

BIOGRAPHICAL SKETCH

Patricia H. Reiff

Personal Data:

Birthdate: March 14, 1950
Birthplace: Oklahoma City, Oklahoma
Married (to Thomas W. Hill), Three Children

Education:

B.S., 1971, Oklahoma State University, Stillwater, Oklahoma, Physics
M.S., 1974, Rice University, Houston, Texas, Space Science
Ph.D., 1975, Rice University, Space Physics and Astronomy

Research Interests:

Co-Investigator and E/PO Lead, MMS mission, NASA
Co-Investigator, PEACE Instrument, Cluster II Mission, ESA

Positions Held:

May 2012 – present:
Professor of Physics and Astronomy, Rice University, Houston, Texas

July 2000 – 2012:
Director, Rice Space Institute and Professor of Physics and Astronomy

July 1996 – June 2000:
Chairman, Department of Space Physics and Astronomy, Rice University

July 1992 – June 2000:
Professor, Department of Space Physics and Astronomy, Rice University

November 1990 - June 1992:
Distinguished Faculty Fellow, Center for Space Physics, Rice University

February 1987 - November 1990:
Senior Research Scientist, Center for Space Physics, Rice University

May 1981 - February 1987:
Associate Research Scientist, Center for Space Physics, Rice University

July 1979 - January 1985:
Assistant Chairman, Dept. of Space Physics and Astronomy, Rice Univ.

January 1983 - June 1983:
Adjunct Associate Professor, Dept. of Space Physics and Astronomy, Rice

July 1978 - May 1981:
Assistant Professor, Dept. of Space Physics and Astronomy, Rice Univ.

September 1976 - July 1978:
Adjunct Assistant Professor, Dept. of Space Physics and Astronomy, Rice

September 1975 - August 1976:
NAS/NRC Resident Research Assoc., NASA Marshall Space Flight Center

April 1975 - September 1975:
Research Associate, Dept. of Space Physics and Astronomy, Rice U.

Memberships:

American Geophysical Union, 1972 - present

Fellow, 1997 - present

Member, Committee on Public Affairs, 2005 - 2008

Member, SPA Public Education Committee, 1993 - present

Member, SPA Awards Committee, 1994 - 1996

Member, Federal Budget Review Panel, 1990 - 1993

Member, JGR Editor Search Committee, 1991 - 1992

Member, Committee on Budget and Finance, 1980 - 1982

International Union of Geodesy and Geophysics, 1972 - present

United States Delegate, 1975, 1981, 1983, 1989, 1991, 1993, 1995,
1999, 2001

Chair, IAGA Working Group 2F (1991 - 1995)

Committee on Space Research (COSPAR)

U.S. Discipline Representative, 1998 - present

Cosmos Club, 1992 - present

Wellesley Alumnae Club, 1981 - present

American Meteorological Society, 1985 - 1990; Councilor, 1985 - 1988

Sigma Pi Sigma, 1970 - present

Sigma Xi, 1981 - present; Member, Awards Committee, 1981

American Association for the Advancement of Science, 1976 - 96

Phi Kappa Phi, 1971 - present

Citizens' Environmental Coalition, Advisory Board, 1998 - 2000;

Board of Trustees, 1978 - 1997; President, 1980 - 1985

City of Houston Green Ribbon Committee, 1981 - 1983

Houston Chamber of Commerce Civic Affairs Council, 1980 - 1983

Houston-Galveston Area Council Committee on Air Quality, 1980 - 1983

Consulting:

Houston Museum of Natural Sciences (sundial; education; solar system)

Legal Work; Guide for solar eclipse tours and cruises (eclipssetours.com)

Ph.D. Students: Ramkumar Balasubramanian (2010), Deirdre Wendel (2009); Menelaos Sarantos (2005); Vance Henize (2003); David Streutker (2003); Wayne Keith (2002); C. Ben Boyle (1998); Shan Xue (1997); Loretta Weiss (1992); Gang Lu (1991); Rudy A. Frahm (1987); Georgette O. Burgess (1984). (12 as of 2015). *In progress:* James Webster, Andrew Marshall

