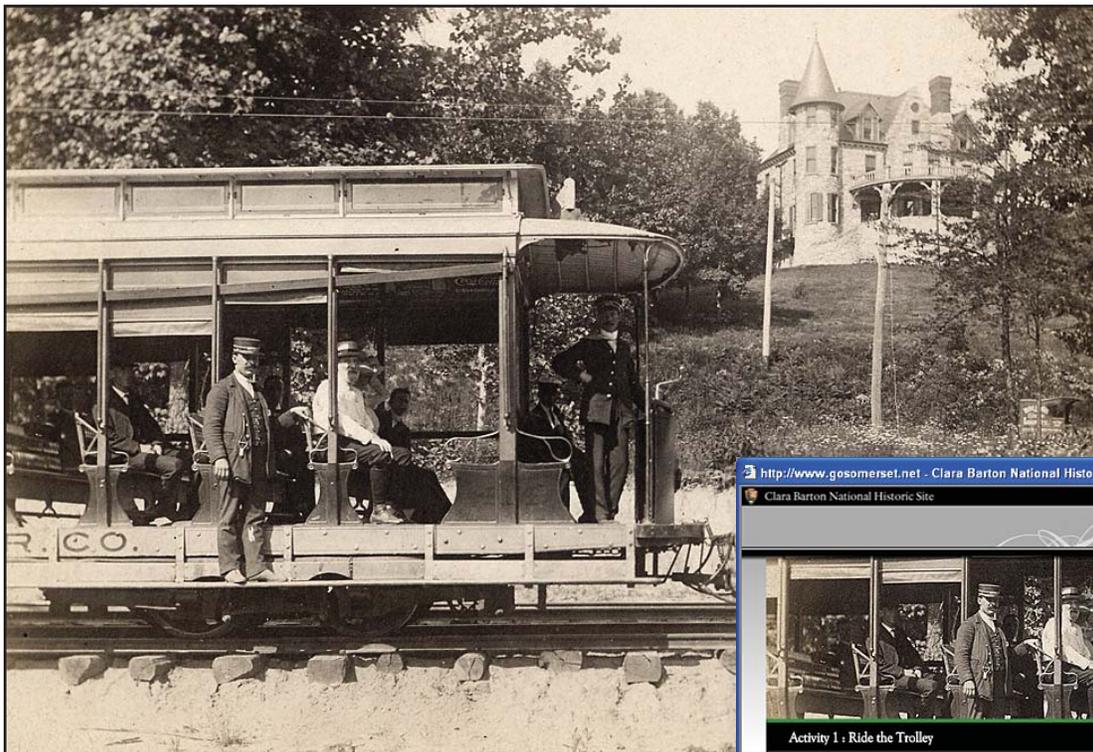
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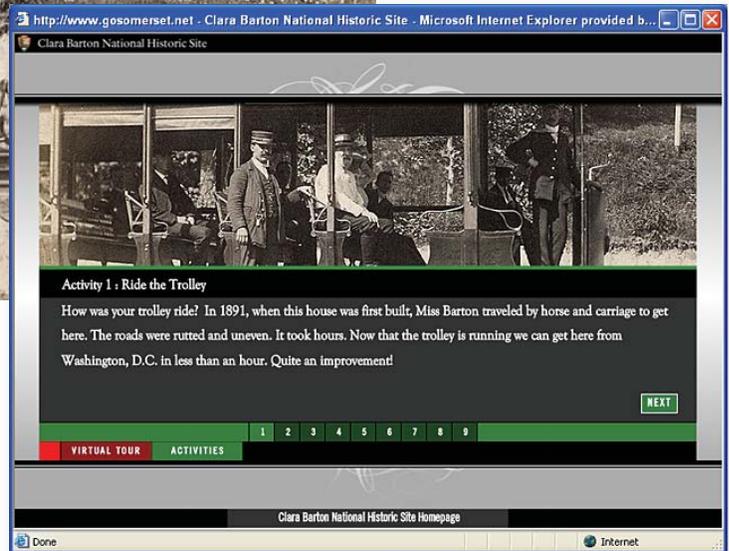
The National Park Service cares for special places saved by the American people so that all may experience our heritage.

EXPERIENCE YOUR AMERICA™



Left: A trolley car pauses in front of the home of Edwin Baltzley, one of the original Glen Echo developers, c.1896. (From the personal collection of Edwin Baltzley, courtesy of the Richard A. Cook collection)

Below: In the "Ride the Trolley" activity, the historic photograph is used to talk about travel in the days before paved roads and automobiles.



and artifacts in the Clara Barton house. A series of activities would be developed to meet elementary education Standards of Learning for the Montgomery County, Maryland, public school system.

