

LifeBio of the Month

Autobiography isn't rocket science anymore—retired NASA scientist writes his LifeBio

Harold Benson of Friendswood, Texas, is a very good storyteller--at least that is what his wife says about him. But it took a Father's Day gift from his daughter to jumpstart his life story.

And what a story he has to tell. Harold is a rocket scientist who helped engineer the spacecraft that put man on the moon in 1969. Read excerpts from Harold Benson's LifeBio.



Tell about your childhood friends and your favorite things to play.

On Heard Avenue (in Augusta, Georgia), we did a lot of different things. Frank was two years younger but we played a lot. He had comic books and that was the first serious reading I ever did. We also raced wind up cars, built models of airplanes, cars and boats, and later gas-powered models. We hunted birds with BB-guns and played hide and seek and other games into the night. Frank and I have kept up with each other till this day. I hired Frank into NASA and we talked about Augusta in Texas. He did not care if he went back to Augusta, and I wanted to go back. The opposite occurred and he took over his father's auto paint and bolt store and has been a great success.

Historical Events: Influence of radio on society.

The radio was a big influence on my life. I had my own radio and I listened to various shows that stimulated my imagination. In the afternoon I would listen to "Jack Armstrong - The All American Boy", "Sky King", "The Phantom" and others. I would save cereal box tops to get cardboard airplanes to fly on a string like P-51, P-40, P-47, Jap Zero and German Messerschmidt. I would order decoder rings and things that glowed in the dark. On Friday night, I listened to "The Inner Sanctum", "Green Hornet" and the "Fights". On Sunday, I listened to comedies such as "Baby Snooks" and "Jack Benny." When I was in the seventh grade, we brought coat hangers to school to be sold so we could buy and listen to a new frequency called FM. We listened to Georgia educational radio and learned about erosion and a new plant that would grow fast and stop erosion that was being brought in from Asia. Today that plant can be seen throughout the Southeast and is hated by everyone because it will take over everything--the plant Kudzu.

What was your first "real" job? What was a typical day like at your work?

NASA was hiring significantly and I was hired to replace engineers that were moving to the newly formed Space Task Group. I graduated on a Friday and was at work on Monday, June 3, 1959. Work at the Hydrodynamic tank started at 8:00 a.m. with a 30-minute lunch and we got off at 4:30 p.m. Work stopped at 4 p.m. so the technicians could pick up all their tools and we

stood at the door and waited for the bell to ring at 4:30 p.m. The facility had about ten engineers and two shop personnel for every engineer. The design, development, and testing was all done on site and was mostly testing of sub-scale models in a 1/2 mile long water tank for hydrodynamic research. My first assignment was the testing of a 100 knot catamaran aircraft carrier with a ground effect stabilized hydrofoil system. This was pretty exciting for a kid fresh out of college. I designed the boat hull and had the model built and the hydrofoils manufactured and installed on the model.

Shooting for the Moon

Work at NASA was very exciting because we were going to the Moon and we did not even know how. The period between 1962 and 1972 was great. We hired a lot of young people from all over the country. In my group, there were two from Texas, two from Alabama, two from Georgia, two from Pennsylvania, and one from New Jersey---all below 30 years of age working on landing spacecraft in water, on the Moon, and emergency landing on the pad. In that time frame, we built a technology group that was the best in the country for these types of problems.



My experience with academia occurred during this time period. I was assigned to represent our center during all the Surveyor landings (unmanned spacecraft that landed on the Moon prior to the manned landings) because I was the lunar module landing gear subsystem manager. There was a huge controversy at the time as to what the surface of the Moon was like. On the committee, there were two professors. One advocated the Moon was like talcum powder and we would sink out of sight and the other said it was like beach sand. The Surveyor landed and when the picture came on showing it sitting on the surface they both shouted, "I was right!" I came back and told my boss the story, but we still had no data telling us the bearing pressure the lunar surface could support. He said to me, "We are going to walk on the moon so go design the footpad on the lunar vehicle for the same pressure that a man's foot would exert on the moon surface." It was that kind of technical boldness that helped make the manned lunar program a success without a lot of help from academia.

What is a key lesson you learned from your father?

My first car was a 1937 Ford coupe with 60 horsepower that I bought from my Grandfather Fell. One day when I got in my car after school, there was a note on the windshield that said, "If you would like to sell this car, call this phone number." When I got home, I called and the guy asked if it was a 60 horsepower car, and I said, "Yes." He said he would pay me \$100 for it. Since I had paid \$75, I said, "O.K." The man said he would be right there to buy it. After I hung up the phone, it rang again and the person asked if I had a 60 horsepower Ford coupe, and I said, "Yes." He immediately offered \$150 and said he would be right there. Dad came home and I told him about the offers and the two men showed up. I asked Dad what I was to do, and he said, "You will sell to the man for \$100 because you told him you would do so." This was an extremely valuable lesson.

The reason the car was in demand was that short track stock car drivers were looking for the 60 horsepower cars because the rear end was geared well for this type of race and the cars with this rear end were getting scarce.

What advice would you give to future generations about marriage?

Carolyn and I were married in Eau Claire Baptist Church in Columbia on August 9, 1959. Marriage is a team institution which requires planning, communication, and willing sacrifice from both parties.



How Harold used LifeBio:

"I fiddled with the web template at first. As I got more and more familiar with the program, I tried to do 30 minutes every evening. What was good for me was the organization. It is well structured and it's all there for you. Also, you don't have to answer every question." Harold ordered four hardcover, leather-bound LifeBio Books for himself and his family.

The family's reaction to Harold's story

"I've heard my son quoting from my book. He re-remembered a story after reading it. My daughter commented on a story I told about my mother and her advice about how to drive in the fog. The advice was to always look to the right, at the side of the road, not at the oncoming traffic. That was a lesson I had taught my daughter but she never knew the advice originally came from my mother."

Diane Benson, Harold's daughter, writes, "I just want to thank you for giving us the opportunity to get Dad's life story on record. My mom is now working on her biography and I cannot wait to read the end results. What a great and innovative product."