

Dr. Roger Myers  
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### **Experience Summary**

Dr. Roger Myers has over 30 years of experience developing, testing and producing for flight space propulsion technologies and systems of all types for NASA, National Security, and commercial space missions. Additionally, he has spent years leading teams studying spacecraft mission requirements, capabilities, designs, and architectures for all space markets and developing strategies and tactics for engineering team leadership and program and business management. His experience ranges from hands-on research and development, to leading small innovative teams, to leading, as General Manager, the world's largest developer and producer of in-space propulsion technologies and systems, Aerojet Rocketdyne's 400+ person site in Redmond, Washington. His experience with chemical, electric, and nuclear propulsion system development and production as well as their integration requirements and challenges for all spacecraft sizes and applications provides a broad foundation for assessing new challenges and opportunities, and his extensive contacts in the U.S. and international space community enable him to facilitate new connections and create new opportunities. Dr. Myers is also the President of the Washington State Academy of Sciences and the Chair of Washington State's Joint Center for Aerospace Technology Innovation, as well as serving on the Boards for the Electric Rocket Propulsion Society (President 2013-2020) and Seattle's Museum of Flight. Additionally, Dr. Myers supports his community serving on National Academies committees and giving speeches and lectures.

### **Education**

BS Aerospace Engineering, summa cum laude, University of Michigan, 1984  
Ph.D, Mechanical and Aerospace Engineering, Princeton University, 1989

### **Experience**

July 2016 – present: independent consultant, R Myers Consulting, LLC  
2013-July 2016: Executive Director, Advanced In-Space Programs, Aerojet Rocketdyne  
2011 – 2013: Executive Director, Electric Propulsion and Integrated Systems, Aerojet  
2010 – 2011: Deputy Lead, Space and Launch Systems and Exec. Director, Electric Propulsion & Integrated Systems, Aerojet  
2006-2010: General Manager, Aerojet Redmond Operations  
2005-2006: Executive Director, Systems and Technology Development, Aerojet  
2002-2005: Director, Systems and Technology Development, Aerojet  
1996-2002: Director, Electric Propulsion and Space Electronics, Olin Aerospace, Primex Technologies, and GD Space Propulsion  
1988-1996: Research Engineer and Group Supervisor (Sverdrup and Nyma) at NASA Glenn Research Center (then Lewis), conducting and overseeing in-space propulsion research

### **Awards and Honors**

Stuhlinger Medal for Outstanding Achievement in Electric Propulsion, Electric Rocket Propulsion Society, 2017  
Wyld Propulsion Award, American Institute of Aeronautics and Astronautics, 2014  
Member (elected), Washington State Academy of Sciences, 2012  
Fellow (elected), American Institute of Aeronautics and Astronautics, 2010  
European Space Agency Award for "Outstanding Contribution to SMART-1 Mission", 2003  
NASA Award for "Turning Goals into Reality", for outstanding contributions to and exceptional progress toward NASA Solar Electric Propulsion Technology Applications Readiness (NSTAR) Team, 2001

NASA Group Achievement Award for the NASA Solar Electric Propulsion Technology Applications Readiness (NSTAR) Team, 1999

NASA Award for Exceptional Contributions to the Space Station Alpha Photovoltaic Test, 1995

NASA Award for Outstanding performance in support of NASA's Space Propulsion Technology Division, 1994

NASA Award for Outstanding support of NASA's On-Board Propulsion Branch, 1992

NASA Award for Outstanding contributions to the Space Station Freedom Photovoltaic Array Test, 1992

NASA Award for Attaining highest power and performance levels achieved with MPD thrusters, 1991

### **Boards and Other Service to Aerospace, Science, and Engineering Community**

2020 – Present: President, Washington State Academy of Sciences; Board member since 2016

2012-Present: Board of Directors and Chair, Joint Center for Aerospace Technology Innovation (Appointed by Washington State Governor)

1995-Present: Board of Directors (Founding member) and President (2013-2020), Electric Rocket Propulsion Society