One of the most compelling arguments in the park's funding request was based on the international scope of the Red Cross story. Because the story of Clara Barton and the American Red Cross has such broad international appeal, hosting the interactive program on the park's website would provide a very effective long-distance learning tool for students and general audiences who could not physically visit the site. As audiences viewed the offices, supply rooms, and living quarters online, they would be experiencing the home and its collections in almost as much detail as "real" visitors do. The inclusion of audio files, historic photographs, historic documents, and interpretive text would further enhance the "virtual" visit.

Funding for the program was approved in 2006. In May 2006, the park approached Harpers Ferry Center to provide contracting services for the online program.

Using their Parks as Classrooms grant and other funding sources, \$12,475 was allocated for design and production of the interactive Flash program. The balance of the park's funding was allocated for two Montgomery County, Maryland teacher stipends. The teachers would help develop curriculum to meet Maryland State Standards of Learning, and would also help guide development of the interactive program's curriculum-based activities.

HFC and Clara Barton staff drafted a scope of work for the Flash program, solicited bids from two National Park Service Indefinite Delivery - Indefinite Quantity (IDIQ) contractors, and awarded a contract to Somerset Group, a Multimedia Planning and Production IDIQ contractor located in Madison, Alabama. The contract called for a 15-room virtual tour of the Clara Barton house and a total of nine activities each for grades 2-4 and grades 5 and up.

