L. David Roper, http://www.roperld.com/personal/RoperLDavid.htm

I was born in Shattuck, Oklahoma (<u>http://www.shattuckok.com/</u>) into a Southern Baptist family that lived on a wheat and dairy farm 5 miles from the small town of Arnett, Oklahoma (<u>http://www.roperld.com/arnettok/</u>) in northwestern Oklahoma. We attended church services at Arnett First Baptist Church

(<u>https://www.facebook.com/ArnettFirstBaptistChurch</u>) every Sunday morning and evening and almost every Wednesday evening. In 1952 I helped build the current brick church building mainly as a carpenter.

I excelled as a student in grade school and played a tenor trombone in band.

High School

In high school I led the singing at church services. Many summers I went with our church group to Falls Creek Baptist Camp (<u>http://www.fallscreekok.org/about/</u>) in southern Oklahoma; one summer I helped build a cabin for the church there. I would not label my home and church life as strict. There were very few stated restrictions; it was just very clear how to behave in a moral way, buttressed by selected Bible verses at church but not at home. Living on a farm and studying kept me very busy with very little time to "get in trouble". I had very little time to become caught up in pop music; my favorite music listening was Spike Jones crazy songs.

I participated in basketball and baseball, but was mediocre in performance; I was a very good score keeper, referee and umpire because I knew the rules. I especially liked basketball, which I regularly practiced on the farm using both hands. I lost much of the interest in later years when it ceased being a non-contact sport.

During high school years young men in our church were encouraged to "surrender" to be Baptist preachers. My brother, Kenneth Lee Roper, "surrendered" to be a Baptist preacher during his high school years and, after graduating from Oklahoma Baptist University (OBU, <u>http://www.okbu.edu/</u>) in Shawnee in 1955, attended Southwestern Southern Baptist Seminary near Fort Worth, Texas. I also, at a church service, "surrendered" and occasionally preached sermons in our church and other nearby churches. My mother, Eva Lucille Franklin Roper, discouraged me from becoming a preacher and, instead, encouraged me to become an "engineer", probably because I excelled in high school studies, especially in mathematics. My father silently discouraged his sons from being farmers.

During my junior year in high school, after reading many books in the school library, I decided that I wanted to be a physicist, although I had no courses in physics, chemistry, trigonometry or calculus in high school. I loved doing algebra problems and did them on the barn wall while milking cows with electric milking machines. My thought process was that physics is about how God designed and operates the universe, which I wanted to know, and physics uses much mathematics, which I loved. (Later I learned that studies indicated that many physicists in those days went into physics for that reason.)

College

I joined my brother at OBU in 1954 during his senior year. I excelled in physics, chemistry and math. I was required to take two semesters of Bible, in which and physical education I made my only B grades. I apparently felt that I had read the Bible enough before college that I did not need to read it again. In philosophy and politics classes taught by Prof. Gregory Pritchard I learned that my religious beliefs made more sense if I embraced liberal politics that was concerned about the wellbeing of all people. My conclusion that racism is immoral got me into some controversy with a family member back in Arnett. No African Americans lived anywhere near, so I was not taught to hate people of different skin colors, for which I am very grateful.

While at OBU I was a leader at University Baptist Church. I married my first wife, Thelma Lee Rowland Roper from Arnett, the summer before my sophomore year.

I became interested in classical musical by attending listening sessions at a professor's home, the university band director; I played trombone in the band. I bought many used classical disks from him to listen to at home. I loved turning my mind away from studies and daily life and letting the wonderful music take over. I still do.

Graduate School

In 1958 my wife, our year-old daughter, Tamra Dawn Roper, and I moved to Massachusetts so I could be a physics graduate student at MIT in Cambridge. We joined Tremont Temple Baptist Church in downtown Boston for a few years. Later, after I got discourage with the church's politics, I helped start a Southern Baptist Church in Framingham, MA. Our second daughter, Truda Gaye Roper, was born in Boston in 1961.

I had to take three senior level courses with high-school valedictorians from all over the world. I was elated at how fast I was learning physics. When I have visited MIT in recent years I often go back to the large lecture hall where I had learned so much physics and just sit there to bask in the memory.

My discovery of the Roper Resonance (<u>http://www.roperld.com/personal/roperres.htm</u>) through my MIT thesis research, with massive computing done at Livermore National Laboratory (<u>https://www.llnl.gov/</u>), was a major factor in my future in the physics profession.

Postdoctoral Years

After I got a PhD from MIT in theoretical physics we moved to Livermore, California in 1963, where I was a postdoctoral appointee in the Particle Physics Division at Livermore National Laboratory. (I had done research there two summers before graduating.) We attended the Conservative Baptist Church, after trying the First Baptist Church for a few months, where I learned that my liberal political leaning was not consistent with the politics of many of the church members.

Small College Teaching

We moved to Louisville, Kentucky in 1965, where I taught at Kentucky Southern College, a Baptist school dedicated to interdisciplinary learning. I felt an obligation to teach at this small Baptist school because learning at OBU enabled me to go to MIT. I taught in the "Twentieth Century Program", and learned very much that I had not had the time to learn before. We drifted away from church membership. By that time my extensive scientific readings outside of physics taught me the truths of evolution, which was inconsistent with much of what I had read in the Bible. We concentrated on raising our two daughters on a suburban acreage, involving school and extensive music lessons. I loved teaching physics and managed to do some physics research.

