

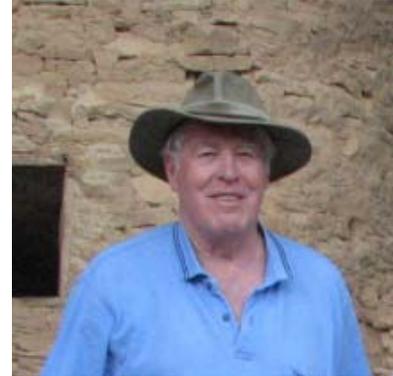


## FELLOW PROFILE

**Name:** Lewis Hanes

**Degrees, certifications,  
etc.:** BS, MA, PhD, The Ohio  
State University

**Current status:** Consultant (Part-time);  
Retired



### **Biography (How you got involved in the field, your major career activities and milestones):**

Following BS technical degree became pilot in US Air Force. Following active duty wanted job in location where could continue military flying. Accepted job with Malcolm Ritchie in Dayton in 1958, and was first introduced to human factors engineering field. Became involved in Air Force-sponsored cockpit R&D, and saw that most professionals in field having an impact held the PhD degree. Obtained PhD while continuing to work for Ritchie, Inc., and serving as an aircraft commander flying refueling aircraft in the Ohio Air National Guard. Joined NCR in 1965, and established and was manager of a human factors department that helped NCR transition from electromechanical business equipment to electronic devices. Joined Westinghouse R&D Center in Pittsburgh in 1973, and established and managed a human performance section. A few years later promoted to manage a department consisting of human performance, mathematics and statistics, intelligent systems, and decision sciences sections. Retired from Westinghouse in 1992, consulted with several organizations, and was appointed an Adjunct Professor at Ohio State. In 1994 joined EPRI in Palo Alto as human performance manager in the Nuclear Power Division. Retired from EPRI in 2004, and have continued to consult on EPRI projects since then.

### **Employment History (List top 5 positions):**

Ritchie, Inc., Dayton, OH (1958-1965)—Senior Associate  
NCR, Dayton, OH (1965-1992)—Human Factors Manager  
Westinghouse R&D Center, Pittsburgh, PA (1973-1992)—Department Manager  
Consultant and Adjunct Professor, Ohio State (1992-1993)  
EPRI, Palo Alto, CA (1994-2004)—Human Performance Manager and Consultant  
Part-time Consultant and retired—(2004-present)

### **What were your significant contributions to the field?**

1. Major contributions in supporting NCR move from electromechanical to electronic products.
2. Hired and mentored young PhDs at Westinghouse who have made major contributions in Human Factors and Ergonomics, including but not limited to Kevin Bennett (Wright State), Tom Bernard (University of South Florida), Randy Mumaw (Boeing), John O'Brien (EPRI), Emilie Roth (Consultant), John Wise (Emery-Riddle), and David Woods (Ohio State).

3. Developed, managed, and arranged funding support for a premier industrial human factors laboratory at Westinghouse performing research involving cognitive sciences, work physiology, neuroscience, virtual reality, etc. The research resulted in numerous patents, and was key in developing several Westinghouse products.
4. Generally recognized as human factors expert in the nuclear power industry based on performing and managing Westinghouse and EPRI projects beginning in 1975, and leadership roles in several national and international technical organizations.

**Did you receive any notable awards or recognition during your career?**

President, Human Factors and Ergonomics Society, 1975-76

Secretary-Treasurer, Human Factors and Ergonomics Society, 1969-70

Chairman of a Subcommittee of the IEEE Nuclear Power Engineering Standards Committee, 1980-88

IEEE Distinguished Lecturer (1987-1992)

Award for supporting Westinghouse Division win the Malcolm Baldrige Quality Award, 1988

**Which articles in the journal *Human Factors* would you say were the most influential to you and your research or practice?**

No one article, but extremely important to search *Human Factors* and other resources to identify relevant information needed for your effort.

**Please provide any links to your online articles, essays, blogs, Wikipedia pages, etc., that pertain to your research, publications or practice.**

Do Google or equivalent search for "lewis hanes Westinghouse" and "lewis hanes epri" for links to some publications.

**What advice would you give someone considering HF/E as a profession?**

1. Get a strong and broad academic background in science and technology, and the technical areas related to your field of interest, e.g., engineering, software, or physiology.
2. Continue to maintain and expand your expertise because technical changes occur frequently.
3. Develop written and oral presentation skills for technical audiences in your field, management and other personnel who are technically qualified but not in your field (and make funding decisions about proposed projects), and the public.
4. Be actively involved in professional and technical societies.