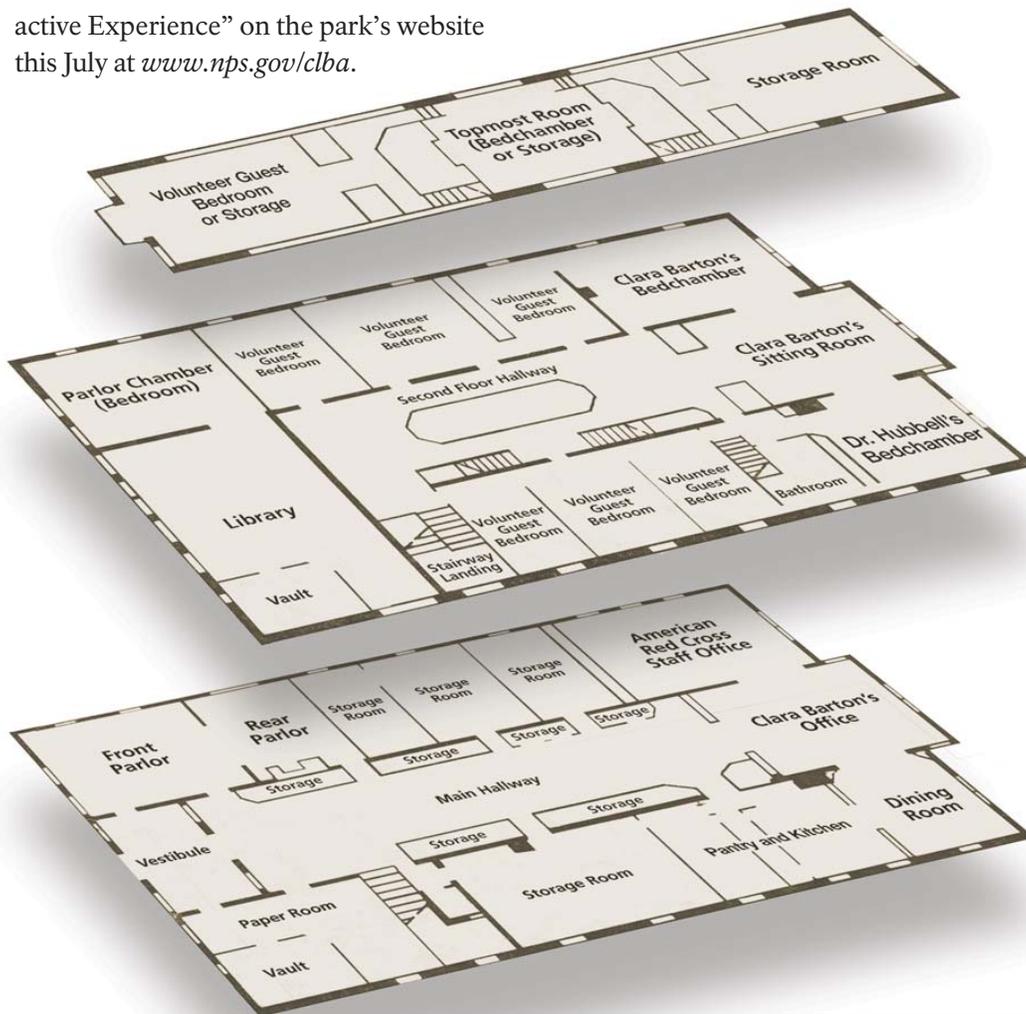
Interactive Activities

Nine activities for grades 2-4 and grades 5 and up are introduced and narrated in the "voice" of Dr. Julian Hubbell, chief field agent for the American Red Cross under Clara Barton. "Dr. Hubbell" presents information, photographs, artifacts, and documents pertaining to Clara Barton and the American Red Cross. After each presentation, students may be asked to answer multiple choice questions, select and move a series of objects, read one or more historic documents, or type a letter on behalf of Miss Barton's American Red Cross.

In April 2007, Clara Barton National Historic Site and Harpers Ferry Center modified the original contract to add additional audio narration and interactive features to the Flash program, bringing the contract total to \$13,967. The program is now undergoing final testing and review. Look for “The Clara Barton Interactive Experience” on the park’s website this July at www.nps.gov/clba.

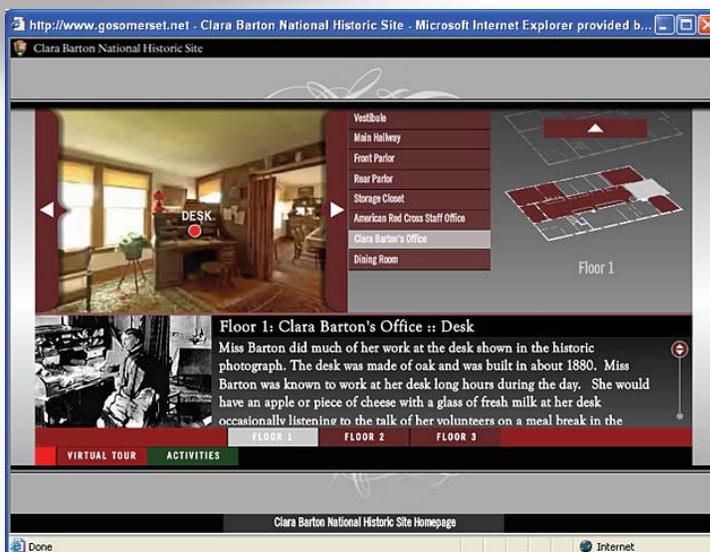
The NPS Project Team

Clara Barton National Historic Site: Ronnie Spiewak, Susan Finta, Joseph Burns, and Kym Elder. Harpers Ferry Center: Delia Garza, David T. Gilbert, Michele Hartley, and Beverly Rinaldi-Alt. The Somerset Group: Carol Rives.



Interactive Virtual Tour

Navigation for the virtual tour is based on a 3-D schematic floor plan of the Clara Barton house adopted from the official park brochure. Users can select a floor and then choose a room to view and manipulate a panoramic photograph of that room. “Hot spots” within each room provide access to in-depth information including artifacts, historic photographs, historic documents, or even audio quotes in the “voice” of Clara Barton.



Selma to Montgomery Interactive Program Wins Award

Selma to Montgomery National Historic Trail’s *Never Lose Sight of Freedom* interactive, mixed media educational DVD was named a finalist at the New York Festivals’ Interactive & Alternative Media Awards competition in April 2007. The double DVD “edukit” is an innovative educational/interpretive media product—the first of its kind developed and produced by Harpers Ferry Center. This is also the first time the National Park Service has been nominated for this prestigious international award.

Never Lose Sight of Freedom not only chronicles the events of the Selma to Montgomery Civil Rights marches of 1965 through the eyes of its participants, but attempts to address the meaning of the march today. As HFC Producer/Director Tim Radford envisioned it, a team of students would seek to uncover the story and legacy of the voting rights movement, assessing its significance from their own perspectives. The focus would be: From voting rights to human rights—how is the baton of change passed to the next generation? The result is an engaging and emotional look at the Civil Rights struggle through the eyes of contemporary students.

For 50 years, New York Festivals has recognized The World’s Best Work™ in advertising, programming, design, and marketing by honoring creativity and effectiveness in global communication through several annual competitions.

The award for *Never Lose Sight of Freedom* recognizes the work of the entire Harpers Ferry Center team, which includes Tim Radford (Producer/Director), Chuck Dunkerly (Producer/Editor), Steve Cannon (Editor/Technical Specialist), and Lakita Edwards (Education Specialist).