M.S. Students: John Shade (1989); Aramis Martinez (2008); William Longley (2014)

M.S.T. Students: Kevin Robedee and Katrina Miguez (2003); Dolores Garay and Anastasia Furitsch (2004); Shazia Iqbal and Amy Jackson (2005); Jimmy Johnson, Mohammad Abid, and Susan Creager (2006); Barbara Brown, Jorge Campos, and Robert Cunningham (2007); Michael Vu and Ginger Burns (2008); Maureen Guzman, Richard Hoffman, and Brian Jacoby (2009); Nancy Fiegel, Molly Nipper (2010); Gregory Adragna, Tammie Crannie, Carol Waters, Omar Mendoza (2011); Mary Ervin and Hannah Lange (2012); Shaun Wegscheid and Jose Flores-Collazo (2014); Kelly Bird (2015); Gigi Nevils and Karen Cauffman (2016) (30 as of 2016)
In Progress: Franklyn Pacheco, Heather Spaugh

Postdoctoral Students (*prev 5 years*): Ramkumar Balasubramanian

Awards:

“Marjorie Corcoran Award for Mentoring and Diversity”, (inaugural award), Rice University, 2018.
“STEM Influencer Award” (inaugural award), Women’s Energy Network, 2018.
"Space Physics and Aeronomy Richard Carrington Award" (SPARC), AGU, December 2013 (*first ever awarded*).
Named “Distinguished Birkeland Speaker” for 2012, University of Oslo
"Aethelstan Spilhaus Award" for public education, AGU, 2009 (*second ever awarded*)
NASA Outreach Certificate, 2008
Sloan Letter of Appreciation, 2007
NASA Group Achievement Award (Cluster Mission), 2004
NARS Service Award, 2004
NASA Group Achievement Award (IMAGE Mission), 2001
Aerospace Educator Award, Society of Women in Aerospace, 1999
NASA Group Achievement Award (GGG Mission), 1998
Named Fellow of the American Geophysical Union, 1997
Elected, Cosmos Club, 1992
Named, one of ten Houston "Women on the Move", 1990 (sponsored by Texas Executive Women and the **Houston Post**)
Nominated, President's Voluntary Action Award, 1983
Certificate of Appreciation, American Geophysical Union, 1983
Listed, *Who's Who in America; International Who's Who of Women, American Men and Women of Science*

Special Publication Award, American Geophysical Union, Solar-Planetary Relations Section, 1982
Listed, *Outstanding Young Women of America*, 1977, 1980
National Research Council, Faculty Assoc., Southwest Res. Instit., 1979
National Academy of Sciences, National Research Council, Resident Research Associateship, 1975 -1976
Outstanding Physics Graduate, Oklahoma State University, 1971
Outstanding Physics Freshman; Freshman Honors, Wellesley Coll. 1968

Editorial Positions: Editorial Board, *Space Weather*, 2002 - 2006

Editor, *EOS, Transactions of the American Geophysical Union*, 1986-89

Associate Editor, *Reviews of Geophysics*, 1987 - 1991

Assoc. Editor, *Journal of Geophysical Research - Space Physics*, 1984-87

Co-Editor, *Magnetospheric and Ionospheric Plasmas*, special issue of *Advances in Space Research*, 1985

University Activities: Campus Observatory Committee, 2002 – present

Examination and Standing Committee, 2011 – 2012; 2015 – present;
Chair, 2018-present

Organizer, Conference for Undergraduate Women in Physics, 2017.