2015 – Present: Board of Trustees, Museum of Flight, Strategic Planning Committee Chair and member of Education and Spaceflight Committees

2006-Present: Visiting Committee, University of Washington, Dept. of Aeronautics and Astronautics

2020 – Feb 2021: Co-Chair: National Academy of Sciences, Engineering and Medicine Committee “Space Nuclear Propulsion for Human Mars Exploration”

2014-Sept 2020: Member, National Academy of Sciences, Engineering and Medicine Space Technology Industry-Government-University Roundtable

2012: Panelist and In-Space Propulsion (TA02) lead, National Academy of Sciences, Engineering and Medicine, “NASA Technology Roadmaps and Priorities: Restoring NASA’s Technological Edge and Paving the Way for a New Era in Space”

2011-July 2016: Board of Directors, Aerojet Rocketdyne Foundation

2010-2012: Advisory Board, Seattle Science Fair

2006: Panelist, National Academy of Sciences, Engineering and Medicine; “High Energy Power and Propulsion and In-Space Transportation”

1993-2008: Associate Editor, Journal of Propulsion and Power

1998-2000: Chair, AIAA Electric Propulsion Technical Committee

1995-2006: Instructor, AIAA Electric Propulsion Short Course

1994: Organizer, Electric Propulsion Sessions, AIAA Joint Propulsion Conference

1990 – Present: Session chair at most Joint Propulsion and International Electric Propulsion Conferences

### **Invited Speeches, Presentations, and Panels**

**Invited Speaker/Lecturer** (examples only): Graduation Commencement Speaker at Washington State University (5/2013); Banquet speaker, American Junior Academy of Sciences, 2020; Plenary Speaker at 2013 IECEC “Power Generation and Processing Challenges for Near-Term High Power Solar Electric Propulsion”; Pacific Northwest Aerospace Association (5/2015) “The Business of Space in Washington State”; Graduation speaker for Washington Aerospace Scholars program (2014, 2015, 2016); Univ. Washington Jackson School of International Studies “Space in Washington State”; Testimony to Washington Lt. Governor’s Summit on Space (12/2015), “Aerojet Rocketdyne in Washington State”; MIT Enterprise Forum Seattle “Human Mars Exploration: How do we do it affordably?” (12/2015); NRO Technology Seminar “Enhanced Mission Affordability thru Advanced In-Space Propulsion” (1/2013); NRC Human Spaceflight Committee “Affordable Human Space Exploration Architectures” (6/2013); NASA ASEB “High Power Solar Electric Propulsion” (10/2013); **Invited Panelist** (examples only): Space Propulsion 2016 “Primes and Operators vs. Suppliers Views on Space Propulsion: Spacecraft”; U.S-Japan Space Forum (3/2016); Propulsion and Energy Conference Forum 360: “Government Investments Enabling Advancement of In-Space Propulsion”

(7/2015); AIAA Propulsion and Energy panel on “Keeping it Going: Sustainability and Growth in Technology and Workforce” (7/2014); Seattle Museum of Flight “The Future of Space” (1/2014); AIAA Propulsion and Energy Conference IECEC Panel on Human Exploration (7/2015) “In-Space Propulsion for Exploration”; “International Partnerships” (Space 2013, 9/2013); “U.S. Space Propulsion” (Space Propulsion 2013, 5/2013); “Space Propulsion in the Puget Sound Region” (WashingtonSTEM, 2/2012); “Pushing the Limits of Knowledge” for NASA 50<sup>th</sup> Anniversary Forum, (2008); Aerospace Lectures @ U of WA (annual from 1997 – present); “Evolution and Future Directions for Space Transportation” (2003); and at many other locations including Cornell, JPL, LANL, LLNL, Michigan Tech., Ohio State U., ORNL, Princeton U., U of Michigan, U of Tennessee Space Institute, and Worcester Polytechnic Institute

