

6/14/04

**R. B. (RON) SCHROER**  
Senior Systems Engineer/  
Airborne and Ground Electronics

118 Dan Moody Trail  
Georgetown, TX 78628- 4521  
(512) 864-0294  
e-mail - r.schroer@ieee.org

#### **QUALIFICATIONS SUMMARY**

- Responsible for electronics/avionics engineering on variety of FAA and NASA /DOD projects.
- Specialize in electronic systems requirements, design, development, test, and marketing.
- Primary experience in avionics, guidance and controls, radar, and communications.
- Supported FAA NAS modernization at headquarters, FAATC, regional offices and terminals.
- Excellent written and verbal skills. (Refer to technical publications section on page 2).
- Eight years on IEEE Aerospace and Electronic Systems Society (AESS) Board of Governors.
- Editor-in-Chief of IEEE Aerospace and Electronics Systems Society (AESS) Magazine.
  - Wrote/edited two special issues (AESS 50 year Anniversary and Wright Brothers Centennial)
  - Received Exceptional Service Award for the above
- Currently providing part time support to RTCA government/industry working groups on GPS

#### **SPECIFIC EXPERIENCE**

##### **SCIENCE APPLICATIONS INTL. CORP. /NISC 2 – Ft. Worth and Austin TX; 3/97- present**

Participate and provide visibility for SAIC at RTCA SC159 (GPS) working group meetings. Report on technical areas that may impact company related activities. Supported FAA project management in overall planning, scheduling and systems engineering for conversion of former air base into new Austin/Bergstrom International Airport (ABIA). Authored paper on ABIA conversion for Air Traffic Control (ATC) Journal. Supported Southwest Region Office (ASW) in planning, and implementation of 2 - 8 GHz microwave radio conversions for communications links at D/FW and seven other ASW locations. Co-authored and presented paper at 2002 IEEE/AIAA Digital Avionics Systems Conference (DASC) on near term ground and airborne ATC challenges

##### **INFORMATION SPECTRUM INC./NISC1 - Atlanta, GA; 11/95-10/96**

Systems engineering and project management support to ensure integrity, completeness and schedule performance of FAA Air Traffic Control (ATC) electronic projects implemented for "96 Atlanta Olympic Games". Concurrent research and analysis to update Atlanta (ATL) Area Transition Plan to modernize air traffic control. Support FAA radar manager in Southern Region.

##### **DIGITAL CONTROL SYSTEMS (DCS) INC. - FAA Technical Center, N J; 1994-1995**

Principal engineer conducting special studies in support of Aviation Security R&D at the FAA Tech Center (FAATC). Evaluated applicability of total quality management (TQM) to research programs. Managed and supported preparation of proposals for new DCS business with FAATC.

##### **1993 LOCKHEED MARTIN (Previously Martin Marietta) AIR TRAFFIC SYSTEMS (ATS); - 1985-**

Deputy Director of ATS Systems Engineering in Washington headquarters supporting FAA in developing requirements, and ensuring functional and interface compatibility of 90 NAS projects. Identified savings of 2.8 million dollars through value engineering studies. Planned and developed series of Martin Marietta sponsored monthly R&D seminars at FAA Headquarters. Extensive marketing and proposal support for DOD R&D and ATC domestic and international new business.

Manager, FAA Technical Center test team, Atlantic City NJ, supporting acceptance test and evaluation of new hardware and software upgrade to Host ATC computer (IBM 4083 mainframe). Developed requirements for new Advanced Automation System distributed processor. Received team commendation from FAA, and Martin Marietta award. Led Systems Engineering and Integration (SEI) team in FAA Atlanta Office (ASW) developing process to integrate and transition radar, automation etc modernization projects for large airport control towers including new Atlanta Metroplex. Authored technical paper for Air Traffic Control Association (ATCA) Proceedings.

## RESUME - RON SCHROER (continued)

### MARTIN MARIETTA (now Lockheed Martin) SPACE AND MISSILE SYSTEMS - Denver, CO

Technical Manager for prototype development of Space Shuttle Manned Maneuvering Unit (MMU) astronaut backpack, and lab test of remote controlled tele-operator for Skylab Reboost. Managed Air Force subcontract at Vandenberg AFB, CA conducting Independent Verification and Validation (IV&V) of test and checkout software for the Air Force "Blue" Shuttle (AF program later cancelled). Lead avionics designer/manager for Shuttle launched Transfer Orbit Stage, and Titan IIIC launched spacecraft studies. Responsible for upper stage requirements, advanced design and integration of avionics for earlier Titan Launch Vehicle payloads. Subcontract manager for avionics design and integration of initial "Commercial Titan" space launch vehicles.

Previous experience as senior guidance and controls (G&C) engineer responsible for requirements, design, integration, test and checkout for various Titan missiles and launch vehicles. Member of on-site launch team representing Denver guidance and controls (G&C) section for first Titan II missile launch from silo at Vandenberg Western Test Range, and first Titan IIIC launch from Cape Canaveral.

### EDUCATION

M. B. A.	<i>University of Colorado</i>	Business Administration
M. S. E.	<i>University of Michigan</i>	Instrumentation Engineering
B. S.	<i>University of Wisconsin (La Crosse)</i>	Chemistry/Physical Science

### PROFESSIONAL AFFILIATIONS

*Institute of Electrical and Electronics Engineers (IEEE)- Life Senior Member*

Offices

IEEE Denver Section Newsletter Editor 1980-83  
IEEE Denver Aerospace & Electronics Systems Society (AESS) Chair - 1982/83  
IEEE Denver Section Chairman – 1984 (Centennial year)  
IEEE AESS "Systems" Magazine Associate Editor; 1994-1998  
IEEE AESS Systems Magazine Editor-in-Chief; 1999-present  
IEEE AESS Board of Governors; 1999-2004

Awards

IEEE Centennial Medal;	1984
IEEE Third Millennium Medal;	2000
IEEE AESS Exceptional Service Award	2004

*American Institute of Aeronautics and Astronautics (AIAA)-Associate Fellow*

Offices

Chairman Southern New Jersey Section – 1987

American Radio Relay League; 1993 to present

### TECHNICAL PUBLICATIONS

Presently Editor-in-Chief Emeritus for "IEEE Aerospace and Electronic Systems Magazine (AESS)".  
Edited AESS 50 year Jubilee Issue of AESS "Systems" magazine  
Researched/wrote "Centennial of Powered Flight" special Issue for 2003 Wright Brothers  
Fourteen technical papers at variety of aerospace/electronics society conferences-most recent DASC  
Three technical articles in engineering society periodicals; most recent in ATCA Journal  
IEEE AESS Conference reports (2-3 year) as Editor of Systems Magazine  
Numerous internal Martin Marietta (Lockheed Martin) studies, reports and proposals

*(Conference paper details available upon request)*

