

## James A. Secan

NorthWest Research Associates, Inc.  
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### SENIOR RESEARCH SCIENTIST

Over three solar-cycles of experience in research of space weather phenomena with primary focus on ionospheric behavior and impact of a variety of communications and surveillance systems.

- Research and experimental work in ionospheric scintillation
- Develop and maintain the WBMOD ionospheric scintillation model
- Research and experimental work in artificial heating of the ionosphere
- Develop semi-empirical ionosphere models for use in raytrace applications
- Research and experimental work in ionospheric tomography
- Consulting work to assess impacts of space weather on user systems
- Research in ionospheric data assimilation models
- Software Team Lead for Beach Probing System project

### EXPERIENCE

**2002-Present:** Vice President and member of Board of Directors, NorthWest Research Associates, Inc. (NWRA).

**2000-Present:** Senior Research Scientist, NWRA. Principal Investigator (PI) on multiple research and development contracts including a multi-year \$1,000,000+ per annum contract for research and support for the DOD High-latitude Active Auroral Research Program (HAARP). Contract work for both Government (DOD, DOC) and private (Boeing, Raytheon, Ball Aerospace) organizations.

**1999-2009:** Manager, NWRA Remote Offices

- Managed NWRA Tucson, AZ, Office; 1999-2009
- Managed NWRA Nashua, NH, Division, 2002-2007
- Responsible for research oversight; supervision of research staff; Nashua Division overhead budget; and interaction with funding agencies
- Oversight included control of \$1,000,000+ budget contracts

**1981-2000:** Research Scientist, NWRA. PI and co-PI on multiple research and development contracts.

**1971-1981:** Officer, United States Air Force. Commander, USAF Ramey Solar Observatory (Puerto Rico); space weather models and applications development; Chief, Space Weather Forecasting Team.

## EDUCATION

**1976:** M.S., University of California, Los Angeles; Atmospheric Sciences

**1972:** USAF Weather Officer Program, St. Louis University

**1971:** B.S., University of Arizona, Astronomy

## PROFESSIONAL ACTIVITIES

**2009-2012:** Chairman of the Steering Committee and Program Chairman of the RF Ionospheric Interactions Workshop

**2009:** Cited for Excellence in Reviewing for the AGU Space Weather journal

**2004:** Recipient of the AFRL/VS Technology Transfer Achievement Award