### **Patents**

- Helicon Hall Thruster, Brian E. Beal, Roger M. Myers, Kristi H. de Gryz and Alfred C. Wilson, U.S. Patent 7,436,122 Oct. 14, 2008
- Uniform Gas Distribution in ion accelerators with closed electron drift, U.S. Patent 6612105, Arnie Voigt, Kristi de Gryz, David King, and Roger Myers, Sept. 2, 2003
- Three axis pulsed plasma thruster with angled cathode and anode strip lines; U.S. Patent 6,173,565; R. Joseph Cassidy, Roger M. Myers and Robert D. Osborne, 1998
- Pulsed Mode Cathode; U.S. Patent 5,357,747; Roger M. Myers and Vincent K. Rawlin, Oct 25, 1994

### **Sample Career Accomplishments**

#### **Department of Defense Space missions:**

**Advanced Extremely High Frequency Mission (AEHF):** led team that developed and produced the 4.5kW Hall thruster propulsion system (thrusters and power processing electronics) used for orbit raising and station keeping, including development of the world’s first zero-erosion long-life Hall thruster (which led to today’s magnetic-shielding concepts).

**Global Positioning System:** Led team that developed and produced propulsion system for all GPS IIF spacecraft

**Wideband Gapfiller Mission:** led team that produced GEO insertion bipropellant engines for all of these spacecraft

**Coriolis:** led team that developed propulsion system for the Navy spacecraft

**NFIRE:** led team that developed and produced propulsion system for Missile Defense Agency spacecraft

**Many classified missions**

#### **NASA Space Missions:**

**Mars Science Laboratory:** led team that developed and produced the lander engines with continuous 100:1 throttling capability (7 to 700lbf thrust) enabling the Curiosity Rover to land successfully on Mars, and recently used for Perseverance rover landing.

**Pluto/New Horizons:** led team that developed and built the propulsion system for APL-led mission to Pluto and beyond – providing extraordinary instrument pointing accuracy during high-speed fly-by.

**STEREO:** led team that developed and built the propulsion systems for the twin spacecraft

**Mars Phoenix Lander:** led team that produced the lander engines for first ever controlled soft-landing using pulsed-mode throttling.

**THEMIS:** led team that developed and built the propulsion systems for the 5-spacecraft constellation of small spacecraft

**GOES-R:** led team that developed and produced the arcjet system for orbit acquisition and control

**Earth Orbiter 1:** led team that developed and built both hydrazine and pulsed plasma thruster propulsion systems for the New Millennium program demonstrator spacecraft.

**Orion:** led team developing all the engines for both the Crew and Service modules, including both new monopropellant and bipropellant engines (2005-2011)

**Ares:** led team that developed 700lbf Roll Control Engines for the Ares launcher

**Deep Space 1:** performed early lifetests on NSTAR ion thruster and designed plume diagnostics used in initial spacecraft interface assessments. This same engine was used on NASA's **Dawn** mission to the asteroids Vesta and Ceres.

**Green Propellant Infusion Mission:** led team that designed, developed and produced AF-M31E propellant thrusters and integrated propulsion system for this successful technology demonstration mission.

### International Civil Space Missions

**European Automated Transfer Vehicle:** led team that qualified and produced 100lbf thrust primary orbit adjust engines for the Jules Verne and subsequent ATV vehicles

**H-II Transfer Vehicle:** led team that qualified and produced 25lbf thrust ACS engines for the HTV vehicle

**Smart-1:** led team that developed and produced hydrazine attitude control system for European mission to the moon.

**DRTS and WINDS:** led team that developed and produced the arcjet systems for these two Japanese communications satellites

### Commercial Missions

**GeoEye-1:** led team that developed propulsion system for highest resolution commercial imagery spacecraft

**A2100:** Led team that developed and continues producing all chemical and electric engine systems (thrusters and power electronics) for Lockheed-Martin's A2100 series of spacecraft (1996-2010)

**Star-2:** Led the team producing all the chemical and electric attitude control engines for Orbital's (now Northrup Grumman) Star series of commercial spacecraft (2006-2010)