Yavapai Observation Station Re-Dedicated

New Exhibits Bring Geology of the Grand Canyon to Life

On May 24, 2007, the National Park Service re-dedicated the historic Yavapai Observation Station—originally called the Yavapai Point Trailside Museum—on the South Rim of the Grand Canyon. New geology exhibits, consistent with the vision of the building’s designers to “make the out-of-doors intelligible,” were also unveiled.

The original structure, which was first dedicated in July 1928, was designed by architect Herbert C. Maier. The building was erected on a site selected by a team of geologists for the express purpose of observing and understanding Grand Canyon geology. Maier, who also designed Park Service museums at Norris Geyser Basin in Yellowstone National Park and at Glacier Point in Yosemite National Park, designed the Yavapai Point Trailside Museum to blend into its setting, and used indigenous Kaibab limestone and ponderosa pine in its construction.

The rehabilitation of the structure and the design of the new exhibits was a Federal Lands Recreation Enhancement Act project, with funding coming directly from park entrance fees. The new exhibits, consistent with the vision of the building’s original proponents, focus on the geologic story of the Grand Canyon.

Staff at Grand Canyon National Park, working closely with exhibit planners and designers at Harpers Ferry Center and with exhibit fabrication contractors Chase Studio and Southern Custom Exhibits, guided the planning, design, and fabrication of the new exhibits. Through the efforts of this entire team, the new exhibits allow park visitors to experience and understand the complicated geologic story of the Grand Canyon. Even more importantly, the exhibits serve as a catalyst for visitors to seek out canyon resources on their own, and to experience intellectually and emotionally the power-



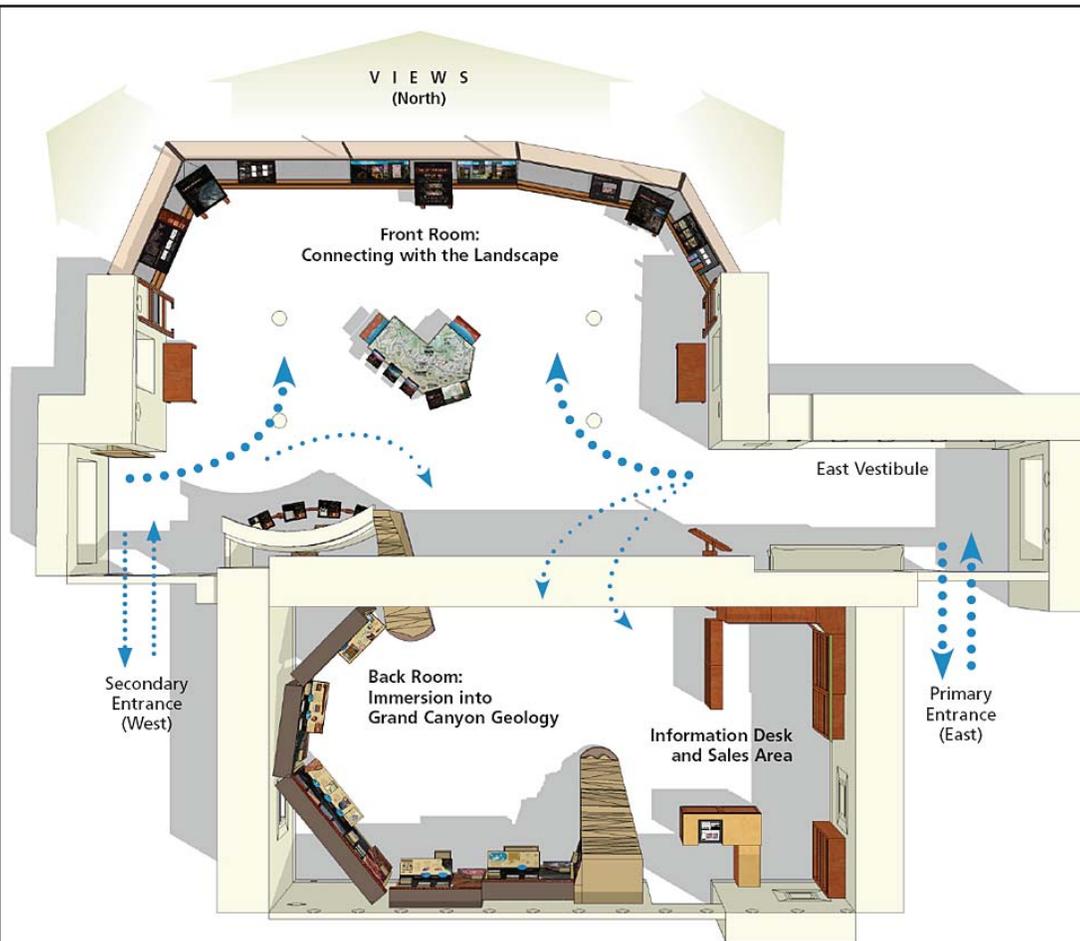
ful geologic processes still at work on the canyon today.