Brown College Associate, 1985-present; Distinguished Brown Associate, 2010; 2013; 2016

Corporate Relations Council, 2007-2012

Promotion and Tenure Committee, 2003-2007

Faculty Council, University Council, 2003 - 2005

Outreach Council, 1999 – 2007; K-12 Outreach council 2008-present

Research Council, 1988 - 1993; 1998 - 2000

Advisory Committee, Baker Institute for Public Policy, 1998-2008

Natural Science Strategic Planning Steering Committee, 1996-97
Chair, Undergraduate Studies Subcommittee, 1996-97

Committee on Undergraduate Education, 1994 - 1998

Vice Provost Search Committee, 1995-96; Dean Search Committee, 1997-8

**Scientific Advisory
Committees:**

Associate, Jones College, 1979-1983

Continuing Education or Alumni College Lecturer, 1995; 1997; 1998;
1999, 2005, 2007, 2008, 2010, 2011

Chief Organizer, "Frontiers in Space Physics and Astronomy" Conference,
1988, 1999, 2004, 2008, 2014

CCMC Visiting Committee, 2017

NSF Portfolio Review Committee, 2015-2016

Heliophysics Forum science advisor, 2009-2015

NASA E/PO MOWG, 2008

Los Alamos National Lab, NIS Advisory Committee, 1997 - 2002

Universities Space Research Association, University Rep., 1993 – present
Chair of the Council of Institutions, 2002 - 2004
Vice Chair of the Council of Institutions, 2000 - 2002
Co-Chair, Strategic Planning Committee, 2001 - 2003
Member, Nominating committee, 1994 - 8; Chair, 1997 - 98

Goddard Space Flight Center, Visiting Committee, 1999 - 2004

UCAR University Relations Committee, 2000 – 2003 (HAO Liaison)

Space Science Advisory Committee, NASA Office of Space Science, 93-8
Member, Space Station Utilization Subcommittee, 1996 - 98;
Member, OSS Education Implementation Task Force, 1995 - 96
Member, Roadmap Committee, Solar Connections Theme, 1996 -97

National Science Foundation, Advisory Committee for Atmospheric
Sciences, 1988 - 1992

Space Science Working Group, American Association of Universities, 1984
-present; Member, Steering Committee, 1984 - 1994

NASA Strategic Implementation Study, Magnetosphere Panel, 1990

Houston Metro Astronomy Council, 1987 - 1991

George Observatory Steering Committee, 1988 - 1990

Committee on Space Research (COSPAR), Subcommission D.3 on Energy
Redistribution in Planetary Magnetospheres, 1984 - 1988

Committee on Solar-Terrestrial Research, National Academy of Sciences, 1979 - 1984; CSTR Panel on Post-IMS Data Analysis, 1979 - 1984; Chairman, 1982 -1984

Data Systems Working Group, NASA, 1980 - 1988; Policy Committee

Courses Taught:

1976 – 77: Magnetospheric Physics (SPAC 604)
1977 – 81: Astronomy for Non-Science Majors (SPAC 241-2, 244, 495-6)
1981 – 82: Universe: Introduction to Astronomy (Continuing Education)
1982 – 83: Toxic Substances and the Public (Hanszen 248)
1984 – 85: The Solar System (Continuing Education)
1985 – 86: Observing Halley's Comet (Continuing Education)
1986 – 87: Amateur Astronomy (Continuing Education)
1987 – 88: Lecturer, School Mathematics Project
1988 – 89: Lecturer, School Math Project & The Science-Math Connection
1989 – 90: Lecturer, Elementary Science Alliance
1990 – 91: Solar System Physics (SPAC 471a)
1991 – 92: Observing the Universe (Continuing Education)
1992 – 93: Ionospheric Physics (SPAC 512); Solar Syst. Phys (SPAC 471)
1993 – 94: Exploring the Solar System (SPAC 202); Natural Sciences 102
1994 – 95: Ionospheric Physics (SPAC 512); Solar Syst. Phys (SPAC 202)
1995 – 96: Exploring the Solar System (SPAC 202); Distance Learning (Science over the Internet classes)
1996 – 97: Distance Learning (Science over the Internet classes)
1997 – 98: Exploring the Solar System (SPAC 202 - shared): Distance Learning (Science over the Internet classes)
1998 - 99: Exploration of the Solar System (SPAC 202) - shared
1999 - 00: Astronomy for Teachers (Spac 403); Grad. Seminar (Spac 500)
Summer 00: Teaching Earth and Solar System (SPAC 402)
2000 - 01: Exploration of the Solar System (ASTR 202); Teaching Earth and Space Science (ASTR 402)
2001 - 02: Sabbatical (fall); Astronomy for Teachers (ASTR 403)(spring)
2002 - 03: Exploration of the Solar System (ASTR 202); Teaching Earth and Space Science (ASTR 402)
2003 - 04: Exploration of the Solar System (ASTR 202); Astronomy for Teachers - Astrobiology (ASTR 403); Continuing Studies series: 40th Anniversary of Space at Rice
2004-2005: Physics of Ham Radio (PHYS 401); Teaching Astronomy Lab (ASTR 430)
2005-2006: Teaching Earth and Space Science (ASTR402); Astronomy for Teachers (ASTR403)
2006-2007: Physics of Ham Radio (PHYS 401); Teaching Astronomy Lab (ASTR 430)
2007-2008: Teaching Earth and Space Science (ASTR402); sabbatical spring 08
2008-2009: Astronomy for Teachers (ASTR403); Ham Radio (PHYS 401)