**FS 1300:** Led the team that developed, qualified and produced the bipropellant apogee engines for Loral's commercial satellites (2006-2010)

**Boeing 702:** led team that developed and produced bipropellant apogee engine for Boeing's commercial satellites

**Eurostar 2000/3000:** Led the team producing the bipropellant engines for EADS/Astrium's commercial satellites (2006-2010)

### Technology Development – but not yet flown

Led teams which:

- wrote winning proposals for NASA Advanced Electric Propulsion System (AEPS), the NASA Evolutionary Xenon Thruster (NEXT), and the 100kW Nested Hall Thruster System demonstration (NextSTEP) programs. The NEXT ion thruster is currently being integrated onto NASA's DART mission as a flight demonstration.
- demonstrated highest performance 100lbf thrust class NTO/Hydrazine bipropellant engine with Isp of 334s (NASA AMBR program, 2008)
- demonstrated highest thrust-to-power ratio Hall thruster (USAF HPPS program, 2008)
- built the NEXT 7.5kW high performance ion thruster (NASA NEXT program, 2007) – in 2015 awarded flight contract
- developed and qualified a 620s I<sub>sp</sub> arcjet propulsion system (2002)
- highest power U.S. steady state magnetoplasmadynamic thruster (225kW, 1993)

## Publications

### Peer-Reviewed Publication

1. "Space Nuclear Propulsion for Human Mars Exploration", R. Braun, R. Myers, S. Bragg-Sitton, J. Cirtain, T. Dodson, A. Gallimore, J. Gilland, B. Lal, P. Moin, J. Sholtis and S. Zinkle, National Academies of Sciences, Engineering and Medicine, 2021, Washington DC, The National Academies Press.  
<https://doi.org/10.17266/25977>.
2. "The Technological and Commercial Expansion of Electric Propulsion," D. Lev, R Myers, K Lemmer, J Kolbeck, H. Koizumi and K. Polzin, *Acta Astronautica*, Vol. 159, June 2019, pp. 213-227.
3. Electric Propulsion Space Experiment (ESEX)", Myers, R. M., *Journal of Propulsion and Power*, Vol. 18, No. 4, July-Aug 2002, p. 721.
4. "Experimental Investigations and Numerical Modeling of Pulsed Plasma Thruster Plumes," Gatsonis, N.A., Eckman, R., Yin, X., Pencil, J., and Myers, R. M., *Journal of Spacecraft and Rockets*, Vol.38 No.3, May – June 2001, pp. 454-464.
5. "Model of Plasma Contactor Performance," Katz, I., Gardner, B.M., Mandell, M.J., Jongeward, G. A., Patterson, M., and Myers, R.M., *Journal of Spacecraft and Rockets*, Vol. 34, No. 6, November-December 1997, pp. 824 – 828.
6. "Advanced Propulsion for Geostationary Orbit Insertion and North–South Station Keeping;" Oleson, S. R., Myers, R.M, Kluever, C. A., Riehl, J., and Curran, F. M., *Journal of Spacecraft and Rockets*, 1997, vol. 34 no.1, pp. 22-28.
7. "Introduction to Arcjets and Arc Heaters: Research Status and Needs Special Section," , *Journal of Propulsion and Power*, Vol. 12, No. 6, Nov-Dec 1996, p. 1010.
8. "Mechanisms of Anode Power Deposition in a Low-Pressure Free Burning Arc," *IEEE Transactions on Plasma Science*, Soulas, G. C., and Myers, R. M., Vol. 24, No. 2, April 1996, pp. 478 – 486.
9. Geometric Scaling of Applied-Field Magnetoplasmadynamic Thrusters; Myers, R.M., *Journal of Propulsion and Power*, Vol. 11, No. 2, March-April 1995, pp.343-350.
10. "Anode Power Deposition in an Applied-Field Segmented Anode MPD Thruster"; Gallimore, A.D., Myers, R.M., Kelly, A.J., and Jahn, R.G.; *Journal of Propulsion and Power*, Vol. 10, No. 2, March – April 1994, pp 262-268; see also AIAA-91-2343, July 1991.
11. "Test Facilities for High Power Electric Propulsion," Sovey, J.S., Vetrone, R.H., Grisnik, S. P., Myers, R.M., and Parkes, J.E.; *Journal of Propulsion and Power*, Vol. 10, No. 1, Jan-Feb. 1994, pp. 18-24. See also AIAA 91-3499, Sept. 1991 and NASA TM 105247.
12. "Applied-Field MPD Thruster Performance with Argon and Hydrogen Propellants," Myers, R.M., *Journal of Propulsion and Power*, Vol. 9, No. 5, September – October 1993, pp. 781 – 784.
13. "Electric Propulsion: an Evolutionary Technology," Curran, F.M., Sovey, J.S., and Myers, R.M., *Acta Astronautica*, Vol. 29, No. 9, July 1993, also presented as IAF 91-241, 42<sup>nd</sup> Congress of the International Astronautical Federation, Montreal, Canada, Oct. 5-11, 1991.
14. "Thermal Nonequilibrium in a Low Power Arcjet Nozzle," Zube, D.M. and Myers, R.M., *Journal of Propulsion and Power*, Vol. 9, No. 4, July-August 1993, see also AIAA 91-2113, July 1991, and NASA CR 187166.