The Yavapai exhibits explain the deposition of the rock layers, the uplift of the Colorado Plateau, and the carving of the Grand Canyon. Displays include beautifully crafted artwork, three-dimensional models, powerful photographs, and interpretive panels which allow park visitors to see and understand the complicated geologic story of the Grand Canyon. Visitors can also view video footage of the Colorado River and diverse views of the canyon landscape. A computer animation depicts sea encroachment and retreat, showing millions of years of geological events in less than thirty seconds.

Learn much more about the new exhibits on the pages that follow.

“We are extremely excited about the renovation of Yavapai Observation Station, along with the new exhibits that tell the story of Grand Canyon’s geology. This is but the first step, as we continue to forge opportunities for connections between our park visitors and the incredible Grand Canyon.”

Steve Martin
Superintendent
Grand Canyon National Park



Left: Floorplan for the Yavapai Observation Station exhibits. The front room, labeled “Connecting with the Landscape,” focuses on the canyon landscape visible outside the windows. The back room, labeled “Immersion into Grand Canyon Geology,” provides more in-depth museum-like exhibits.

Below: These low profile exhibit panels in the front room along the north-facing observation windows convey the variety of beauty, color, and texture found in the Grand Canyon. They also describe the on-going erosional forces that continue to shape the canyon features. One of the panels provides a tactile relief model depicting Shiva Temple, Isis Temple, and Cheops Pyramid. On the far left a continuous-loop video monitor shows different perspectives of the canyon. (NPS Photo by Chris Dearing)

The Exhibit Space

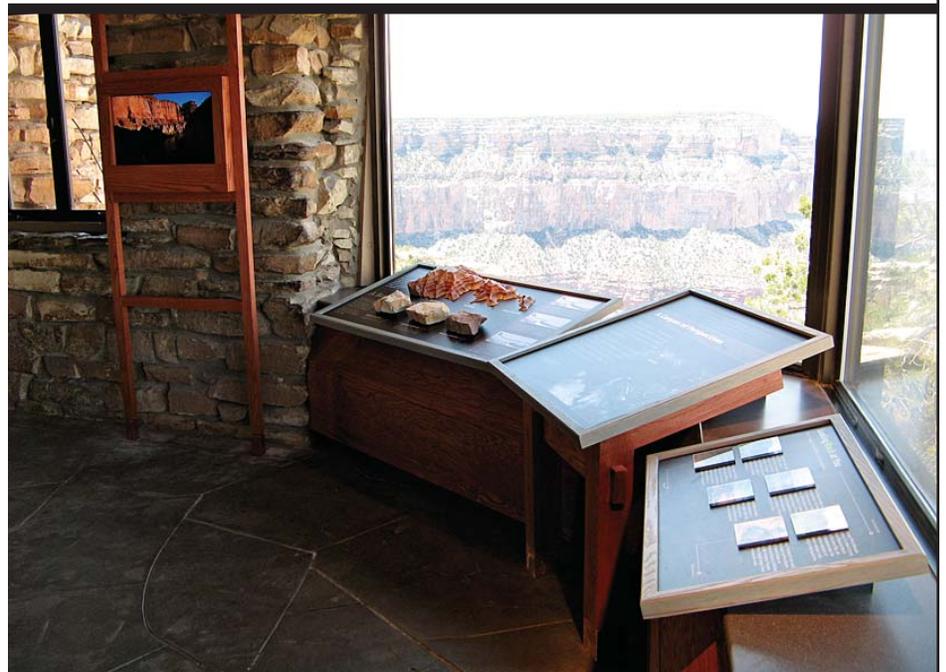
The Yavapai Observation Station must accommodate as many as 6,000-7,000 visitors a day in a space that totals just 1,400 square feet. As a result, the exhibit planners agreed to provide as much open space as possible, and to avoid complex interactives that might slow visitor movement through the exhibits.

The original 1930s design of the building prescribed two distinct experiences: viewing the canyon from the front room, and interacting with more museum-like exhibits in the back room. The new exhibits emulate this original plan.