Research and Teaching

When we moved to Blacksburg, Virginia in 1967, where I did research and taught at Virginia Polytechnic Institute, we attended First Baptist Church for a while and then quit attending church. It happened one Sunday when my wife said "I am not going to church any more. I can worship God better here on the mountain than in church." We had built, with much of our own labor, a double-A-frame energy-efficient house on the side of a 51-acres mountain five miles from Blacksburg.

I took every opportunity to take year-long sabbaticals and other shorter leaves of absence to experience life, including physics teaching and research, in other countries, including Italy, Switzerland, Scotland, Japan, Papua New Guinea and Brazil. Also, we visited many other countries on vacations. I was often unhappy with political developments in the USA such that I wanted to be able to live happily elsewhere if it became necessary.

Second Marriage

My first wife died in 1993 and I married my second wife, Jeanne Baril Roper, in 1994. Jeanne was born in Boston and raised in a strict Catholic home. She attended a strict Catholic school until the second grade and then public schools. At age 12 her family moved to Coral Gables, Florida. While a student at Florida State University at Tallahassee she started attending an Episcopal church where there was "ceremony without guilt".

After I connected with Jeanne I attended Christ Episcopal Church in Blacksburg, Virginia with her for the following main reasons in order of importance:

- 1. I want to be with her, especially since she wants me to be there. Several of her female friends at church attend without their husbands.
- 2. The church did not force anyone to state their beliefs or non-beliefs.
- 3. The church members are wonderful, caring and moral people.
- 4. The church accepts all people, although the non-European members are few.

When Jeanne leaves town without me I often attend the Unitarian Universalist Congregation in Blacksburg if the advertised service theme interests me. Its mission statement is "We are a caring and diverse community bringing spirit, love, justice, learning, and reason to our congregation and to the larger world." There are seven principles which Unitarian Universalist congregations affirm and promote:

- 1. The inherent worth and dignity of every person
- 2. Justice, equity and compassion in human relations
- 3. Acceptance of one another and encouragement to spiritual growth in our congregations
- 4. A free and responsible search for truth and meaning
- 5. The right of conscience and the use of the democratic process within our congregations and in society at large
- 6. The goal of world community with peace, liberty, and justice for all
- 7. Respect for the interdependent web of all existence of which we are a part

Before I met Jeanne my life was full with my family, maintaining my property and my physics research and teaching. I had long admired the good work done by Habitat for Humanity and other charitable organizations. Jeanne helped start the New River Shelter for homeless people and the Montgomery County Emergency Assistance Program (MCEAP) and was involved with Habitat for Humanity of the New River Valley (HfHNRV). Shortly after we married I joined her on the executive boards of MCEAP and HfHNRV. I was president of HfHNRV 1994-96. In 2003 we helped start Valley Interfaith Child Care Center (VICCC), a secular caring and learning facility for working low-income families. Later I helped start a ReStore for HfHNRV. I remain involved with the ReStore and VICCC and support them financially. In some sense I regard these activities as more important than being involved in a religious organization.

Current Life Philosophy

I cannot point out the exact time when I no longer believed in Christian doctrine. Instead of relying on religious beliefs for "truth" I gradually came to rely on scientific theories that were made into theories by observations and logical reasoning. My particle-physics and biophysics research during my professional career led me to interdisciplinary research in many other areas of knowledge (<u>http://www.roperld.com/personal/InterdisciplinaryStudies.htm</u>).

For example, doing the physics, chemistry and mathematics of climate change due to burning fossil fuels (<u>http://www.roperld.com/science/globalwarmingmathematics.htm</u>) enabled me to understand that global warming is real and very dangerous for our civilization. That led me to making our house and apartment house I owned more energy efficient, driving an electric car and installing solar energy on an apartment house and on our house.

Over time I learned that a person can behave morally without having religious beliefs. Certainly my morals were greatly shaped by past religious teachings I experienced.

I was never happy with the push by churches to evangelize and minimized my participation in it. Similarly, I now do not push my non-belief in religious doctrines on others. When I see others who apparently have comfort in their beliefs of life after death of their religious doctrines, I am glad that they have that comfort. On the rare occasion when someone asks me about my religious belief, I state that I have none and, if they desire it, I try to explain how one can be moral without religious beliefs. If asked I state that because someone believes something does not make it true. When called upon for a short title of my "religion", I say "secular humanism" or "rational humanism".

My belief in scientific truth makes me pursue educational efforts involving evolution, climate change, renewable energy and the future of the Earth and humans on it.

I enjoy classical music, especially full-orchestral music, and most operas, despite the ridiculous lyrics of many of them. Listening to such wonderful music gives me, I suppose, what could be called a "spiritual experience". I was an original member of the Blacksburg Community band and played bass trombone in it for 23 years. I do not enjoy contemporary pop music, especially loud rock "music".

"Sermon" I gave at Christ Episcopal Church, Blacksburg Virginia in 2001; <u>http://www.roperld.com/personal/BeliefsEvolve.htm</u>