

## Victor W. Bolie -- Pilot Training & Main Experience

CPT Primary, Nampa, ID, Fall of 1942  
CPT Secondary, Spokane, WA, Spring of 1943  
Preflight, Montgomery, AL, Spring of 1944  
Primary (PT-17), Douglas, GA, Summer of 1944 (\*)  
Basic (AT-6), Macon, GA, Summer of 1944 (\*\*)  
Advanced (B-25), Valdosta, GA, Fall of 1944  
Transition (B-17), Columbus, OH, Spring of 1945  
Phase (B-29), Roswell, NM, Summer of 1945  
Overseas (C-46, C-47), Philippines, Okinawa, 1946  
Reserves (B-29, AT-6), Short duty tour, Salina, KS, 1948  
Civilian (Comanche, Aztec), Oregon & California, 1963-66

\*Inscribed Gold Ring Award for Highest Academic Achievement

\*Selected as one of the graduation air-show participants

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Total flying time 1025 hours

At Douglas, GA my certificate of completion of class 44K primary flight training was signed by E. Richardson (Partner), G.W. Goetzen (Flight Director), and James G. Hambright, Jr. (Army Air Forces Supervisor). My individual flight record was certified by Robert J. Thole, 1st Lt., AC (Operations Officer). Two of my cadet colleagues were Forrest Allen and Warren Blair. Unfortunately, I cannot remember the names of my several excellent ground-school and flight instructors.

My wife's name is Earleen. We were married March 12, 1945 at Valdosta, GA when I was on my first pilot assignment as a B-25 flight instructor at Moody Field. She has a BA degree from the University of Northern Iowa, and was a high school teacher at Lynd, MN while I was overseas in 1946. She later earned the MS degree from Iowa State University, specializing in gifted-pupil counseling. She has also been a licensed full-time teacher in California, Oklahoma, and New Mexico while accompanying me on my various civilian occupations. All of my good fortunes and successes would be nothing without her loving help.

## Chronology

### Military

1942-47 U.S. Air Force. Training and duty as 2nd Lt., 1st Lt., and as instrument-rated multiengine pilot (B-25, B-17, B-29 aircraft) and flight instructor (AT-6, B-25 aircraft), US and Pacific. Additional duties as Public Relations Officer.

### Education

1947-52 Iowa State University, B.S., M.S., Ph.D.  
(Physics, Mathematics, Electrical Engineering)

1955-57 Coe College, B.A. (Chemistry, Spanish)

1958-59 Stanford University, M.A. (Physiology, Histology)

### Experience

1952-57 Collins Radio Company. Engineering research and administration in radio communication, electronic instrumentation, sea and air navigation, missile guidance, and computer systems. Promoted to Assistant to Vice President.

1957-58 Iowa State University. Associate Professor of Electrical Engineering. Undergraduate and graduate teaching. EE Research Committee Chairman. Biomedical engineering program development.

1958-59 Stanford University. National Science Foundation Senior Postdoctoral Fellow. Advanced study, laboratory teaching, and research in physiology.

1959-63 Iowa State University. Professor of Anatomy, Physiology, and Electrical Engineering. Chairman of Biomedical Engineering. Interdisciplinary teaching and research.

1963-66 Autonetics Division of North American Rockwell Corporation. Engineering research and administration in bionics, electrode chemistry, artificial hearts, and pattern recognition. Promoted to Staff of Vice President.

1966-67 University of Arizona. Professor of Electrical Engineering. Research and graduate-level teaching in semiconductor theory and integrated circuit techniques.

- 1967-71 Oklahoma State University. Professor and Holder of the Albrecht Naeter Chair in electrical engineering. Deputy Director of the OSU/USDOD Weather Research Program. Research and teaching in solid-state electronics and artificial intelligence.
- 1971-76 University of New Mexico. Professor and Chairman, Department of Electrical and Computer Engineering. Executive duties, plus teaching and research. Principal investigator on a 6-year USAF OSR project on automatic speech recognition.
- 1976- University of New Mexico. Professor of Electrical and Computer Engineering. Teaching and research in signal theory, adaptive control, electrophysics, and neural networks. Research at Los Alamos (linear accelerators, neutron choppers, free-electron lasers), Sandia (high-voltage triggered gas switches), and USAF Phillips Laboratory (laser speckle, satellite imaging).

## Highlights

Gold ring highest-academic-achievement award, USAF cadet, 1944  
 Commercial pilot, multi-engine/instrument/instructor, 1945-1970  
 Senior postdoctoral fellow, National Science Foundation, 1958  
 Director-of-research award, Morris Animal Foundation, 1961  
 National chairman, IEEE-ASME-AICHE-ISA JCEMB, 1965-1966  
 Distinguished professor rank, Oklahoma State University, 1967  
 Fellow, Institute of Electrical & Electronic Engineers, 1971  
 Distinguished research service award, University of New Mexico, 1988  
 Certificate of recognition, Los Alamos National Laboratory, 1990  
 Registered professional engineer, New Mexico & Oklahoma, 1993  
 Member of Pi Mu Epsilon, Eta Kappa Nu, Phi Kappa Phi, Sigma Xi  
 Member, Reserve Officers Association, American Security Council  
 Listed in Who's Who in America and Who's Who in the World, 1993  
 38 patents, 90 publications, 16 MS theses, 17 PhD dissertations

# **Victor W. Bolle, PhD**

## **Biographical Summary**

Dr. Bolle is a former USAF multi-engine pilot, and the holder of 5 academic degrees specializing in mathematics, physics, chemistry, medical physiology, and electrical engineering. He is the inventor of 38 patents, the director of 16 MS theses and 17 PhD dissertations, and the author of over 90 research and engineering publications.

In industry he has served as Head of the Radio Astronomy and Computer Analysis Groups, and as Assistant to the Vice President, at Collins Radio Company -- and later as Chief of the Bionics and Pattern Recognition Groups, and as Assistant to the Vice President, at Rockwell International. In university work he has served as Head of Biomedical Engineering at Iowa State -- and later as Chairman of the Electrical and Computer Engineering Department at the University of New Mexico.

In professional activities, he has made over 80 public speeches and TV appearances in behalf of science and technology -- and he has served in numerous consulting, editorial, proposal-review, site-visit, and conference-organizing assignments. He is a Registered Professional Engineer, and a long-standing member of the American Physiological Society, the US Reserve Officers Association, the American Security Council, and the Portland City Club.

Dr. Bolle has served as a tenured full professor at four universities during his academic career, and is listed in Who's Who in the World. His performance recognitions include the 1958 Award of Senior Postdoctoral Fellow from the National Science Foundation, the 1971 Award of Fellow Rank from the Institute of Electrical and Electronic Engineers, the 1988 Award for Distinguished Research Service from the UNM College of Engineering, and the 1990 Certificate of Recognition for Patent Achievement from the Los Alamos National Laboratory.