2009-2010: Teaching Earth and Space Science (ASTR402); Teaching Astronomy Lab (ASTR 430)
2010-2011: Ham Radio (PHYS 401); Astronomy for Teachers (ASTR403);
2011-2012: Teaching Earth and Space Science (ASTR402); Teaching Astronomy Lab (ASTR 430)
2012-2013: Astronomy for Teachers (ASTR403); Ham Radio (PHYS 401)
2013-2014: Teaching Earth and Space Science (ASTR402); Teaching Astronomy Lab (ASTR 530)
2014-2015: Astronomy for Teachers (ASTR503); Ham Radio (PHYS 501)
2015-2016: Teaching Earth and Space Science (ASTR502); Teaching Astronomy Lab (ASTR 530)
2016-2017: Sabbatical (Fall); Physics of Ham Radio (PHYS 501) spring
2017-2018: Teaching Earth and Space Science (ASTR502); Astronomy for Teachers (ASTR503)
2016-2017: Physics of Ham Radio (PHYS 501) fall; Teaching Astronomy Lab (ASTR 530), spring.

Publications (*number counts refereed journal or book articles only*)

- Moore, P. R., D. L. Reasoner, W. J. Burke, and F. J. Rich, "Lunar Surface Observations of the August, 1972, Solar Flare Activity," in *Collected Data Reports on August, 1972, Solar-Terrestrial Events*, ed. Helen E. Coffee, Report UAG-28, WDC-A for Solar-Terrestrial Physics, Boulder, Colorado, (1973), p. 356.
- Moore, P. R., "Magnetosheath Electrons at Lunar Distance," M.S. Thesis, Rice University, Houston, Texas, (1974).
- Reiff, P. H., and D. L. Reasoner, "The Magnetosheath Electron Population at Lunar Distance - General Features," *J. Geophys. Res.*, 80, (1975), p. 1232-1237.
- Reiff, P. H., "Modification of Particle Fluxes at the Lunar Surface by Electric and Magnetic Fields," Ph.D. Thesis, Rice University, Houston, Texas, (1975).
- Burke, W. J., P. H. Reiff, and D. L. Reasoner, "The Effect of Local Magnetic Fields on the Lunar Photoelectron Layer While the Moon is in the Plasma Sheet," *Geochem. Cosmochem. Acta, Suppl.* 6, Vol. 3, (1975), pp. 2985-2997.
- Reiff, P. H., "Magnetic Shadowing of Charged Particles by an Extended Surface," *J. Geophys. Res.*, 81, (1976), pp. 3423-3427.
- Reiff, P. H., and W. J. Burke, "Interactions of the Plasma Sheet with the Lunar Surface at the Apollo 14 Site," *J. Geophys. Res.*, 81, (1976), pp. 4761- 4764.
- Reiff, P. H., T. W. Hill, and J. L. Burch, "Solar-Wind Plasma Injection at the Dayside Magnetospheric Cusp," *J. Geophys. Res.*, 82, (1977), pp. 479-491.
- Hill, T. W., and P. H. Reiff, "Evidence of Magnetospheric Cusp Proton Acceleration by Magnetic Merging at the Dayside Magnetopause," *J. Geophys. Res.*, 82, (1977), pp. 3623-3628.
- Freeman, J. W., H. K. Hills, T. W. Hill, P. H. Reiff, and D. A. Hardy, "Heavy Ion Circulation in the Earth's Magnetosphere," *Geophys. Res. Lett.*, 4, (1977), pp. 195-197.
- Reiff, P. H., T. W. Hill, and J. L. Burch, "Reply to Comment by W. J. Heikkila," *J. Geophys. Res.*, 83, (1978), pp. 229-231.
- Harel, M., R. A. Wolf, P. H. Reiff, and H. K. Hills, "Study of Plasma Flow Near the Earth's Plasmapause," *Report AFGL-TR-77-0286*, Hanscom AFB, (1977).
