

## 1988 Engineer of Distinction



**David Patterson Hammer**

B.S. Civil Engineering, TPI, 1965

M.S. Civil Engineering, University of Illinois, 1971

Chief, Geotechnical Branch  
Ohio River Division  
U.S. Army Corps of Engineers  
Cincinnati, Ohio

### Citation

David P. Hammer, a 1965 graduate of Tennessee Technological University, has spent his entire 23 year professional career with the U.S. Army Corps of Engineers. From 1965 to 1967 he was a Project Soils Engineer with the Louisville District. While there he was awarded a Full Fellowship for a semester of graduate studies at Harvard University and was made a Kentucky Colonel for his design efforts on three dams in Kentucky. In 1967 he transferred to the Waterways Experiment Station (WES) in Vicksburg, Mississippi, as a Research Civil Engineer responsible for geotechnically related research and development of policy and criteria. After completing additional coursework at Mississippi State University, he was awarded a Full Fellowship for one year of graduate study at the university of his choice. He received his Master of Science in Civil Engineering from the University of Illinois in 1971. He also completed all required coursework for the PhD degree.

He accepted the position of Chief, Soils Design Section in the Savannah District in 1973. While at Savannah, he pioneered use of the 1- and 2-point method of compaction control for embankment construction. He presented this technique to the engineering profession at the ASCE National Convention in Chicago in 1978.

He returned to the WES in 1975 where he conducted a one-half million dollar field research program to evaluate the use of underdrainage techniques for the dewatering/densification of fine-grained dredge material. He developed the first criteria in the United States for the design and construction of retaining dikes for containment of dredged material. This work was presented to the profession at the 11<sup>th</sup> Annual Dredging Seminar in New Orleans in 1978. He became a Senior Research Engineer in 1978 and, in addition, served as consultant and troubleshooter in the field of geotechnical engineering to the entire Corps of Engineers. During this time he was technical consultant for the construction of Cave Buttes Dam, Arizona, and for design and construction of Warm Springs Dam, California.

In 1980, Mr. Hammer implemented a theoretical rock correction procedure for use in construction control of embankments built of earth-rock mixtures, a procedure initially used in the construction of Warm Springs

Dam. He presented this procedure to the National ASCE Geotechnical Specialty Conference in San Francisco in 1981 and Las Vegas in 1982. The American Standard for Testing Material is currently studying this technique for inclusion into their standards. He was also instrumental in launching a multimillion dollar research program in 1984 in connection with the extension of this work. While at Warm Springs Dam, he headed the development of a computerized data base system for construction control data, which was the first such system in the Corps of Engineers.

From 1980 to the present Mr. Hammer has been Chief of the Geotechnical Branch of the Ohio River Division (ORD), Cincinnati, Ohio. He serves as the primary materials, engineering, and geologic consultant to the Division where the total construction budget averages in excess of \$500 million per year.

Perhaps the most significant contribution he has made to the engineering profession has been his continual implementation of technology transfer. In addition to the presentations mentioned above, Mr. Hammer has authored 12 technical publications. He has made technical presentation at five Corps-wide Geotechnical Conferences. He has served as an instructor in several Corps of Engineers technical courses for over ten straight years. He has presented guest lectures at five universities. He recently organized and moderated an ORD-wide Geotechnical Conference attended by 50 engineers and geologists from both government and private practice.

Mr. Hammer is a registered professional engineer in two states. In 1985 he was named Outstanding Federal Employee of the Year in the Professional and Scientific Category by the Federal Executive Board of Cincinnati. In 1986 he received the Professional Accomplishment Award in Government from the Technical Societies Council of Engineers and Scientists of Cincinnati. He is a member of the Field Advisory Group for the Corps of Engineers Geotechnical Research Program. During Tech's 1987 commencement exercises he, along with his son David, was inducted into the Order of the Engineer.

Mr. Hammer is a Fellow of the American Society of Civil Engineers. He is a member of the United States Committee on Large Dams, the International Society of Soil Mechanics and Foundation Engineering, and the Society of American Military Engineers. He is a member of the Church of Christ in Florence, Kentucky.



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