Pure 'Cherokee gold'

- By BETTY SMITH, Jun 26, 2008

Dr. Norbert Hill addresses admirers of Mary Golda Ross, including, from left: former Principal Chief Wilma Mankiller, Tribal Councilor Cara Cowan Watts, and Ross' niece, Evelyn Ross McMillan. In the background are Principal Chief Chad Smith and Dr. Allen Schneider, who offered prayer during a memorial service Wednesday.

To her colleagues and the young people she inspired, Mary Golda Ross was known as Mary, but to her family, she was pure gold.

Those whose lives were touched by Ross came together Wednesday at the Cherokee Tribal Council chambers to share their memories of this Cherokee pioneer in aviation and aerospace, who died April 29 at Los Altos, Calif. After the memorial, Ross' ashes were committed to the earth at Ross Cemetery, the final resting place of many family members.

The tribal council had passed a resolution and planned to honor Ross on the date of her 100th birthday, but her death came too soon, several speakers said. Wednesday's memorial served as a substitute for that occasion, and if Ross was not there in person, her spirit filled the auditorium as people remembered her and watched a video of her achievements.

The Wright brothers made their first flight less than five years before Ross was born Aug. 9, 1908, at Bald Hill. At that time few, if any, people in the Cherokee Nation had seen an airplane. But during her life, she became involved designing planes for American pilots during World War II, and working on the fledgling space program.

With other people in the United States and worldwide, she was thrilled when astronaut Neil Armstrong first stepped on the moon, knowing she helped lay the path for that achievement. "I always wanted to be one of the women behind the first woman in space, and I was," she once said.

Ross, the great-grandmother of famed Principal Chief John Ross, was one of the first students at Owen School at Park Hill. Her parents, Mary Henrietta Moore Ross and William Wallace Ross, were pictured in the video at their wedding reception at the Murrell Home. The family's commitment to

education was embodied by the donation of part of her mother's land for construction of Bald Hill School.

She received her high school diploma at age 16, and went through the curriculum at Northeastern State Teachers College in three years. While teaching school, she spent her summers finishing her bachelor's degree. She worked for the Bureau of Indian Affairs, helping educate young women. She also received her master's degree in mathematics, which she loved.

Ross visited California in 1942, a life-changing trip. That year she started work as a mathematician at Lockheed Corp., and with the company's encouragement, earned her engineering degree. She was the first woman and the first Native American engineer at Lockheed, an achievement of which she was proud.

She received numerous awards throughout her lifetime and once appeared on the popular TV show, "What's My LIne?"

"I had the privilege of studying with three Nobel prize winners, and I have to say I hold Mary at that same level," said Dr. Marilyn Grass Culp, a scientist and physician who cherishes Ross as a mentor.

She believes the only reason Ross didn't become a Nobel laureate was that much of her work was classified then, and remains so today.

When she first told Ross of her ambitions to become a scientist and a physician, Ross didn't scoff, but encouraged her and continued to do so.

“What struck me most about her was her generosity,” Culp said. “I thought she was someone I’d like to emulate.”

Later, Culp had the chance to return the favor, treating her when Ross, then elderly, became ill during a conference of American Indian Science and Engineering Society, a group she actively served as a mentor and a source of inspiration. As she drove Ross to her office for treatment, Ross continued her educational role, talking about the history of Tulsa and the Arkansas River.

Dr. Norbert Hill, a scientist who knew Ross as a colleague and also in his role as Oneida chief, recalled Ross’ warmth and humor.

“Somebody said that when Mary Ross died, the Cherokee Nation IQ went down a few points,” he said, provoking a few laughs. “We need heroes so we have something to measure our lives against.”

Ross was one of those heroes, he said.

He recalled visiting Ross in California and riding in her aged Oldsmobile 88, “a true Indian car … bigger than a Hummer and smaller than a jet.” When they arrived at a restaurant, Ross adeptly parallel-parked it in a tiny parking place with inches to spare.

“I said, ‘Well, she used to park missiles in space,’” he said.

He said Ross was the “queen of the ball” in 2002 at the opening of the National Museum of the American Indian at the Smithsonian. She wore a green tear dress, which was on display at the memorial.

“She said, ‘I’m 95 and this is my first Cherokee dress. I know for sure there couldn’t have been a prouder Cherokee in the land,’” Hill said.

Her niece, Evelyn Ross McMillan, said that for nearly 70 years, she had known Ross as “Aunt Gold.” McMillan, who taught math for 23 years, is one of 11 teachers in the family.

Several summers ago, when Ross was 94, McMillan sat with her, doing paperwork. Ross asked her to check her figures. A calculator was on the table, and McMillan reached for it.

“She reached over, slapped my hand, and said, ‘You know that’s not the way to do that,’” said McMillan, whose tears welled up along with the fond memories.

Ross had deep pride in her Indian heritage and her belief in hard work. She once said, “If my European ancestors had been as smart as my Indian ancestors, we would have a different world.”

For much of her life, Ross was considered almost a curiosity because of her pursuit of a male-dominated profession. During her career at Lockheed, the company considered her work critical to the Agena space rocket, an essential step in the Apollo program to land on the moon. She worked on some of the earliest plans for a manned orbital space system and flyby missions to Venus and Mars.

Her work was part of the NASA Interplanetary Manual used by astronauts.

The video showed newspaper headlines about the talented engineer with the headlines, “A Miss Behind Our Missiles” and “A Far Out Cherokee Chick.”

She even was a calendar girl, serving as Miss July 1984 for the “Winning Opportunities for Women” (WOW), a group trying to inspire young women to nontraditional careers.

Wilma Mankiller, former Cherokee Nation principal chief, praised Ross’ feminist accomplishments.

“There’s no woman I’ve ever met who was more intelligent, more compassionate, and just a great lady,” she said. “I still have an image of Mary leaning down to listen to young students who had the hope of a career in math and science. She was an optimist who saw the unlimited boundaries of the human potential.”

Ross grew up without the rights today’s young women take for granted.

“She didn’t let society define for her what it means to be a woman. She lived life on her own terms,” Mankiller said.

Tribal Councilor Cara Cowan Watts, an engineer, considers Ross one of her personal heroes, who is “also known as our Cherokee rocket scientist.”

“Through her life work, Mary carried on her family’s tradition as a Cherokee leader,” she said. “Mary never stood still for long. She did what it took to advance her career and never looked back. Just think, a Cherokee woman from

Park Hill, Oklahoma, helped put a man on the moon."

Principal Chief Chad Smith said Ross did more than design missiles, rockets and satellites.

"She was an advocate for the advancement of women and Native Americans in science and math," he said. "As people pass on and leave us legacies, hers is perhaps one of the first, but her greatest legacy is passing on the desire for intelligence. We need to speak in the language of math and science. It is an abstract language; it is a literate language."

Smith said it's important for Cherokees to learn their first language, Cherokee, but it is also important for them to study other spoken languages, as well as such languages as those belonging to math, science and the arts.

"I think she personified one of the greatest traits the Cherokees have had for years," he said. "We're people who love self-governance and we love education."

Perhaps Mankiller's summary of Ross is most fitting.

"Mary made us all so proud to be Cherokee," she said. "When we came into a room or were at an event with her, we all stood a little prouder in her presence."