

McDonnell Douglas inspector recalls excitement of Mercury, Gemini projects
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BONNE TERRE, MO. — We are all familiar with the public faces of the space race. Gus Grissom. John Glenn. Alan Shepard. James Lovell. Neil Armstrong.

And we've all heard about sputnik launched 50 years ago this past week, a spark that lit the fires of ambition in the United States. But these were not the fuel that ultimately carried America into space so rapidly. That was the ambition and enthusiasm of many thousands of men and women on the ground who took up tools and designed ships that could fly among the stars and take a human to the moon.

Among these "everymen" was Dale Iffrig of Bonne Terre, a quality control inspector at the old McDonnell Douglas, now Boeing, in St. Louis. He was one of about a dozen inspectors in a quality control division that handled electronics for the Gemini series of spacecraft.

Gemini came between the Mercury and Apollo missions and was part of a more systematic approach to learning all that would be needed for advanced space travel. It included 10 staffed flights in the 1960s.

Iffrig remembers the excitement of it all.

"It was a privilege to work on this project," Iffrig said, "and it was exciting. They wanted you to feel like you were part of something big, and we did."

Workers were encouraged to not just focus on doing their particular tasks well but to understand how their pieces fit into the context as a whole.

So there was encouragement up and down the line to think of what could go wrong, and to spot anything that looked as if it could fail. Inspectors even had access to the engineers designing the pieces. If something didn't look right, they could ask about the design, and sometimes did.

"They usually took that pretty well," Iffrig said.

Parts for the spacecraft came from all over the country, and inspectors took many trips to assure their quality. California, New Jersey, Massachusetts, Minnesota, Boston, St. Louis, Illinois — it was a coast-to-coast effort.

"We went to the specialists, wherever they were," Iffrig said.

Rockets generally had the best of everything — except in electronics. That was kept simple for reliability's sake. Simple switches and relays had fewer chances to go wrong, and many of the newer electronics were as yet untried. With so much depending on perfect operation, the fewer moving parts, the better.

There was a sense of camaraderie among the thousands of people who worked on the spacecraft, and this was also a big part of the success of the American program. Everyone knew how important the space race was to the country, and there was a lot of pride at being part of it all.

At each launching, television sets were brought in so those on the ground could see their handiwork heading into space. They watched along with the rest of America, from young children on up to the families of the astronauts themselves.

Earl Mullins, director of the Space Museum in Bonne Terre, remembers watching an Alan Shepard launching at a schoolwide assembly when he was about age 9.

"Everyone was quiet," he said. "You could hear a pin drop." But Mullins' fancy had been caught by space even before that. On his parents' dairy farm, the family watched the skies overhead looking for that spark of light that was a satellite in the sky, whizzing by among a field of stars.

Sputnik. Explorer. And Project Echo. That 110-foot silver Mylar balloon first captured the young Mullins' imagination.

"You could not help but notice the cosmos," Mullins said, "and have all kinds of questions go through your head." Those questions still inspire him today. "Are we really alone out there?"

Mullins brought in an expert last weekend to talk about that very question in honor of the 50th anniversary of the space race. The expert, John Severson, talked about the study of life on other planets and the Mars Rover missions that are gathering data about the conditions there.

So far it looks as if the Red Planet has water, a basic building block of life as we know it. Those building blocks — from about 20 elements in all — are made up of stardust from dying stars, Severson explained, and from that stardust we are all wondrously made.