DAVID A. ARNOLD
Physicist/Systems Analyst

Education

Boston University, A.B., Physics (1962)
Boston University, A.M., Physics (1969)

Military service

1962-1964 Physical Science Assistant,
U.S. Army Cold Regions Research and Engineering Laboratory,
Hanover, NH

Work experience

1964-1972	Senior Astrometric Computer, Project Leader, Supervisory Data Analyst, Smithsonian Astrophysical Observatory
1972-1978	Systems Analyst, Experimental Geophysics Department, Smithsonian Astrophysical Observatory
1978	Consultant, Martin Marietta, Denver, Colorado. Tethered satellites.
1978-1980	Physicist (Applied), Geoastronomy Division, Smithsonian Astrophysical Observatory
1980	Consultant, Martin Marietta, Denver, Colorado. Tethered satellites.
l980-1994	Computer Systems Analyst, Radio & Geoastronomy Division, Smithsonian Astrophysical Observatory
1985-1986	Science and Technology Corp., Hampton, Virginia. Tethered satellites
1994	Consultant, Martin Marietta, Denver, Colorado. Tethered satellites
1995-2002	Consultant, ITE Inc., Laurel, MD. Retroreflector arrays.
1997	Consultant, Naval Research Laboratory, Washington, DC. Tethered satellites.
2003-2018	Consultant, Smithsonian Astrophysical Observatory. Laser satellite tracking including design of retroreflector arrays, analysis of laser tracking systems, processing of laser tracking data.
2004	Consultant, Center for Automation & Robotics, University of Alabama, Huntsville, Alabama. Retroreflector arrays.
2006	Consultant, LNF/INFN, Frascati, Italy, April 8 - April 28. Retroreflector arrays. Consultant, LNF/INFN, Frascati, Italy, Sept 21 - Sept 29. Retroreflector arrays.
2007	Consultant, LNF/INFN, Frascati, Italy, Sept 29 - Oct 19. Retroreflector arrays.

General Fields of Investigation

- Computer modeling of optical and laser satellite tracking systems
- Analysis of optical and laser satellite tracking data
- Design and analysis of retroreflector arrays for satellite laser tracking
- Design and analysis of tethered satellite systems, including dynamics, electrodynamics, and thermal issues

Awards

NASA Group Achievement Award for the LAGEOS project.
JPL Certificate of Appreciation for the TOPEX/POSEIDON project, February 2, 1993
NASA Public Service Group Achievement Award for the TOPEX/POSEIDON,
Precision Orbit Determination Team, March 18, 1994