15. "Techniques for Spectroscopic Measurements in a Low Power Arcjet Nozzle," Zube, D.M. and Myers, R.M., *Journal of Propulsion and Power*, Vol. 8, No. 1, Jan-Feb 1992.
14. "Energy Deposition in Low Power Coaxial Plasma Thrusters," Myers, R. M., Kelly, A. J., and Jahn, R. G., *Journal of Propulsion and Power*, Vol. 7, No. 5, Sept. – Oct. 1991. See also AIAA 88-3206, July 1988.
16. "Cathode Phenomena in a Low Power, Steady-State MPD Thruster," Myers, R.M., Suzuki, N., Kelly, A.J., and Jahn, R.G., *Journal of Propulsion and Power*, Vol. 7, No. 5, Sept – Oct. 1991. See also AIAA 88-3206, July 1988.

### Book Contributions

Nuclear Electric Propulsion: Status and Future, with Gilland, J., Sovey, J., and Brophy, J., in *A Critical Review of Space Nuclear Power and Propulsion, 1984-1993*, M. El-Genk, ed., American Institute of Physics Press, New York, 1994.

### Trade Journal

"Fiber-Optic Switch for Broadband Emission Spectroscopy" DeGroot, W., Myers, R. M., and Zube, D. M., *Laser Tech Briefs*, Vol. 2, No. 2, Spring 1994, pp. 50 – 54.