- Reiff, P. H., J. L. Burch, and R. A. Heelis, "Dayside Auroral Arcs and Convection," *Geophys. Res. Lett.*, 5, (1978), pp. 391-394.
- Harel, M., R. A. Wolf, and P. H. Reiff, "Results of Computer Simulating the Inner Magnetosphere During a Substorm-Type Event," *Proceedings of the 21st COSPAR Symposium*, Paper M.4.6, (1978).

- Hardy, D. A., P. H. Reiff, and W. J. Burke, "Response of Magnetotail Plasma at Lunar Distance to Changes in the Interplanetary Magnetic Field, the Solar Wind Plasma, and Substorm Activity," *J. Geophys. Res.*, 84, (1979), pp. 1382-1390.
- Harel, M., R. A. Wolf, P. H. Reiff, and M. Smiddy, "Computer Modeling of Events in the Inner Magnetosphere," in *Quantitative Modeling of Magnetospheric Processes, Geophys. Monogr. Ser.*, Vol. 21, ed. W. P. Olson, AGU, Washington, D. C., (1979), pp. 499-512.
- Freeman, J. W., D. Cooke, and P. H. Reiff, "Space Environmental Effects and the Solar Power Satellite," in *Spacecraft Charging Technology-1978*, ed. R. C. Finke and C. P. Pike, NASA CP 1071, Washington, D. C., (1979), pp. 408-418.
- Reiff, P. H., "Low Altitude Signatures of the Boundary Layers," in *Proc. of Magnetospheric Boundary Layers, Alpbach, 11-15 June 1979*, ed. B. Battrock, ESA SP-148, Noordwijk, Netherlands, (1979), pp. 167-173.
- Reiff, P. H. and T. W. Hill, "Earth and Jupiter: Comparison of Magnetopause Structures," in *Proc. of Magnetospheric Boundary Layers, Alpbach, 11-15 June 1979*, ed. B. Battrock, ESA SP-148, Noordwijk, Netherlands (1979), pp. 227-228.
- Hill, T. W., and P. H. Reiff, "On the Cause of Plasma-Sheet Thinning During Magnetospheric Substorms," *Geophys. Res. Lett.*, 7, (1980), pp. 177-180.
- Reiff, P. H., J. W. Freeman, and D. L. Cooke, "Environmental Protection of the Solar Power Satellite," in *Space Systems and Their Interactions with the Space Environment*, eds. H. B. Garrett and C. P. Pike, New York, (1980), pp. 554-576.
- Hill, T. W., and P. H. Reiff, "Plasma-Sheet Dynamics and Magnetospheric Substorms," *Planet. Space Sci.*, 28, (1980), pp. 363-374.
- Burch, J. L., P. H. Reiff, R. A. Heelis, R. W. Spiro, and S. A. Fields, "Cusp Region Particle Precipitation and Ion Convection for Northward Interplanetary Magnetic Field," *Geophys. Res. Lett.*, 1, (1980), pp. 393-396.
- Reiff, P. H., R. W. Spiro, and T. W. Hill, "Prediction of the Polar-Cap Potential Drop," in *High Latitude Electric Fields in the Magnetosphere and Ionosphere*, ed. G. S. Stiles and F. T. Berkey, Amer. Geophys. Union, Washington, D. C., (1980), p. 22-1.
- Reiff, P. H., J. L. Burch, and R. W. Spiro, "Cusp Proton Signatures and the Interplanetary Magnetic Field," *J. Geophys. Res.*, 85, (1980), p. 5997-6005.
- Reiff, P. H., "*Solar Terrestrial Research for the 1980's*," Comm. on Solar-Terrestrial Research, National Academy Press, Washington, D.C., (1981).

