

Fly me to the moon

By Nick Thomas
Special to the Advertiser

As an artist, Myra Lewiski has tackled jewelry designing, antique pottery restoration, metal sculpturing, painting and more. Now, she's turning her talents to writing.

Her first book will be a biography about her brother, Bob Carlton, whose career highlights as a flight controller with NASA include being a part of the team that aided in putting the first man on the moon.

The Johnson Space Center in Houston was an unlikely destination for a kid who grew up working on his grandfather's dairy farm in Rainbow City, just south of Gadsden. Three years older than his sister, Bob was a hard worker who also tackled tough jobs at his uncle's sawmill.

"He worked on cars, trucks and machinery, and really had no interest in space then," said Lewiski from her home in Montgomery, where she has lived since 1971. "But he was a very resourceful boy who learned how to fix things and resolve issues in a practical way while keeping his cool."

Lewiski said these qualities, combined with an Auburn University engineering degree, four years as an Air Force aircraft mechanic and a decade working on flight testing and control systems for companies such as Lockheed, prepared her brother for the demanding task of NASA flight controller.

Carlton began his NASA career in 1964 working on the Agena, an early upper-stage rocket system used in the manned Gemini program. He quickly advanced to flight controller for Apollo 9, 10 and 11. Not surprisingly, his involvement in the historic Apollo 11 mission remains memorable.

"I was in charge of the guidance, navigation and control systems of the lunar module," said Carlton, 79, by phone from his home in La Porte, near Houston.

Carlton monitored the lunar module's two propulsion systems: the descent stage controlling the craft's landing and the ascent stage that would ferry Neil Armstrong and Buzz Aldrin safely back to Mike Collins in the orbiting command module. Both were crucial for the success of the mission and safety of the crew.

While generally regarded by the public as incident-free, the Apollo 11 mission was not without its drama and Carlton was smack in the middle of it.

"We powered up the lunar module to prepare for a 12-minute burn to the moon's surface," Carlton recalled. "Towards the end of the burn, a low-level fuel alarm tripped warning there was only 120 seconds of fuel remaining. I started a stopwatch to count down the fuel remaining to depletion."

You could tell how concerned everyone was in the control center by the look on their faces. At 60 seconds remaining, you could hear a pin drop; at 30 seconds, we started holding our breath. At that point, I wondered if we would be able to land."

One reason for the unexpected additional fuel burn was the extra time Armstrong needed to maneuver to a suitable landing site.

"I had just 18 seconds on my stopwatch when the crew landed," Carlton said. "Another 18 seconds and the mission would have probably been aborted."



NASA

Bob Carlton, standing second from right, was a NASA flight controller for several Apollo missions. At far right is Buzz Aldrin.



Nick Thomas Special to the Advertiser

Myra Lewiski is writing a book about her brother, Bob Carlton, who worked as a flight controller during the lunar descent.

Apollo 11 Flight Director Gene Kranz relied on controllers like Carlton.

"Bob was amazingly accurate in his calls," Kranz said by phone from his Houston home. "He was sparse on words, but I got to know him and the others so well that I could make judgments by the tone of their voices."

Carlton said he felt "pretty calm and collected" when he realized the \$350 mil-

lion mission was just seconds away from being aborted.

"We had rehearsed the landing many times in the simulator, although doing it for real certainly added an intensity!," he said.

"It was very tense in mission control center," recalled Charlie Duke, from his home in Texas.

Duke, who would later pilot the lunar

module on Apollo 16, was Apollo 11's Capcom — the person in charge of communicating directly with the astronauts.

"Bob really did keep his cool," Duke said. "We made the right decisions and what a relief when we heard Buzz Aldrin transmit 'Contact light, engine stop.' We performed like a well-rehearsed orchestra even though a lot of the problems we experienced we had never seen before."

One of those other problems occurred shortly after landing, as the lunar module systems were being checked.

"I became concerned about pressure building up in the fuel tank," Carlton said. "Liquid nitrogen was used to move the fuel, and it had to be warmed to form a gas with a heat exchanger. Aldrin vented the gas, but the pressure kept rising according to my instruments."

After Aldrin checked his onboard instruments, Carlton realized the high pressure was in a fuel line that had become blocked by a frozen slug of fuel, and was less serious than a pressure build up in the tank itself.

"An explosion would have killed the crew," he said.

Lewiski hopes readers will find stories such as these interesting. She's enlisted the aid of Birmingham writer R.M. Mike Goins to co-author her book. While she wishes the book could have been finished this summer — the 40th anniversary of the Apollo 11 moon landing — she plans on publishing near the end of the year.

"It will be a window to Bob's amazing career," she said. "I'm having lots of fun writing."

Nick Thomas is a freelance journalist who lives in Millbrook.