### Conference Papers

1. "Performance of the Aurora Low-Power Hall Effect Thruster," Sommerville, J., Frunceck, C., King, L., Makela, J., Terhune, K., Washeleski, R., and Myers, R., IEPC-2019-740, 36<sup>th</sup> International Electric Propulsion Conference, Vienna, Austria, Sept. 2019.
2. "Nuclear Launch Approval: Options for Criteria"; Kowal, K., Locke, J., Myers, R., and Howieson, S., Paper #51 at the 2019 Nuclear and Emerging Technologies for Space Conference, American Nuclear Society Topical Meeting, Richland, WA, Feb 25-28, 2019.
3. "13kW Advanced Electric Propulsion Flight System Development and Qualification," Jackson, J., Allen, M., Myers, R., Soendker, E., Welander, B., Tolentino, A., Hablitzel, S., Yeatts, C., Xu, S., Sheehan, C., Cardin, J., Snyder, J., Hofer, R., Tofil, T. and Herman, D., IEPC-2017-223, 35<sup>th</sup> International Electric Propulsion Conference, Atlanta, GA, Oct. 2017
4. "100 kW Nested Hall Thruster System Development," Jackson, J., Allen, M., Myers, R., Hoskins, W., Soendker, E., Welander B., Tolentino, A., Hablitzel, S., Hall, S., Gallimore, A., Jorns, B., Hofer, R., Goebel, D. and Pencil, E., IEPC-2017-219, 35<sup>th</sup> International Electric Propulsion Conference, Atlanta, GA, October 8 – 12, 2017
5. "NEXT-C Flight Ion Propulsion System Development Status," Fisher, J., Ferriauolo, B., Monheiser, J., Barlog, C., Allen, M., Myers, R., Hoskins, W., Bontempo, J., Nazario, M., Shastry R., Soulas, G. and Aulisio, M., IEPC 2017-218, 35<sup>th</sup> International Electric Propulsion Conference, Atlanta, GA, Oct. 2017
6. "Development of a 13kW Hall Thruster Propulsion System Performance Model for AEPS," Stanley, S., Allen, M., Goodfellow, K., Chew, G., Rapetti, R., Tofil, T., Herman D., Jackson, J., and Myers, R., AIAA 2017-4726, 53<sup>rd</sup> AIAA/SAE/ASEE Joint Propulsion Conference, AIAA Propulsion and Energy Forum, Atlanta, GA, July 2017.

7. "Architecture Sensitivity to Propulsion Choices for Human Mars Missions," Joyner, C. R., Horton, J., Kokan, T.S., Levack, D. J., Long, M., Myers, R., Widman, F., AIAA Space 2016, AIAA-2016-5458, Sept. 2015.
8. "Affordable Exploration Architectures Using the Space Launch System and High-Power Solar Electric Propulsion," Myers, R., Joyner, C.R., Cassady, R.J., Overton, S., Kokan, T., Horton, J., Hoskins W.A., IEPC-2015-492, 34th International Electric Propulsion Conference July, Kobe, Japan, July 2015
9. "Solar Electric Propulsion Architecture for Mars Cargo for Affordable Exploration and Sustained Permanence," Joyner, C. R., Kokan, T., Myers, R., Levack D., and Cassady, R. J., AIAA Space 2015, AIAA-2015-4520, Pasadena, CA, Sept 2015
10. "30 Years of Electric Propulsion Flight Experience at Aerojet Rocketdyne," Hoskins, W. A., Cassady, R. J., Morgan, O., Myers, R. M., King, D. Q., and de Grys, K., 33<sup>rd</sup> International Electric Propulsion Conference, Washington D.C., October 2013.