- Harel, M., R. A. Wolf, P. H. Reiff, R. W. Spiro, W. J. Burke, F. J. Rich, and M. Smiddy, "Quantitative Simulation of a Magnetospheric Substorm, 1. Model Logic and Overview," *J. Geophys. Res.*, *86*, (1981), pp. 2217-2241.
- Harel, M., R. W. Wolf, R. W. Spiro, P. H. Reiff, C.-K. Chen, W. J. Burke, F. J. Rich, and M. Smiddy, "Quantitative Simulation of a Magnetospheric Substorm, 2. Comparison with Observations," *J. Geophys. Res.*, *86*, (1981), pp. 2242- 2260.
- Spiro, R. W., M. Harel, R. A. Wolf, and P. H. Reiff, "Quantitative Simulation of a Magnetospheric Substorm, 3. Plasmaspheric Electric Fields and Evolution of the Plasmapause," *J. Geophys. Res.*, *86*, (1981), pp. 2261-2272.
- Reiff, P. H., R. W. Spiro, and T. W. Hill, "Dependence of Polar Cap Potential Drop on Interplanetary Parameters," *J. Geophys. Res.*, *86* (1981), pp. 7639- 7648; correction, *87*, (1982), p. 2579.
- Reiff, P. H., "Sunward Convection in Both Polar Caps," *J. Geophys. Res.*, *87*, (1982), pp. 5976-5980.
- Wolf, R. A., M. Harel, R. W. Spiro, G.-H. Voigt, P. H. Reiff, and C.-K. Chen, "Computer Simulation of Inner Magnetospheric Dynamics for the Magnetospheric Dynamics for the Magnetic Storm of July 29, 1977," *J. Geophys. Res.*, *87*, (1982), pp. 5949-5962.
- Carovillano, R. L., and P. H. Reiff, "Scientific Results of the United States' IMS Effort," *Rev. Geophys. Space Phys.*, *20*, (1982), p. 653.
- Burch, J. L., P. H. Reiff, R. A. Heelis, J. D. Winningham, W. B. Hanson, C. Gurgiola, J. D. Menietti, R. A. Hoffman, and J. N. Barfield, "Plasma Injection and Transport in the Mid-Altitude Polar Cusp," *Geophys. Res. Lett.*, *9*, (1982), pp. 921-924, doi: 10.1029/GL009i009p00921.
- Spiro, R. W., P. H. Reiff, and L. J. Maher, Jr., "Precipitating Electron Energy Flux and Auroral Zone Conductances--An Empirical Model," *J. Geophys. Res.*, *87*, (1982), pp. 8215-8227, doi: 10.1029/JA087iA10p08215.
- Reiff, P. H., "Polar and Auroral Phenomena: A Review of U.S. Progress During 1979-1982," *Rev. Geophys. Space Phys.*, *21*, (1983), pp. 418-433.
- Reiff, P. H., "The Use and Misuse of Statistical Analyses," in *Solar-Terrestrial Physics - Fundamental Principles*, ed. R. L. Carovillano and J. M. Forbes, D. Reidel, Boston, MA, (1983), pp. 493-522.
- Burch, J. L., P. H. Reiff, and M. Sugiura, "Upward Electron Beams Measured by DE-1: A Primary Source of Dayside Region-1 Birkeland Currents," *Geophys. Res. Lett.*, *10*, (1983), pp. 753-756.
- Reiff, P. H., "Models of Auroral-Zone Conductances," in *Magnetospheric Currents*, *Geophys. Monogr. Ser.*, *28*, ed. T. A. Potemra and J. N. Barfield, AGU Press, Washington, D.C. (1983), pp. 180-191.

