



*Curriculum Vitae:*

**H. Paul Shuch, Ph.D.**

**Author, Educator, and Engineer**

**email: paul @ shuch.net, fly@AvSport.org**

**STRENGTHS**

Gifted, articulate teacher and eager learner, with excellent communications skills. Highly interdisciplinary. Creative and innovative problem solver, well versed in out-of-the-box thinking. Effective delegator, able to break up large projects into manageable elements. World-class record of publication and invention. Inspired motivator, forging consensus and commitment by example. Consistently exceeds requirements of all assigned tasks, on schedule and under budget.

**WEAKNESSES**

Perfectionism: demands no less than the best efforts from himself, his students, and his subordinates. Intolerant of incompetence. Totally lacking in false modesty.

**PROFESSIONAL EXPERIENCE**

<b>Commercial Sector:</b>	Chief Engineer, Microcomm Consulting	since 1975
	Vice President & Chief Technology Officer, QorTek, Inc.	2004 – 2006
	Senior Engineering Instructor, Lockheed Missiles & Space Co.	1975 – 1977
	ECM Engineer, Applied Technology Division, Itek Corp.	1972 – 1975
	Product Engineering Technician, TransAction Systems Inc.	1969 – 1971
<b>Educational/Nonprofit Sector:</b>	Chief Flight Instructor, AvSport of Lock Haven	since 2010
	Visiting Professor, Electrical Engineering, Heidelberg U. Appl Sci	2007 – 2009
	Visiting Professor of Physics/Astronomy, Lycoming College	2006 – 2007
	Instrument Flight Instructor and FAA Safety Team Representative	since 1981
	Executive Director, The SETI League, Inc.	1994 – 2006
	Professor of Electronics, PA College of Technology (PSU)	1990 – 1997
	Microwave Technology Program Head, San Jose City College	1977 – 1990
	Avionics Lecturer, San Jose State University Aeronautics Dept.	1984 – 1987
<b>Military:</b>	Electronics Instructor (part time), West Valley College	1973 – 1977
	Sergeant, Telecommunications Systems Controller, USAF	1965 – 1969

**EDUCATION**

Ph.D.	1990	Engineering, University of California, Berkeley	High Honors	GPA 3.78
M. A.	1986	Industrial Studies, San Jose State University	Highest Honors	GPA 3.96
B. S.	1975	Industrial Technology, San Jose State University	High Honors	GPA 3.88
A. S.	1972	Electronics, West Valley College	Honors	GPA 3.68

## **VALID TEACHING CREDENTIALS**

<b>Certificate</b>	<b>Issued By</b>
Chief Administrative Officer Credential	The California Community Colleges
Life Instructor Credential	The California Community Colleges
Certificate of Demonstrated Competence	Pennsylvania Department of Education
Certified Flight Instructor, Airplane and Instrument	Federal Aviation Administration

## **HONORS AND AWARDS**

- 2011 Aviation Safety Award, Federal Aviation Administration Safety Team
- 2007 Presidential Achievement Award, Radio Amateur Satellite Corporation
- 2007 Elected Full Member, International Academy of Astronautics
- 2006 Elected Fellow of the European Radio Astronomy Club
- 2006 Elevated to Executive Director Emeritus, The SETI League, Inc.
- 2003 Elected Corresponding Member, International Academy of Astronautics
- 2002 Elected Fellow of the Radio Club of America
- 2001 QST Cover Plaque Award (November), ARRL
- 2001 Technical Achievement Awards (two), CPaCCIT
- 2000 Technical Excellence Award, Dayton Hamvention
- 1999 Technical Achievement Award, ARRL Atlantic Division
- 1999 Elected Fellow of the British Interplanetary Society
- 1993 John T. Chambers Memorial Award, Central States VHF Society
- 1992 Flight Instructor of the Year, FAA Harrisburg Flight Standards District Office
- 1990 Doctoral Thesis Prize, Fannie and John Hertz Foundation
- 1990 Robert Horonjeff Grant, Institute of Transportation Studies, UC Berkeley
- 1989 Winner of ASCE Air Transportation Division Student Paper Competition
- 1989 Hertz Foundation Fellowship in the Applied Physical Sciences, UC Berkeley
- 1988 Robert Goddard Memorial Scholarship, National Space Club
- 1988 President's Award to Outstanding Faculty, San Jose City College
- 1987 Outstanding Safety Achievement Award, Experimental Aircraft Association

