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BIBLIOGRAPHY - LAWRENCE D. MILES, AB, BSc, CVS

Born on April 21 1904 in Harvard Nebraska USA, the second of what was to become six sons to Vinetta A. and Delos D. Miles, where Mr Miles was Superintendent of Public Schools. The family moved in 1905 to a farm 30 miles from O'Niell Nebraska, where Lawrence spent his boyhood. The father believed in continuous and constructive work for all ages and provided that environment.

The parents believed that each should have opportunity for education, but should, himself work for it and earn it. They therefore moved in 1917 to a small farm on the edge of a college town, Lincoln Nebraska where high-school and college were available. The boy worked in a grocery store and public market after school, Saturdays and vacation periods 1919 through 1924. Meanwhile he graduated from University Place High School in 1921, and from Nebraska Wesleyan University in 1922.

His degree was AB in "Education" (teaching techniques) as the major and business as a minor. Although outside activities were limited by his work, he took part in several activities. One was the college YMCA of which he became president. He was a member of Beta Kappa social fraternity.

From college he became principal of the high-school of Winnebago, Nebraska 1925-1926. He then accepted a job offered by a local banker in the First National Bank for a year, then moved to a larger bank in a larger town, the Security National Bank of Creighton, Nebraska. He now had a "feeling" for what goes on in business, but still a hunger for more knowledge in the field of Science, so he enrolled in Electrical Engineering at the University of Nebraska, also in Lincoln. He secured  $\frac{1}{2}$  time employment with the Hollister Engineering Co, consulting engineers, and took about  $\frac{1}{2}$  work in the engineering course, securing his degree in Electrical Engineering in 1931.

While at the University of Nebraska he was elected to Sigma Tau, the Honorary Engineering fraternity. He was invited back 22 years later, after his development of the System of Value Analysis/Engineering to tell about the system in the annual commemorative lecture.

At graduation, although at the depth of the depression, General Electric Co. offered him a job as a student engineer in its Vacuum Tube Engineering Department, at Schenectady New York, which he accepted in 1932.

In design engineering work he contributed substantially to the art of making glass-to-metal seals for large vacuum and gaseous tubes and to the design of metal sealed mercury power tubes, including the ignition system for using them. He researched the use of cadmium instead of

mercury in power tubes for important benefits. He has twelve patents.

In his engineering work he always spearheaded the pressure for economic values - for lower costs of experimental samples - for lower costs of resulting designs, etc. To increase the yield from his drive for blending the engineering and the economic factors he transferred in 1938 to the central purchasing department which was responsible for purchasing millions of dollars worth of engineered materials and products. The dollar benefits recorded from his work during the next six years were in the millions.

In 1944 he became purchasing manager of one of GE's plants, Locke Insulator Corp., taking line responsibility for delivery and cost of millions of dollars worth of materials and products per year. During this period of nearly 4 years he developed patterns of engineering and laboratory and purchasing teamwork which eliminated costs and improved products. He learned first-hand both the productive and the destructive force of human attitudes and practices, and their effect on appropriate designs and appropriate costs.

In late 1947 he asked to transfer back to the purchasing vice-president staff with his schedule cleared so that he could research and develop workable techniques which would secure more cost-effective achievement by the decision making employees in a plant or business. Returning to Schenectady N.Y. in late 1947, his work started, work which was to produce the most basic of the Value Analysis techniques and approaches in 1948, to be followed by powerful supplementary techniques in 1949 and 1950.

#### Activities and accomplishments.

1947 - Created the basic Value Analysis functional approach.

1948 - 1950 At the suggestion of General Electric's Vice president Engineering, named the approach Value Analysis. Established "do-it" and training programs which were available to GE's approximately 100 plants. Trained men from these departments. Accepted products and men from these plants. Applied the techniques, showed them how they could increase earnings or competitive position. Learned that large benefits result when technical people also use the techniques. Geared training to them.

1951 - 1953 Continued training men and doing work for the plants. Did this using a revolving team of 6 to 8 people. Moved training out into plant locations. Budgeted 1000 per year to be trained. Later often exceeded that number. Learned that greatest benefits come when customers and vendors also know and use the Value Analysis functional and methodical thinking approaches, so, taught it to other industries as well.

1954 - 1958 Taught teachers from the plants. Assisted them in putting on their programs. Assigned two of the staff of 8 to 12, full time to research to improve the techniques.

The USA Military Navy was a customer. Told them about it. They liked it. Trained some of their engineers. Took the training seminar to Washington DC. Taught teachers for them. Taught them to use the seminar. Instead of Value Analysis, they called it Value Engineering. The Navy received great benefit from it. Note the award from them below. Organized and led some big projects for GE plants which were in competitive trouble on important items.

1959 - 1964 Continued the above.

Wrote the definitive book "Techniques of Value Analysis and Engineering" - McGraw-Hill Book Co which went into 11 languages.

Developed advanced techniques. Developed and conducted advanced technique training.

Found the techniques also to be effective in non-hardware matters.

Promoted use in Chemical and Process industries.

Retired from General Electric Co.

1965 - 1981 Consulted Industry and Government.

Learned the enormous benefits also available when the approaches are used to improve "soft-ware", administrative practices government groups, social benefit groups, hospitals, communications practices, et al. Helped adapt the techniques to this type of problems.

Consulting work included clients in USA, Canada, Mexico, Japan, England, France, Sweden, Holland, Germany, Switzerland, and South Africa.

Taught special courses in the University of California Los Angeles.

Updated book "Techniques of Value Analysis and Engineering" 2nd Ed.

Written as a text-book. Arranged for progressing learning and teaching, with available questions for each chapter.

Wrote, and now write and lecture extensively upon the use of the Value Analysis System to increase profit yield in purchasing work.

Now write and publish a monthly column on the subject.

Make special lectures in seminars and conferences.

#### Memberships.

Society of American Value Engineers, Fellow and first elected president  
National Association of Purchasing Managers, Honorary member of Los Angeles and of Washington DC chapters.

Toastmasters International, Past president Schenectady N.Y. chapter.

Edison Club, Schenectady NY. past member.

Mohawk Club, Schenectady NY, past member.

Lions Club International, past member.

#### Recognitions and Awards.

General Electric Co. The company's highest award. In honor of their first president, Charles A. Coffin, for benefits to the company resulting from the creation and use of the Value Analysis/Engineering System.

United States. Highest award to a civilian. Resulting from the benefit to the United States Navy from learning and using Value Engineering.

Nebraska Wesleyan University. Alumni Medal of Honor. In recognition of high achievement through the creation of the system of Value Engineering. Each year, one of the alumni is so honored.

The Society of American Value Engineers has established the "LAWRENCE D. MILES AWARD". It is available. It has been awarded once. "(It)..is the most exclusive award given by the Society and is awarded only to those persons who have made a truly new and creative contribution to the advancement of the profession of Value Engineering/Analysis."