BIOGRAPHY

<u>NAME</u> Kauko Einari Hallikainen

DATE OF BIRTH

January 5, 1916

FATHER'S NAME

Kalle Einari Hallikainen

ADDRESS

4521 Barrett Avenue Richmond, CA 94805

PLACE OF BIRTH

Chicago, Illinois

MOTHER'S NAME Hilda (Pulkkinen) Hallikainen

CHILDREN

Son, Harold M. Hallikainen, born November 2, 1951 Daughter, Suzanne M. Gerwick, born May 6, 1954 Son, David L. Hallikainen, born June 15, 1955 Daughter, Jan M. Hallikainen, born June 23, 1960

POSITION AND FIRM

Chairman of Board and Treasurer, Granberg Pump and Meter Ltd. (1977-1983) Owner, Hallikainen Properties

EDUCATION

- Graduate Electrical Engineering Department, California State Polytechnic University, 1937. In 1937, Cal Poly had only two-year courses.
- University of California, 1937. Part of job description, Shell Development, continue school at University of California, Berkeley as required - Continued education in the following subjects: Differential Calculus; Integral Calculus; Differention Equations; Math for Engineers; Radio Engineering II; Servo Mechanism; Automation; English Speech; Silk Screening; Statistics; Economics, etc.
- (3) 1940- US Navy Midshipman School; Commissioned Ensign
- (4) 1942 Underwater Defense School, US Navy; Graduated No. 1 in class

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EXPERIENCE

<u>Shell Development Company</u>, Emeryville, California - April, 1937 - July, 1941. Employed in the instrument department in development, design and construction of scientific instruments for the petroleum and chemical industries.

<u>Staff of Commander Base Force Pacific Flee, U.S.N.</u> - February 1942-May, 1942. In charge of degaussing for Pacific Fleet. Suggested and did preliminary design of a mobile degaussing vessel. Eleven vessels were built. Wrote brochure on Principles of Degaussing for Naval Officers.

<u>Staff of Commander Service Squadron South Pacific, U.S.N.</u> - May, 1972 - December 1942. In charge of Harbor Defenses. Collaborated with Dr. Rumbaugh (Deputy Director of Naval Ordinance Laboratory) in augmentation of degaussing and range facilities, South Pacific area. Analyzed and did empirical work on magnetic characteristics of ships.

Naval Operating Base U.S.N., Auckland, New Zealand - December, 1942 - July, 1943. In charge of Special Defenses. Duties identical to #3.

<u>Naval Mine Warfare Test Station, U.S.N.</u> - December, 1943 - September, 1945. In charge of Station Laboratory. Rank of Lt. Commander. Organized instrument department. Supervised development, design and construction of special instruments for torpedo and mine research.

<u>Shell Development Company</u> - October, 1945 - January, 1952. Developed, designed and supervised construction of scientific instruments.

Hallikainen Instruments - January ,1952 - 1973. Development, design and manufacture of industrial and scientific instruments for the petroleum/chemical industries and medical field.

<u>Hallikainen Associates</u> - March, 1973 - August 22, 1975. Design and manufacture process control instrumentation systems for petroleum industry.

PATENTS

Co-holder of the following patents:

- (1) Continuous Electrometric Titration, Pat., No. 2668097
- (2) Continuous Moisture Determination Apparatus for Gases, Pat. No. 2654242

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PUBLICATIONS

Author:

- (1) <u>Analytical Process Instruments</u>, 1921 London, England
- (2) <u>Viscosity Measurement</u>, Instruments and Control Systems, Vol. 35, No. 2, pp. 137-144.
- (3) <u>Viscometry</u>, Instruments and Control Systems, Vol. 35, No. 11, pp. 82-84.
- (4) <u>Viscometry</u>, Viscosity Measurement and Control, Chapter 1, pp. 1-12

Co-Author

- (1) <u>Self recording Semi-Automatic Mechanized Titration</u>, Instruments, Vol. 16, No. 7, pp. 402, 442 and 444.
- (2) <u>Continuous Recording Electrometric Titrometer</u>, Instruments, Vol. 25, pp. 335-338.
- (3) <u>Analytical Instrumentation for Refinery Process Control</u>, National Petroleum Refiners Association, Fall 1964.
- (4) <u>Cutback Asphalt Blending with Continuous Viscometers</u>, National Petroleum Refiners Association, Fall 1964.
- (5) <u>Evaluating On-Stream Analyzer Performance</u>, Texas A&M University Symposium, January 1971.
- (6) <u>To Evaluate Analyzer Performance</u>, Hydrocarbon Processing, February, 1972.

