

# *Instructor Résumé*

## **ROBERT W. BRADFORD** Consultant and Lecturer in Electronics and Environmental Testing to **Technology Training, Inc.**

Robert Bradford has over 25 years experience in the fields of electronics and environmental testing. He has been a senior test technician, a systems integration engineer and a part-time university professor. His teaching experience spans his whole career, starting as a Master Instructor in his early years with the US Air Force.

### **EXPERIENCE**

- 1989 – Present **US Air Force Civil Service**, *Senior Test Technician* for the 46<sup>th</sup> Test Group, 746<sup>th</sup> Test Squadron (previously the 6585 Test Group) at Holloman AFB NM. Responsible for the installation, modification, operation and maintenance of test beds used to test Internal Guidance Systems and Components and support of the High Speed Test Track. Test beds consisting of Rate and Position Tables, Centrifuges, Leveling Platforms, Shock and Vibration Systems, Altitude / Temperature / Humidity Chambers and Static Loading Facilities. Additional responsibilities include operation and maintenance for support equipment such as Cooling Towers, Hydraulic / Pneumatic / Water Pump systems and Ultra-clean Air Supply systems. Establishes test schedules and procedures, perform tests, collects and analyzes data and prepares reports. Make changes to computer programs requiring an understanding of DOS, C, Basic and Unix programming. Performs calibrations on all support systems and components. Performs Modal Analysis measurements on structures and sled test fore-bodies.
- 1988 – Present *Assistant Professor, part time*, **New Mexico State University – Alamogordo**, Electronic Technologies Branch. Teaching courses in DC Circuit Analysis, AC Circuit Analysis, Introduction of Digital Electronics, Digital Circuits II, Communications Systems, PC Upgrade and Maintenance, and Soldering.
- 1987 – 1989 *Systems Integration Engineer* for **Applied Technology Associates** of Albuquerque, New Mexico. Responsible for the design, fabrication and installation of hardware integration devices and interfacing of electronic, pneumatic, computer, and electromagnetic devices used in the digital control system of the Seismically Stable Platform of the 6585 Test Group at Holloman AFB. This included the mechanical design and fabrication of actuator mounting surfaces and motion analysis. Performed system characterization testing using FFT analysis techniques, and modified control loop algorithms to optimize loop performance. Performed real-time data acquisition on tilt-meters, accelerometers, and displacement sensors on VME systems requiring the use of C programming. Served as Field Test Engineer in the troubleshooting and buildup of a data acquisition systems used to perform extremely low level vibration and noise studies in the range of 1 micro-G.
- 1979 – 1987 Member of the **United States Air Force**, assigned to the 6585 Test Group at Holloman AFB NM. Responsible for the installation, modification, operation and maintenance of test beds used to test Internal Guidance Systems and Components and support of the High Speed Test Track.
- 1968 – 1979 Master Instructor certified to teach 23 weeks of fundamental electronics, communications systems, and missile systems for the USAF.

### **EDUCATION**

Bachelor of Science, Electronic Technology, Chapman University, 1982

Several graduate level courses in EE, New Mexico State University, 1982 – 1988

Three Associate of Science degrees from Community College of the Air Force (CCAF): General Electronics Technology, 1979; Instructor in Technology, 1977; Communications Equipment Technology, 1974

Environmental Engineering Specialist Certificate from Technology Training, Inc.

### **PROFESSIONAL AND TECHNICAL**

Co-author of paper on the "Use of Auxiliary Sensors and Digital Controls for Improved Rate Table Noise" presented at the Guidance Test Symposium, 1987.