The front room, labeled “Connecting with the Landscape” in the floor plan above, features low profile wayside-type panels that allow visitors to view the wide, expansive scenery while helping them better understand the landscape they see. Exhibits here emphasize geological processes visible in the canyon view.

Some objects and exhibit elements are interactive, but low-tech and simplistic in design. Videos play on continuous loops and are silent.

The front room also includes a topographic relief model (*see the next page*).





Above: This highly detailed topographic relief model of the Grand Canyon is located in the front room of the Yavapai Observation Station.

Far Left: A Computer Numerically Controlled (CNC) router at exhibit fabrication contractor Southern Custom Exhibits carves a high-density foam template that will be used to create a mold for the final relief map. The router uses Digital Elevation Model (DEM) data to create an extremely accurate template.

Left: An interpretive panel along one edge of the topographic relief map illustrates and explains how erosion widened the canyon over time.

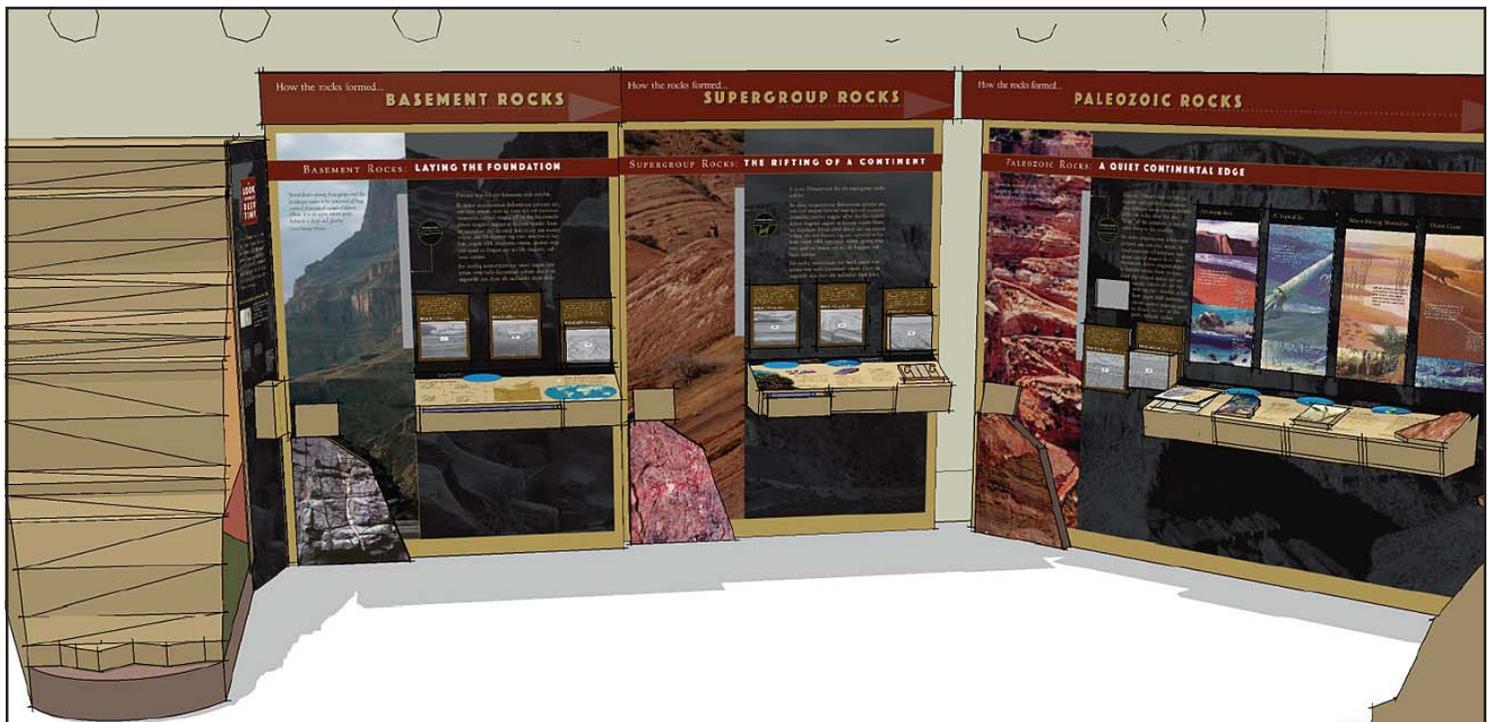
(NPS Photos by Chris Dearing)

Canyon of Enormous Proportions

A large topographic relief model in the front room of the Yavapai Observation Station mimics the canyon view in remarkable detail. The map is a dimensional, tactile model that has true color and labeling directly applied. Visitors can quickly gain an eye-opening vantage to the three-dimensional nature and scale of the Grand Canyon.

