

# We Have a Choice

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In June 1965 our family moved from Pasadena, California to Tullahoma, Tennessee starting our careers at the newly established University of Tennessee Space Institute, or UTSI as assistant professors in Aerospace Engineering. UTSI is a graduate school and all professors taught one course plus other academic responsibilities as 50% of our time and the remaining 50% of our time was doing funded research. My husband was working in the fluid mechanics area and I did research in magnetohydrodynamic (MHD) power generation. In the early 1970s there was an energy crisis resulting from the oil embargo. President Carter declared "WAR" to make the United States "Energy Independence". As a result, large amount of federal money poured into energy research including MHD. The Department of Energy built an MHD laboratory at UTSI and our research program grew to more than 100 people in the 1980s. I was in charge of this large MHD program at UTSI.

With the experience of managing large research programs within the university, I decided there was no reason I could not do it for myself. I took early retirement from UTSI when I turned 55 and started ERC in 1988. Our office was our basement in our home and I hired my retired secretary working part time for me. I want to make sure there was no "Conflict of Interest", real or imagined with my former employer. I decided to leave the energy field and pursuing in aerospace where I earned my Ph. D. in 1963 from Caltech. I choose the values for ERC as "Integrity, excellence and treat others as the way I want to be treated". These values have served us well and today ERC has over 800 employees over several states and our revenue is \$100 million.

At beginning we pursued the "Small Business Innovation Research" or SBIR contracts, which are set aside for small business with less than 500 employees. There are also other set-aside programs such as minority owned business, veteran owned, women owned and so on to make sure all sectors of the society has a chance to start a business. These programs are

like the affirmative action plans so that these weaker groups would not fail at the starting line.

In the case of ERC, our early contracts were small and short durations. I could only hire part time employees and consultants. Eventually our contracts became larger and duration longer so that I could hire full time employees. This immediately brought another problem – contract gaps! The Phase I of SBIR contracts is 6 months and we can submit a Phase II proposal after we turned in our Phase I final report. Phase II SBIR has a 2-year duration. I remembered clearly the day ERC won our first SBIR Phase II contract. I was so excited and jumped up and said that, “Now I can build ERC!” ERC is getting stronger with time and we continued winning various contracts, mostly SBIRs. However the gap between Phase I and Phase II contracts is quite long, more than 6 months. This gap is detrimental to small businesses. How could we support the “experts” while waiting? Finally I decided to bid on “support service contracts”. All government agencies have to do work without gaps whether they are research, management, administration or anything else. These types of contracts are usually 3 to 5 years long and the contractors work side by side with government employees. Now all ERC contracts are support service contracts. We support several NASA locations including JPL, Army research in Huntsville and Air Force Research at the Edwards Air Force base in California.

I had a small stroke in 2000 and decided to retire. My stroke had nothing to do with working too hard. I had a congenital heart defect, a hole inside of my heart. The hole was repaired in 1964, nearly 50 years ago. I am still very healthy but old age has its own issues. I am very grateful that our eldest son, Ernie left his post doc position at Harvard doing research in Biology to rescue me. Ernie really made ERC to grow from a 300 people company with \$25 million revenue in 1998 to today's over 800 employees and \$100 million revenue.

Thank you for you time and I'd be happy to answer questions.