

QUAD-CITIES SKYWATCH

50 years ago Apollo 8 gifted us with Earthrise

Q-C stargazer recalls exciting, nail-biting 1968 space race

ALAN SHEIDLER

Popular Astronomy Club

It's hard to believe, but here we are at the end of another year. December is the time to celebrate Christmas and our accomplishments of the past year. As we review the happenings and accomplishments of 2018, it is also appropriate to look further back in time. Do you know what happened 50 years ago this month?

Many of us today do not realize the end of 1968 was the beginning of an exciting period of unbelievable advancement in mankind's exploration of space. The year 1968 was laced with many serious social issues such as riots, the Vietnam War, and assassinations. But to me, 1968 is indelibly burned into my memory as the time we humans demonstrated our ability to explore space in a very big way. Admittedly, in 1968, I was only 12 years old, but I remember it as though it were yesterday. The

event that to me crowns that year with glory is Apollo 8.

The Apollo program was an audacious undertaking which culminated with U.S. astronauts setting foot on the surface of the moon in 1969. I have vivid memories of the moon missions which still seem fresh and inspiring. I credit the space program with igniting my own interests in science and inspiring me to pursue a career in engineering.

Obviously landing on the moon and walking about on the lunar surface is awe inspiring. But if I had to identify the one mission that was the most important and memorable to me it would have to be Apollo 8.

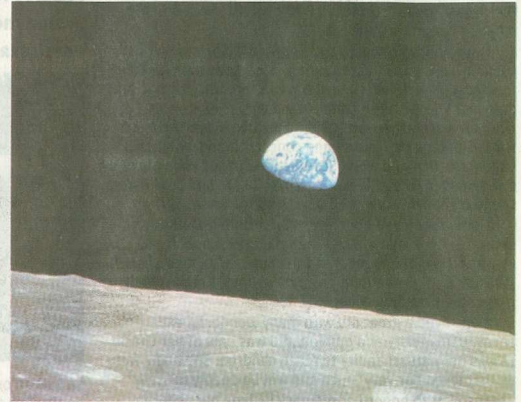
Apollo 8 marked the first time humans traveled to another planet (the moon). Mission astronauts Frank Borman, Jim Lovell and Bill Anders were the first to blast off in a Saturn V rocket and set a world speed record of 24,200 mph necessary to propel them on a trajectory to the moon. They were the first humans to escape Earth's gravity and be captured by the gravity of another planet (the moon). They were the first to orbit the moon and the first to actually see with their own eyes the far side of the moon. They were also the first to witness the iconic "Earthrise" as they orbited the moon. This mission was the first

to broadcast live television images of the moon to millions of Earthbound viewers.

Apollo 8 also had several "nail biting" events, which I vividly remember. During each of the 10 orbits of the moon, Apollo 8 lost contact with Earth for about 45 minutes as it passed behind the moon which blocked radio communication. There was palpable relief each time Houston re-established communication. Another amazing first (and nail-biter) occurred when the command module re-entered Earth's atmosphere upon returning from the moon. The re-entry speed was much faster (25,000 mph) than any previous re-entry from low Earth orbit.

Apollo 8 was an amazing success with many firsts. Never before had humans traveled so far, so fast or so closely approached another celestial body. Never before had so many millions watched and witnessed the engineering achievements, the adventure and audacity. Apollo 8 paved the way for Apollo 11's lunar landing and the remainder of the Apollo program, which was an unbelievable success, by any measure.

While we revel in the successes of the past, we also need to consider the potential of the future. Given the capability of



NASA

On Christmas Eve 1968, the Apollo 8 crew, the first manned mission to the moon, took this photo of "Earthrise" over the lunar horizon, showing Earth for the first time as it appears from deep space.

today's advanced technology can anyone doubt we will sometime soon be returning to the moon and blazing a trail to Mars or beyond? I think not and am reminded of this every time I do a program for First Lego League students or other group sessions with school-age attendees.

Young folks looking through

our club's telescopes could be the generation of astronauts involved in our next steps in space exploration.

Apollo 8 was 50 years ago this month. What incredible accomplishments will we be celebrating 50 years from today? Time will tell, but the sky's the limit! Keep looking up!