The map is a product of very close collaboration between HFC cartographer Tom Patterson and contractors International Mapping, Southern Custom Exhibits, and Chase Studio.

International Mapping provided Digital Elevation Model (DEM) data to Southern Custom Exhibits for their Computer Numerically Controlled (CNC) router. The router carved a detailed template into a block of high-density foam. The foam template was then sent to Chase Studio, who specialize in natural history models. Chase Studio created a mold from the foam template, formed the final map in a durable resin, then hand painted the natural landscape, adding roads, trails, park boundaries, etc. These map details were traced using a special audio-visual system that projected a map image onto the surface of the relief model.



Above: This drawing from the Final Exhibit Plan shows a series of interconnected exhibits forming a sweeping arc along the south and west walls in the rear room of the Yavapai Observation Station. They introduce the three steps of rock formation and the variety of their associated rock types; they convey a sense of the long period of time required to build up the canyon rocks; and they explain formation of the rocks in the context of a dynamic planet with illustrations of plate tectonics, climate changes, and fluctuations in sea level.

Left: Photograph of the same finished exhibit space. (NPS Photo by Chris Dearing)

Immersion into Geology

The back room of the Yavapai Observation Station is devoted to “Immersion into Grand Canyon Geology.” These exhibits are more museum-like, providing visitors with more comprehensive and in-depth interpretation of the canyon’s geology.

The exhibits here are bordered—both physically and thematically—by scale models of the canyon walls representing the North and South rims. The models are generalized depictions and are

positioned relative to the landscape (the North Rim model is approximately north of the South Rim model). Visitors pass between these canyon walls into a series of interconnected exhibits that tell the story of how the rocks were formed, uplifted, and then eroded away to create the canyon. Exhibits illustrate the steps of rock formation and rock types, convey a sense of geologic time, describe the process of canyon formation, and establish a connection between formation of the Grand Canyon and the landscape today.

Canyon Wall Columns

Grand Canyon National Park's geology subject matter expert Carl Bowman and the park team devised the idea of using scale model walls of the North and South rims of the Grand Canyon to frame the Yavapai Observation Station exhibits. These columns provide a dramatic visual backdrop for the rear room exhibits, convey the beauty and variety of landscape features in the canyon, distinguish between the north and south sides of the canyon, illustrate the stratigraphy of Grand Canyon rocks, and serve as a prop for interpreters to use in their talks.

Contractor International Mapping furnished canyon maps, geographic illustrations, and reference 3-D visualizations to model maker Chase Studio. Chase Studio in turn used these visual aids to develop

generalized but highly realistic sections of the North and South rims of the canyon, paying particular attention to the slope, color, and texture of the canyon walls.

While the north column has a longer profile and shows more and larger springs, the south column is shorter and has a steeper profile. Mounted on the cutaway face of each column is an acrylic digital graphic print that depicts each rock layer with its name and age.

Below left: Employees of exhibit fabrication contractors Southern Custom Exhibits and Chase Studio carefully guide a canyon wall column into the Yavapai Observation Station. (Grand Canyon National Park Photo)

Below right: Finished model of the South Rim canyon wall. (NPS Photo by Chris Dearing)

Bottom: An employee at Chase Studio carves the North Rim model from laminated layers of foam. (NPS Photo by Chris Dearing)



Retirees

Rich Helman

Wayside exhibit planner Rich Helman has retired after 30 years with the National Park Service. Helman, who graduated from N.C. State University with a degree in Recreation and Park Administration, came to the NPS through the Ranger Intake Training Program in 1973. As part of this one-year training program, Helman spent 12 weeks at Albright Training Center in Grand Canyon National Park, four weeks studying environmental education at George Williams College in Williams Bay, Wisconsin, and six months at Independence National Historical Park in Philadelphia.

After completing the program, he was assigned as a law enforcement ranger at Everglades National Park, Florida. Just three months later, he was detailed to Fort Jefferson—now Dry Tortugas National Park—where his duties included a broad range of park ranger activities including law enforcement and interpretation. During his two and one-half years at Fort Jefferson, Helman acquired a particular interest in both cultural history and natural history, and became a certified diver.

In 1976, Helman left the Park Service to pursue a life-long goal—to hike the entire Appalachian Trail, which he did in 1977. One year later, in 1978, he was back with the NPS as a seasonal ranger at De Soto National Memorial in Florida, followed by seasonal tours at Mount McKinley (Denali) National Park, Everglades National Park, and Wright Brothers National Memorial. After working at Wright Brothers, Helman was accepted into the N.C. State graduate program in Life Sciences, where he earned his Masters degree.

