

Robert Bruninga

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Education

Degree	Discipline	Institution	Year
M.S.	Electrical Engineering	Naval Postgraduate School	1971
B.S.	Electrical Engineering	Georgia Tech	1970

Academic Experience

Institution	Rank	Title	Dates	Full or Part Time
U.S. Naval Academy	Senior Research Engineer		1990-present	Full
U.S. Naval Academy	Instructor	Associate Chairman, EE Department	1983-1985	Full

Non-Academic Experience

- US Navy – Engineering Duty Officer 1970-1990
- Author – APRS (Automatic Packet Reporting System) an on-air protocol used by 40,000 or more users worldwide in a global system (including satellite s) for supporting hand-held position reporting and text messaging via VHF radio.

Certifications and Professional Registrations

- Professional Engineer in Maryland
- FCC License WB4APR (since 1962)
- Private Pilot – (currently inactive)

Current Membership in Professional Organizations

- IEEE National Committee on Transportation and Aerospace
- Maryland Electric Vehicle Infrastructure Council (public commentor)
- Amateur Satellite Corporation (AMSAT)
- Technical Chair – APRS Standards Committee

Honors and Awards

- Technical Excellence Award, Dayton Hamvention, 1998
- YASMEE Foundation Technical Award for APRS, 2010

Service Activities

- USNA
 - Amateur Radio Club 1983 to present
 - Activity 2 (2010 – present)
- Public Service
 - Anne Arundel Radio Club- Communications support for local activities
 - Maryland Mobileers – mans the county, and state EOC during emergencies

Selected Publications and Presentations (Last Five Years)

- Bruninga, Overlooking L1 Charging –at-work in the Race to Public Charging Speed, IEEE International Electric Vehicle Conference, Greenville, SC, 4-8 March 2012
- Bruninga, A Shadow TEMPn-N Network, Annual TAPR/ARRL Digital Communications Conference, Baltimore Maryland, October 2011.
- Bruninga, Workshop: Universal Ham Radio Connectivity by-Callsign, Annual TAPR/ARRL Digital Communications Conference, Baltimore Maryland, October 2011.
- Bruninga, US Naval Academy Small Satellite Program, a chapter in the book Small Satellites: Past, Present and Future. Published by the AIAA in 2009
- Bruninga, Psat and the APRS Space Network, AMSAT Symposium September 2009
- Bruninga, Using GO-32 for Mobile APRS Satellite Operation, AMSAT Symposium, September 2007

Recent Professional Development Activities

- Annual AIAA/USU Small Satellite Conference, Logan, Utah. Participant and speaker in the annual CUBESAT conference. Development and mentorship of 5 five successful on-orbit Satellite Missions, PCSAT1 (2001), PCSAT2 (2006), ANDE (2006) RAFT (2006), MARSCOM (2006).
- Electric Vehicle Infrastructure Proponent. Participates in all local, state and Washington area Electric Vehicle conferences, meetings, and talks. Invited guest due to having completed 3 Prius Electric Vehicle projects.