11. "Solar Electric Propulsion (SEP) Benefits for Near-Term NASA Exploration," DeMaster-Smith, L., Kimbrel, S., Overton, S., Carpenter, C., Myers, R., and King, D., AIAA-2013-5352, AIAA Space 2013 Conference and Exposition, San Diego, CA, Sept. 2013
12. "A Space Logistics System Based on Efficient In-space Transportation," Carpenter, C., Myers, R., Hoskins, W., Kimbrel, S., AIAA-2012-5128, AIAA Space 2012 Conference and Exposition, Pasadena, CA, Sept. 2012.
13. "High Power Solar Electric Propulsion for Human Space Exploration Architectures", Myers, R. M. and Carpenter, C., IEPC 2011-261, 32<sup>nd</sup> International Electric Propulsion Conference, Wiesbaden, Germany, September 2011.
14. Overview of Major U.S. Industrial Electric Propulsion Programs, Myers, R. M., AIAA-2004-3331, 40<sup>th</sup> Joint Propulsion Conference and Exhibit, Fort Lauderdale, FL, July 2004
15. "Overview of major U.S. industrial programs in electric propulsion," Myers, R. M., AIAA-2000-3147, 36<sup>th</sup> Joint Propulsion Conference and Exhibit, Huntsville, AL, July 16-19, 2000.
16. "Pulsed Plasma Thruster plumes - Experimental investigations and numerical modeling," Gatsonis, N. A., Byrne, L., Eckman, R., Gagne, M., Yin, X., Pencil, E. J., Myers, R.M., AIAA-2000-464, Aerospace Sciences Meeting and Exhibit, 38th, Reno, NV, Jan. 10-13, 2000.
17. "Hall Thruster-Cathode Coupling," Tilley, D., de Grys, K., and Myers, R., AIAA 1999-2865, 35<sup>th</sup> Joint Propulsion Conference and Exhibit, Los Angeles, CA, July 1999.
18. "Overview of Major U.S. Industrial Programs in Electric Propulsion," Myers, R. M., Cassady, R. J., AIAA-1998-3179, 34<sup>th</sup> Joint Propulsion Conference and Exhibit, Cleveland, OH, July 13-15, 1998.
19. "Flight Hollow Cathode for Hall Thruster Applications," Tilley, D.L., Willmes, G., Myers, R.M., and Smith R., AIAA-1998-339, 34<sup>th</sup> Joint Propulsion Conference and Exhibit, Cleveland, OH, July 13-15, 1998.
20. "Experimental Investigation of the LES 8/9 Pulsed Plasma Thruster Plume," Eckman, R., Gatsonis, N. A., Myers, R. M., and Pencil, E. J., IEPC-97-126, Proceedings of the 25<sup>th</sup> International Electric Propulsion Conference, Cleveland, OH, September 1997.
21. "Investigation of Pulsed Plasma Thrusters for Spacecraft Attitude Control," Meckel, N. J., Cassady, R. J., Osborne, R. D., Hoskins, W. A., and Myers, R. M., IEPC-97-128, Proceedings of the 25<sup>th</sup> International Electric Propulsion Conference, Cleveland, OH, September 1997.
22. "Launch Vehicle and Power Level Impacts on Electric GEO Insertion," Oleson, S. R. and Myers, R. M., AIAA-1996-2978, 32<sup>nd</sup> Joint Propulsion Conference and Exhibit, Lake Buena Vista, FL, July 1-3, 1996.

