

# An interview with Malcolm Ritchie



Malcolm Ritchie

**Could you give a little background on your work at Wright State?**

I had joined Wright State with a charter to set up a program which was a hybrid of control engineering and behavioral science. The reason I got that was because I had a dozen or so years running Ritchie Inc., which was my own organization, helping design machines to be user friendly, and particularly airplanes. My first career activity was as a military pilot during World War II.

**That was in the Pacific, wasn't it?**

Yes. I was flying mainly night flyers. Black Widows. And I did intruder work flying B-25s.

I had a year of engineering school before the war. When the war was over I realized that I wasn't really very well educated. I was helped in that recognition by being suddenly plopped down in places like New Guinea, the Netherlands Indies, the Philippines, and winding up in Japan. I saw a lot of things I didn't understand very well.

So, with the GI bill, I decided I needed more education. I met Bobbie (Roberta) while we were both students at Graceland College, which was then a junior college. When we finished there and were married we went to the University of California in Berkeley, where we both got undergraduate degrees, and I got an M.A. Returning to Graceland, I became Dean of Students. While there, I learned that there was such a thing as engineering psychology, and that most of the research that created the field was done on problems of aviation. We moved to the University of Illinois where they had an aviation psychology laboratory associated with a flying school.

I got paid for flying and doing research in airplanes. As soon as I got my doctorate in 1953, I started working with an Air Force program at Wright Patterson on the design of aircraft instruments. Then I got delegated to Wright Field to run the simulation facility. That's how we wound up in Ohio in 1955.

After several years running the University of Illinois program at Wright Field, the university decided it didn't want to run that program anymore. So I hung my shingle out as a consultant and entrepreneur and

formed Ritchie Inc. We worked with the C-5 program, the manned orbiting laboratory. I was asked to participate in each of the first three manned space systems: the Mercury program in which John Glenn finally flew, the Gemini program with two astronauts, and the Apollo program. I did those as a contractor for General Electric's missiles and space vehicles department.

In 1968 the defense budget started changing and didn't have any new airplanes coming along, so I had to let all my employees go. In 1969 I went out to Wright State. I found out that the chairman of the psychology department and the chairman of the engineering department were interested in developing a human factors engineering program that would merge these two, and they hired me to create it.

I spent 13 years doing that getting it off the ground. There had never been such a degree before, but it's still going.

**When did you retire from Wright State?**

1982. I've done several things since then, but that's when I retired. That was long enough ago that I have had students who have had distinguished careers. One, my student assistant at Wright State, graduated, went up to Wayne State, and became the first graduate in human factors engineering. That was Bill Marras, whose father had been a manager at the Engineers Club. Bill went on to teach at Ohio State, where he set up a laboratory that he still runs. Another of my students, Kevin Burns, is now Chief Engineer of the Air Force F15/F16 Program Office.

**When did you join the Engineers Club?**

About three years ago. I had been here many times for professional society business and that sort of thing. But I didn't join until my neighbor, **Bill Quinlaven**, had me come down and visit, and he said if I would like to become a member, he would sponsor me. It has been a great experience.

**What do you enjoy most about the club?**

The association of the people at the Barn Gang. And the lectures we hear. These Tuesday luncheons are different from anything else that I do. I am in the Sycamore Glynn retirement community, most of that time in non-technical activities, and it's refreshing to come down and associate with so many interesting people who have done a lot on their own.

**You're one of those interesting people.**

Well, I have had the opportunity to do some unusual things.