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#### **ALUMNI**

### **OSU ALUMNUS IN AMERICA'S SPACE RACE**



Mr. Jack H. Graham is the owner of Graham and Associates Professional Consulting Engineers in Yukon, Oklahoma. Graduating from Oklahoma Agricultural and Mechanical College, now Oklahoma State University, in 1959 with a Bachelor of Science in Electrical Engineering, Graham entered engineering at a time of major advancement in aerospace technology and worked on numerous ground-breaking projects in the middle of the US-USSR Space Race.

Graham was born March 16, 1937 and was raised on a dairy farm just outside of Oklahoma City as the youngest of four brothers. Graham's oldest brother attended OSU and graduated with an engineering degree after serving in World War II. "He didn't have to milk cows and that looked so promising that all four of us boys went to OSU," says Graham. "I haven't milked a cow since."

Graham attended OSU while supporting his wife and two children. He worked for the university's physical plant as an electrician's helper. He graduated from OSU in 1959, finishing his B.S.E.E. in only three and half years.

After graduating, Graham went to work for Sperry Gyroscope in New York City where he participated in the development of electronic counter measures designed to render the B52 bomber invisible to Soviet radar systems. This technology was brand new, and Graham was on the front line of its design. "We didn't know a lot about transistors or solid state electronics back in those days, but when I went to New York, that's all we were doing, the very latest solid state electronics," says Graham.

Graham worked for Sperry for four years, during which time he was given the opportunity to move to Salt Lake City and work on the surface-to-surface missile system called Sergeant. After leaving Sperry, Graham went to work for Boeing in Alabama. Working with rocket scientist Wernher von Braun, he contributed to the first stage of the Saturn 5 system, the missile system that would later put man on the moon.

"I was a little cog in the great big wheel that put a man on the moon," says Graham, one of thousands of people involved in the project. "That was the single most extensive effort of mankind," he says. "It had more people and more money invested in it than any other effort in history. It was very exciting."

Once the Saturn 5 system was running, Graham left Boeing to work for Ling-Temco-Vought in Grand Prairie, Texas. "We were working on what you might say was a Star Wars project," says Graham. The project was a satellite system that could shoot down Soviet intercontinental ballistic missiles.

Having registered as a professional engineer while in Alabama, Graham moved back to Oklahoma City and began working for a mechanical and electrical engineering consulting firm. Graham bought this firm from its founders in 1974 and changed its name to Graham and Associates Professional Consulting. Graham is also a past president of the Oklahoma Society of Professional Engineers and a Fellow of the National Society of Professional Engineers.

Graham credits his success in engineering to his education. "It was essential! Everything I've done as a professional engineer was based on my education in the engineering department at OSU," he says. He states that he received a good, if not better, education than many of the engineers whom he worked with when he first joined Sperry Gyroscope. "My education was as good as anyone else's there," he says. "I'm very proud of the education I got at OSU." Reflecting on his experiences in engineering, Graham says "An engineering degree is an outstanding degree. It enables you to go out and, through technology, help build your society."

Graham encourages current students not to take their educations for granted. "Pay attention to your professors. You're there for a purpose, and that purpose is to get educated. Don't waste that opportunity."