23. "A 1000-Hr Wear Test of the NASA NSTAR Ion Thruster," Polk, J, Patterson, M. J., Brophy, J. R., Rawlin, V. K., Sovey, J. S., Myers, R. M., Blandino, J. J., Goodfellow, K. D., and Garner, C. E., AIAA-1996-2717, 32<sup>nd</sup> Joint Propulsion Conference and Exhibit, Lake Buena Vista, FL, July 1996.
24. "NSTAR Ion Thruster and Breadboard Power Processor Functional Integration Test Results," Hamley, J. A., Pinero, L. R., Rawlin, V. K., Miller, J. R., Myers, R. M., and Bowers, G. E., AIAA-1996-2720, 32<sup>nd</sup> Joint Propulsion Conference and Exhibit, Lake Buena Vista, FL, July 1996.
25. "Design and Operation of a Laboratory Benchmark PPT," Kamhawi, H., Turchi, P. J., Leiweke, R. J., and Myers, R. M., AIAA 1996-2732, 32<sup>nd</sup> Joint Propulsion Conference and Exhibit, Lake Buena Vista, FL, July 1996.
26. "Pulsed Plasma Thrusters for Small Spacecraft Attitude Control," McGuire, M. L., and Myers, R. M., Guidance Navigation and Control Conference, NASA Goddard Space Flight Center, May 1996.
27. "Pulsed Plasma Thruster Contamination," Myers, R. M., Arrington, L. A., Pencil, E., Carter, J., Heminger, J., Gatsonis, N., AIAA-1996-2729, 32<sup>nd</sup> Joint Propulsion Conference and Exhibit, Lake Buena Vista, FL, July 1-3, 1996.
28. "Improved Pulsed Plasma Thruster Systems for Satellite Propulsion," Meckel, N. J., Hoskins, W. A., Cassady, R. J., Myers, R. M., Oleson, S. R., McGuire, M., AIAA-1996-2735, 32<sup>nd</sup> Joint Propulsion Conference and Exhibit, Lake Buena Vista, FL, July 1-3, 1996
29. "Current Collection by ISSA Solar Array in Laboratory Chamber Environment and Implications for Space," Gardner, B., Jongeward, G., Katz, I., Chock, R., Kaufman, B., Myers, R., AIAA-1996-483, Aerospace Sciences Meeting and Exhibit, 34<sup>th</sup>, Reno, NV, Jan. 15-18, 1996
30. "A Model of Plasma Contactor Behavior in the Laboratory," Katz, I., Gardner, B., Jongeward, G., Patterson, M., Myers, R., AIAA-1996-484, Aerospace Sciences Meeting and Exhibit, 34<sup>th</sup>, Reno, NV, Jan. 15-18, 1996
31. "Pulsed Plasma Thruster Technology for Small Satellite Applications," Myers, R. M., Oleson, S., McGuire, M., Meckel, N., and Cassady, R. J., Proceedings of the 9<sup>th</sup> Annual AIAA/USU Conference on Small Satellites, Utah State University, Sept. 1995.
32. "Advanced Propulsion Benefits to New Millennium Class Missions," Dudzinski, L.A. and Myers, R. M., Proceedings of the 9<sup>th</sup> Annual AIAA/USU Conference on Small Satellites, Utah State University, Sept. 1995.
33. "Electric Propulsion for an Interplanetary Astrophysics Mission," Patel, B., Martinez-Sanchez, M., Ricker, G., Tilley, D., Barnhart, D., Alexander, H., Myers, R. M., Pencil, E., Horvat, G., and Samella, J., IEPC 95-235, Proceedings of the 24<sup>th</sup> International Electric Propulsion Conference, Moscow, Russia, Sept. 1995.
34. "Electric Propulsion for Geostationary Orbit Insertion," Oleson, S. R., Curran, F. M., and Myers, R. M., IECEC 95-363, Proceedings of the 30<sup>th</sup> Intersociety Energy Conversion Engineering Conference, July 1995.
35. "Advanced Propulsion for Geostationary Orbit Insertion and North-South Station Keeping," Oleson, S. R., Myers, R. M., Kluever, C. A., Riehl, J. P, and Curran, F. M., AIAA-1995-2513, ASME, SAE, and ASEE, Joint Propulsion Conference and Exhibit, 31<sup>st</sup>, San Diego, CA, July 10-12, 1995.
36. "Experiments with Multi-Material Propellants in Ablation-Fed Pulsed Plasma Thrusters," Leiweke, R.J., Turchi, P. J., Kamhawi, H., and Myers, R. M., AIAA-1995-2916, 31<sup>st</sup> Joint Propulsion Conference and Exhibit, San Diego, CA, July 1995
37. "Preliminary Pulsed MPD Thruster Performance," Domonkos, M.T., Gallimore, A. D., Myers, R. M., and Thomson, E., AIAA 1995-2674, 31<sup>st</sup> Joint Propulsion Conference and Exhibit, San Diego, CA, July 1995.



38. "Low Power Electric Propulsion for Minor Body Applications," Riehl, J., Gefert, L., Myers, R. M., Pencil, E. McAdams, J., and Kusnierkiewicz, D., AIAA-1995-2812, 31<sup>st</sup> Joint Propulsion Conference and Exhibit, San Diego, CA, July 1995.
39. "Spectral Line Emission by the SEPAC Plasma Contactor: Comparison Between Measurements and Theory," Katz, I., Parks, D., Gardner, B., Mende, S., Colin, H., Manzella, D., and Myers, R.M., AIAA-1995-0369, 33<sup>rd</sup> Aerospace Sciences Meeting, Reno, NV, January 1995.
40. "Mission to the Sun: The Solar Pioneer," McNutt, R. L., Reynolds, E.L., McAdams, J. V., Bokulic, R. S., Bhatnagar, V, Williams, B. D., Wiley, C. E., Myers, R. M., and Gefert, L. P., Paper 1.2-003, COSPAR (Committee on Space Research) 1994.
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