SUMMARY

Mr. Gist is a seasoned engineering professional, research and development specialist, and award-winning educator, with computer programming and project management expertise.

His education includes a Bachelor of Science degree from West Texas State University in Canyon, TX, with a double major in Mathematics and in Physics, received summa cum laude. He earned a Master of Science degree in Aerospace Engineering from the University of Texas at Austin, TX.

Clearance:
DoD Secret

Mr. Gist has broad industry experience, beginning as an Orbit Determination Specialist for the National Geodetic Survey, followed by several years with The Aerospace Corporation as an Engineering Specialist and as a Project Engineer. He has since partnered to create his own engineering consulting business, 1Earth Research, in Colorado Springs. In addition, he teaches physics to scientists and engineers at the University of Colorado in Colorado Springs.

Over his career, he has gained computer proficiency in C, C++, and FORTRAN programming, website development and maintenance, database implementation, and operating system scripting on Windows, Linux, and Unix systems.

RESEARCH AREAS:

Orbital Dynamics, Perturbations and Satellite Lifetimes
Satellite Constellation Design, Analysis and Optimization
Satellite Collision Avoidance for Launch and On-Orbit Vehicles
Advanced GPS Data Processing and Position Estimation for Satellites
Data Analysis, Filtering and Process Feedback

SOME PUBLICATIONS & PRESENTATIONS:

- *Risk Management Of Unintentionally Collocated Geosynchronous Spacecraft,* R. Gist and D. Oltrogge, Daniel, 2001 AIAA/AAS Astrodynamics Specialist Conference, Quebec City, Quebec, Canada.
- *Chapter 15: Collision Avoidance and Radio Frequency Interference* for Space Modeling and Simulation: Roles and Applications Throughout the System Life Cycle, Ed. Larry Rainey, (with D. Oltrogge), The Aerospace Press.
- *A Computer Demonstration of Onboard Orbit Control Using a GPS Receiver,* C. C. Chao, H. Bernstein, M. Menn and R. Gist 1994 AIAA Astrodynamics Conference, Scottsdale, AZ.