- Kamide, Y., H. W. Kroehl, B. A. Hausman, R. L. McPherron, S.-I. Akasofu, A. D. Richmond, P. H. Reiff, and S. Matsushita, "Numerical Modeling of Ionospheric Parameters from Global IMS Magnetometer Data for the CDAW-6 Intervals," World Data Center - A Report UAG-88, National Academy of Sciences, Washington, D.C. (1983).
- Reiff, P. H., "Evidence of Magnetic Merging from Low-Altitude Spacecraft and Ground-Based Measurements," in *Magnetic Reconnection, Geophys. Monogr. Ser.*, 30, ed. E. W. Hones, AGU Press, Washington, D.C., (1984), pp. 104-113.
- Burch, J. L., P. H. Reiff, J. D. Menietti, R. A. Heelis, W. B. Hanson, S. D. Shawhan, E. G. Shelley, M. Sugiura, D. R. Weimer and J. D. Winningham, "IMF By-dependent Plasma Flow and Birkeland Currents in the Dayside Magnetosphere: 1. Dynamics Explorer Observations," *J. Geophys. Res.*, 90, (1985), pp. 1577-1593.
- Reiff, P. H., and J. L. Burch, "By-Dependent Plasma Flow and Birkeland Currents in the Dayside Magnetosphere: 2. A Global Model for Southward and Northward IMF," *J. Geophys. Res.*, 90, (1985), pp. 1595-1609.
- Schmerling, E. R., S. W. H. Cowley, and P. H. Reiff, Editors, *Magnetosphere and Ionospheric Plasmas*, special issue of *Adv. Space Res.*, 5, (1985).
- Burch, J. L. and P. H. Reiff, "Field-Aligned Currents and Ion Convection at High Altitudes," *Adv. in Space Res.*, ed. E. R. Schmerling, S. W. H. Cowley and P. H. Reiff, 5, (1985), pp. 23-40.
- Heelis, R. A. and P. H. Reiff, "Observations of Magnetospheric Convection from Low Altitudes," *Adv. Space Res.*, ed. E. R. Schmerling, S. W. H. Cowley and P. H. Reiff, 5, (1985), pp. 349-362.
- Reiff, P. H., R. W. Spiro, R. A. Wolf, Y. Kamide, and J. H. King, "Comparison of Polar Cap Potential Drops Estimated From Solar Wind and Ground Magnetometer Data: CDAW 6," *J. Geophys. Res.*, 90, (1985), pp. 1318-1324.
- Simons, S. L., P. H. Reiff, R. W. Spiro, D. A. Hardy, and H. W. Kroehl, "A Comparison of Precipitating Electron Energy Fluxes on March 22, 1979 with an Empirical Model: CDAW-6," *J. Geophys. Res.*, 90, (1985), pp. 2727-2734.
- Reiff, P. H., "The NASA Budget in Congress," *EOS, Trans. AGU*, 66, (1985), p. 433.
- Reiff, P. H., "Particle Precipitation into the Thermosphere," in *Thermosphere Dynamics Workshop II*, ed. H. G. Mayr and N. J. Miller, NASA CP 2389, (1985), pp. 361-367.
- Reiff, P. H., "Timeliness, EOS, and the Electronic Age," *EOS, Trans. AGU.*, 67, (1986), p. 25.
- Reiff, P. H., H. L. Collin, E. G. Shelley, J. L. Burch and J. D. Winningham, "Heating of Upflowing Ionospheric Ions on Auroral Field Lines," in *Ion Acceleration in The Magnetosphere and Ionosphere, Geophys. Monogr. Ser.*, 38, T. Chang, editor, AGU Press, Washington, DC, (1986), pp. 83-91, [doi:10.1029/GM038p0083](https://doi.org/10.1029/GM038p0083).

