



- Investigated subsystem architecture, and hardware which included establishing S, X, and Ka band component designs and obtaining cost estimates from various vendors. Extensive correspondence with technical vendor personnel was necessary to establish feasible design possibilities for NGST.
- Established a preliminary set of top-level requirements for the NGST communication subsystem based on trade study results. Supported technical meetings and technical document reviews.

**2/90 -12/92    *Systems Engineer, Commercial Communication Satellites*    General Electric Company, East Windsor, NJ**

- Technical focal point for Satcom C3/C4 payload providing direction and leadership in all aspects of transponder and antenna design from concept through to launch. This included extensive coordination of communication engineering personnel, and development and maintenance of link budgets, assuring compliance of components with system requirements.
- Responsible for coordinating customer weekly meetings, including program office and engineering skill center personnel. Conducted Satcom C3/C4 training course for customer personnel at command/control sites. Direct contact with GE Americom customer on both an administrative and technical level.
- Generated spacecraft test plan and payload test requirements documents insuring that the documents met program contractual requirements and demonstrated required technical performance.
- Generated test discrepancy reports and waivers, and maintained antenna schedule to assure timely delivery of components and subsystems to spacecraft.

**12/83- 1/90    *Electromagnetic Engineer, Antenna Systems*    General Electric Company, Valley Forge, PA**

- Antenna engineering representative in the DSCS III (Defense Systems Communication Satellite) orbital operations group. Technical leader on in-orbit tests from test plan phase to final report. Extensive interaction with Air force Customer. Instructor in communications training courses in Colorado Springs, CO, and Sunnyvale, CA. Technical analyst in orbital anomaly investigations, field test projects, and in-orbit antenna special studies.
- Developed test procedures and data reduction analysis software for in-orbit antenna alignment tests. Software allowed for real-time analysis of measurement data resulting in field site implementation of antenna alignment biases. This resulted in significant reduction in cost, time and risk involved in providing spacecraft to customer.
- Tested and analyzed DSCS III antennas both at the antenna range and field test levels.
- Designed X-band waveguide filters for DSCS III Increased Bandwidth Project. Tested and tuned filters using HP 8510 network analyzer assuring they met proper specifications.

### **EDUCATIONAL HISTORY**

**5/88    *Master of Science in Electrical Engineering*    University of Pennsylvania, Philadelphia, PA**

**12/83    *Bachelor of Science in Physics*    Villanova University, Villanova, PA**

### **PROFESSIONAL SOCIETIES**

- American Mathematical Society (AMS), American Physical Society (APS), Institute of Electrical and Electronic Engineers (IEEE)