LICENSES

Professional Engineer, State of California EE No. 912

SOCIETY AFFILIATIONS

- Northern California Section, Instrument Society of America, Member since 1948, Director - 1956-59, 1966-67, Vice President -1956-57, President - 1957-58, National Delegate - 1966-67.
- (2) District XI Council, Instrument Society of America, Secretary/Vice President Elect 1966-67, Vice President 1967-69.
- (3) Society of the Advancement of Management, East Bay Chapter now San Francisco Area Chapter, member from 1957 to 1966.
 Vice President of Membership 1960, Vice President of Programs -

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- 1961, President 1962, Director 1963-66.
- (4) Richmond Chamber of Commerce, Member since 1965, Director -1967-72, Vice President - 1969-70, President - 1971-1972.
- (5) Engineers Club of Richmond, Member from 1965 to 1972, Vice President 1968-69, President 1969-70.
- (6) Council of Richmond Industries, Member since 1967, Director -1970-72, Vice President of Programs and Special Events - 1971 and 1974, President 1972, Treasurer - 1975-78.
- (7) Westcom Industries, formerly Contra Costa Community Workshops, Director 1967-71, Treasurer - 1971.
- (8) Galvin Tract Industries, Member from 1968 to 1971, Chairman -1969.
- (9) California Society for Professional Engineers Member from 1960-68.
- (10) American Society of Testing Materials, Member since 1961, Member D-2 Committee, Chairman of Section C (Validation of Automatic Analyzers) of coordinating Division 1 on Test Methods since 1973.
- (11) Berkeley Manufacturer's Association, Member from 1960-65, Vice President 1962, President 1963, Director 1963-64.
- (12) Berkeley Young Men's Christian Association, Director 1968-69.
- (13) D. J. Pompeo Memorial Fund, Chairman 1961-63 (\$10,000 annual scholarship fund established at University of California, Berkeley.
- (14) Oakland Power Squadron of the United States Power Squadrons, Member since 1967.
- (15) Voting Associate, Institute of Radio Engineers, 1938-45 (approx.)
- (16) Pt. San Pablo Yacht Club, Member since 1965, Director 1966 to date

- (17) Rotary Club of Richmond, Member 1971-77.
- (18) Contra Costa Tax Payers' Association, Member since 1970-75.
- (19) St. Francis Yacht Club, Member since 1970. Rear Commodore, 1979. Vice Commodore, 1980. Commodore, 1981. Honorary Member 1996.
- (20) Contra Costa County Development Association, Member and Director 1972-77.
- (21) Advisory Committee on the Conservation of the Environment in Navigation and Transportation, Member 1970-77.
- (22) Marin Yacht Club, Member since 1974. Rear Commodore 1978. Honorary Member 1990
- (23) San Francisco Bay Knarr Association. Honorary Member 1980
- (24) United Finnish Kaleva Lodge 21, Trustee 1995-1996-1997.
- (25) Richmond Yacht Harbor, Ltd. President.

OTHER ACTIVITIES

Director Director Director	1973-77. Underground Surveys Corporation1973-77. National Medical Engineering1973-75. Totco Division, Baker Oil Tool Corporation
Member	1982-to present. Board of Visitors, University of California, Davis, School of Medicine

OTHER ACHIEVEMENTS

- (1) Professional Manager of the Year Award, 1963 Society for the Advancement of Management, East Bay Chapter.
- (2) Received Outstanding Engineer Scroll for 9 counties of East Bay Engineering Week - 1955.
- (3) Elected Fellow of Instrument Society of America in 1963.
- (4) Elected Fellow of American Association for the Advancement of Science in 1968.

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- (5) Listed in <u>Who's Who of the West</u>.
- (6) Listed in <u>Who's Who in Finance</u>.
- (7) Listed in Engineers of Distinction in the United States.

RECREATION

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(1) Boating

Revised 11-15-97 Revised 8/12/99 KEH/pgw pw/pc/wpwin/kehbio.97(a&c)