## **PATENTS ISSUED**

- 2003 U.S. Patent #6593876, Adaptive Microwave Antenna Array
- 1987 U.S. Patent #4713669, Aircraft Binaural Doppler Collision Alert System

## **GRANTS RECEIVED**

- 2005 FA8650-05-M-6506, Millimeter Wave Dosimetry, AFRL/OSD
- 2004 - 2006 NAS5-03014, Reconfigurable Synthetic Aperture Radar Antenna, NASA ESTO
- 2003 Matching Grant, Williamsport/Lycoming Foundation
- 2002 General Fund Grant, ARRL Foundation
- 2000 - 2002 annual Small Research Grants, American Astronomical Society
- 1999 - 2003 annual Unrestricted Research Grants, Randell Charitable Trust
- 1999 Unrestricted Research Grant, Adrian Berry Foundation
- 1998 - 2004 annual Technical Development Grants, Central States VHF Society
- 1995 - 2005 annual SETI Sustaining Grants, Second Foundation
- 1995 - 2002 annual SETI Sustaining Grants, Orville N. Greene Foundation

## **PUBLICATIONS** (complete listing available online)

Author or editor of more than 600 publications, including a dozen books, countless poems, roughly 100 songs, and over 250 papers in various conference Proceedings, technical, scholarly and popular journals. Listed in *Who's Who in Aviation and Aerospace*, *Who's Who in California*, *American Men and Women of Science*, *Who's Who of American Inventors*, *International Directory of Distinguished Leadership*, *Who's Who in American Education*, and *Who's Who in Science and Engineering*.

## **LEADERSHIP POSITIONS**

- Co-Chair and Webmaster, IAA SETI Permanent Study Group
- Vice President and Webmaster, Society of Amateur Radio Astronomers
- Principal Investigator and Webmaster, Invitation to ETI
- Director of Education, Radio Amateur Satellite Corporation
- Boards of Directors: Radio Amateur Satellite Corp., QorTek Inc., The SETI League Inc., Beech Aero Club, Central States VHF Society, Society of Amateur Radio Astronomers,
- Chairman, ARRL VHF/UHF Advisory Committee and ARRL FCC Briefing Committee
- Conference Chairman, Program Chairman, West Coast VHF/UHF Conference
- Technical Director, Chairman of the Board, Project OSCAR Inc.
- Technical Session Organizer, IEEE Western Electronics Convention (WESCON)
- Federal Aviation Administration Safety Team Representative
- Fellowship Interviewer, Fannie and John Hertz Foundation
- Military Program Evaluator, American Council on Education
- Guest Lecturer, Air Safety Foundation Flight Instructor Refresher Clinic
- Editor and Manuscript Reviewer for various publishers and peer reviewed journals
- Faculty Senator, San Jose City College

## **SERVICE TO THE COMMUNITY**

- Elected Member, Lycoming County Democratic Standing Committee
- Member, Gifted Education Advisory Council, Williamsport Area School District
- Merit Badge Counselor, Boy Scout Troop 36, Balls Mills PA
- Membership Officer, Executive Committee member, Central PA MENSA
- Judge, North Central PA Odyssey of the Mind
- Vice President, Parent's Association for Gifted Education, Lycoming County
- President and Webmaster, Temple Beth Ha-Sholom, Williamsport PA
- Member, Williamsport Interfaith Council
- Founding Chairman, Santa Clara County Airports Commission

## **CURRENT MEMBERSHIPS**

- The SETI League, Inc. (life)
- American MENSA, Ltd. (life)
- Society of Wild Weasels (life)
- Amateur Satellite Corporation (life)
- American Radio Relay League (life)
- Central States VHF Society (life)
- Radio Club of America (fellow)
- British Interplanetary Society (fellow)
- European Radio Astronomy Club (fellow)
- AFCS Alumni Association
- International Academy of Astronautics
- National Association of Flight Instructors

## **JUNG-MYERS-BRIGGS TOPOLOGY PROFILE:**

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## **ALIGNMENT:**

Lawful Good

**WEBSITES:** <<http://shuch.net>>, <<http://drseti.org>>, <<http://microcomm.net>>, <<http://AvSport.org>>