- Frahm, R. A., P. H. Reiff, J. D. Winningham and J. L. Burch, "Banded ion morphology: Main and recovery storm phases," in *Ion Acceleration in the Magnetosphere and Ionosphere, Geophys. Monogr. Ser.*, 38, T. Chang, editor, AGU Press, Washington, DC (1986), pp. 98-107.
50. Heelis, R. A., P. H. Reiff, J. D. Winningham, and W. B. Hanson, "Ionospheric Convection Signatures Observed by DE 2 during Northward Interplanetary Magnetic Field," *J. Geophys. Res.*, 91, (1986), pp. 5817-5830.
- Reiff, P. H. and J. G. Luhmann, "Solar Wind Control of the Polar-Cap Voltage," in *Solar-Wind Magnetosphere Coupling*, ed. Y. Kamide and J. Slavin, Terra Publ. Co., Tokyo, (1986), pp. 453-476.
- Reiff, P. H., "Looking Ahead and Looking Back," *EOS, Trans. AGU*, 68, (1987), p. 74.
- Coley, W. R., R. A. Heelis, W. B. Hanson, P. H. Reiff, J. R. Sharber, and J. D. Winningham, "Ionospheric convection signatures and magnetic field topology," *J. Geophys. Res.*, 92, (1987), pp. 12352-12364.
- Roble, R. G., T. L. Killeen, N. W. Spencer, R. A. Heelis, P. H. Reiff, J. D. Winningham, and D. S. Evans, "Thermospheric dynamics during 21/22 November 1981: Dynamics Explorer measurements and TGCM predictions," *J. Geophys. Res.*, 93, (1988), pp. 209-225.
- Reiff, P. H., "A Budget We Can Get Behind," *EOS, Trans. AGU*, 69, (1988), p. 138.
- Reiff, P. H., H. L. Collin, J. D. Craven, J. L. Burch, J. D. Winningham, E. G. Shelley, L. A. Frank, and M. A. Friedman, "Determination of Auroral Electrostatic Potentials using High-and Low-altitude Particle Distributions," *J. Geophys. Res.*, 93, (1988), pp. 7441-7465.
- Reiff, P. H., "Richard P. Feynman 1918-1988," *EOS, Trans. AGU*, 69, (1988), p. 1649 and 1657.
- Lu, G., P. H. Reiff, M. R. Hairston, R. A. Heelis, and J. L. Karty, "Distribution of convection potential around the polar cap boundary as a function of the interplanetary magnetic field," *J. Geophys. Res.*, 94, (1989), pp. 13447-13461 .
- Reiff, P. H., G. Lu, D. R. Weimer, J. A. Slavin and M. Sugiura, "Auroral Electric and Magnetic Fields," in *Physics of Space Plasmas*, ed. T. Chang, G. B. Crew, and J. R. Jasperse, SPI Conference Proceedings and Reprint Series, 8, Scientific Publishers, Cambridge, MA, (1989), pp. 287-307.
- Weiss, L., M. J. Sablik, J. D. Winningham, R. A. Frahm, and P. H. Reiff, "Design and Numerical Simulation of a 3-D Electron Analyzer That Resolves Both Energy and Elevation Angle," *Nuclear Instruments and Methods in Physics Research*, 281, (1989), pp. 628-639.
- Toffoletto, F. R., T. W. Hill, and P. H. Reiff, "A model of FTE footprints in the polar cap," in *Physics of Magnetic Flux Ropes, Geophys. Monogr. Ser.*, 58, AGU Press, Washington, D.C., (1989), pp. 599.

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