In 1983, Helman was hired as an interpretive naturalist at Canaveral National Seashore, where he quickly moved up to become Chief of Interpretation. In 1986, he began planning a series of wayside exhibits for the park. Through his work on this project, Helman met Ray Price, Chief of the Division of Wayside Exhibits at Harpers Ferry Center. Price liked Helman's work, and in May 1986, hired him as a wayside exhibit planner.

At Harpers Ferry Center Helman found a home, and he spent the next (and last) 21 years of his career as a wayside exhibit planner. During that time, he planned over 1,000 wayside exhibits for such diverse parks as Fort Sumter National Monument, Grand Canyon National Park, Great Smoky

Mountains National Park, Isle Royale National Park, Kalaupapa National Historical Park, New River Gorge National River, Sequoia and Kings Canyon National Parks, and Shenandoah National Park. Of his many projects, one that stands out in particular was Fort Scott National Historic Site, Kansas, where a combination of factors including park staff, interpretive stories, and illustration development resulted in some of Helman's most gratifying work.

One of Helman's few regrets is that the HFC wayside exhibit planners, designers, and producers rarely get to see their waysides after they've been installed at a park. So one of his goals during retirement is to travel to many of the national park sites where his waysides are located and finally see the results of his years of work.

Helman and his wife, Deborah—who was a seasonal naturalist at Everglades National Park when they met in 1973—will continue to live in the northern Shenandoah Valley near Martinsburg, West Virginia. They have two grown sons, Tim and Chris.

David Nathanson

Harpers Ferry Center librarian David Nathanson has retired after 32 years with the National Park Service. Nathanson came to HFC in 1974 as the center's first professional librarian. During his tenure, the library collections grew from about 8,000 volumes to over 33,000 catalogued items. Among the most notable collections Nathanson has managed include the papers and books of Harold L. Peterson, former chief curator of the National Park Service and world-renown authority on arms, armor, and military science; some of the papers, films, and taped interviews of Horace Albright, second director of the National Park Service; and the Ronald F. Lee Papers, which contain the records of an early chief historian, regional director, chief of interpretation of the National Park Service, and one of the founders of the National Trust for Historic Preservation.

Nathanson has also catalogued the records of key programs and events that have shaped the National Park Service, including the Civilian Conservation Corps (CCC), the Mission 66 program (1955-1966), the National Parks Centennial (1972), and the American Revolution Bicentennial activities of the Service. Nathanson's "Publishing History of *The Courier*" catalog indexes the National Park Service employee newsletter from 1977 until publication was discon-

tinued in 1993, *The Courier* provides a wonderful snapshot of NPS operations, covering a variety of topics on NPS employees, news, operations, and programs.

One of Nathanson's most memorable accomplishments has been "Sunshine and Shadows: A catalog of Civil War Unit Histories and Personal Narratives in National Park Service Libraries." With the assistance of the parks, Nathanson assembled and published this catalog in 1986 where none had previously existed. NPS Chief Historian Ed Bearss wrote the introduction for it. The catalog evolved from typewritten pages in a three-ring binder to a desktop database which today contains over 4,900 records and is available as a searchable Web application on the HFC website.

During his 32-year tenure at Harpers Ferry Center, Nathanson has managed library services, archival services, and graphics research. He has served as Curator for the National Park Service History Collection, supervised the National Park Service Historic Photograph Collection, and served as HFC's Information Management Coordinator. He has served on the National [Museum] Catalog Steering Committee, the National Park Service Archives Advisory Council, and the NPS Library Advisory Council.

Recently, Ann Hitchcock, Chief Curator of the National Park Service, said of Nathanson: "I will be forever grateful to you for stepping up to provide the first archival guidance for the servicewide museum program in the 1980s. At a crucial moment, you filled a gap that enabled us to start down the road to a professional approach to our archival collections on a servicewide basis."

Nathanson plans to remain in the Frederick, Maryland area.

Nancy Purinton

Nancy Purinton has retired from the National Park Service after 13 years as paper conservator at Harpers Ferry Center. When Nancy arrived at the Center in 1994, she had to re-establish the paper conservatory laboratory. While here she worked on such major projects as the wallpaper in the Diplomatic Reception Room at the White House, the Fort Stanwix Orderly Book, and the exhibit of one of the first printed copies of the Constitution and Amendments for Independence National Historical Park. Servicewide, paper collections have benefited considerably from Nancy's work.