PUBLICATIONS

A P L staff members were authors or co-authors of the following unclassified books and technical articles that were recently published:

Bailey LE, Roberts JC, and Joned DL (GWU)

Bao G (JHU), Jiang W (JHU), and Roberts JC

Benson RC, Phillips TE, Silver DM, Boies MT, U y OM, and Galica GE (Physical Sciences)

Bitman WR
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Cameron GE, and Hemsman CB
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Carkhuff BG, and Roberts JC

Castella FR, and Moore JR

Ceasar-Spall K, and Spall JC

Chin DC


Conn RA, Elenes J (Drexel U niv.), and Kam M (Drexel U niv.)

Corvelli AA (JHU), Roberts JC, and Biermann PJ

Corvelli AA (JHU), Roberts JC, and Biermann PJ
The design, analysis and fabrication of a segmental bone replacement, J. Aviat. M at. 28(3), 2-8 (Apr 1997).

Dakermanji G, Butler MH, Carlson PU, and Tempkin DK

Darrin AG (NASA GSFC), Le BO, and Kadesch J (UNISYS)

Dockery GD, and Kuttler JR

Dragonette RA

Dunham DW
The moon hits the bullseye, Sky and Telescope 94(1), 93-96 (Jul 1997).

Edwards RL, Sharpe WN Jr (JHU), and Yuan B (JHU)


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Goldhirsh J, Musiani BH, Dissanayake AW (COMSAT), and Lin KT (COMSAT)
Three-site space diversity experiment at 20 GHz using A CTS in the eastern United States, Proc. IEEE 85(6), 970-980 (Jun 1997).
Goldhirsh J, Musiani BH, and Vogel WJ (Univ. of Texas at Austin)
Cumulative fade distributions and frequency scaling techniques at 20 GHz from the advanced communications technology satellite and at 12 GHz from the digital satellite system, Proc. IEEE 85(6), 910–916 (1997).

Goldhirsh J, and Vogel WJ (Univ. of Texas at Austin)

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Gusso M

Haley DR, Strikwerda TE, Fisher HL, and H eyley GA

Harvey RJ
The mission operation's dream team—The spacecraft specialists, Proc. 2nd Int. Symp. on Reducing the Cost of Spacecraft Ground Systems and Operations, pp. 43–1–43.8 (Jul 1997).

Harvey RJ, Hermes MJ, and Wishard DL

Energetic neutral instrument: Initial forward modeling results—Atom images from the POLAR CEPPAD/IPS, EOS (Supplement) 78, S305 (1997).

Huang ZC (Hughes STX Corp.), Mott DB (NASA GSFC), Shu PK (NASA GSFC), Zhang R, Chen JC (UMBC), and Wickenden DR

Jenkins AL, Uy OM, and Murray GM

Jiang W (JHU), Bao G (JHU), and Roberts JC

Keating GM (GWU), Leary JC (GWU), Green BD (PSI), Uy OM, Besson RC, Erlanson RE, Phillips TE, Lesho JC, and Boise MT

Konstanzer GC, Rowland JR, Dockery GD, Naves MR, Sylvester JJ, Sluiter FJ, and Darling JP

Konstanzer GG, Rowland JR, Dockery GD, Sylvester JJ, Naves MR, and Davis DR

Kupperman DG, Paxton Lj, Carbay JF, and McE vaddy P J

Lanzerotti LJ, MacLaen GG, Armstrong TP, R oelof EC, Gold RE, and Decker RB

Le BQ, Darrin A (NASA GSFC), and Kadeshj (UNISYS)

Le BQ, N han E, Maurer L, Lew A, Lander J, Lehtonen S, and Darrin M (GSFC)
Evaluation of die coating materials for chip-on-board technology insertion in spaceborne applications, Proc. 6th Int. Conf. on M ultichip M odules, pp. 142–147 (Apr 1997).

Le BQ, Schwartz P, Peacock K, Strohbehn K, and Scha lor T

Lin TW (JHU Medical Inst.), Corvelli AA (JHU), Frondoza CG (JHU Medical Inst.), Roberts JC, and Hungerford DS (JHU Medical Inst.)

Lieu K, Newell PT, Meng CI, Parks G, and Britt nacher M

Loesch JF, and Ham merman DM (Howard Co. DILP)

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Mauk BH, K rimigis SM, McKel litch DG, and Roelof EC

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McAdams JV

McE vaddy P J

Mechtel DM (US Naval Academy), Charles HK Jr, and Frankomacaro A S
Mehoke DS, and Vernon SR

Murray GM, Jenkins A L (U MBC), Bzhelyansky A (U MBC), and U y O M

Reliability study of chip-on-board technology for space applications with a 3-D stacked DRAM as test vehicle, Proc. ASM E Int. Intersociety Electronic and Photonics Packaging Conf., pp. 1679-1684 (Jun 1997).

Pace DK

Paranicas CP, Cheng AF, Mauk BH, Keath EP, and Krimigis SM
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Roelof EC
Interpreting magnetospheric images of charged particle populations as 2D to 2D mappings, EOS (Supplement) 78, 5286 (1997).


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Thorne RM (UCLA), Armstrong T P (U. of Kansas), Stone S (U. of Kansas), Williams DJ, McEntire RW, Bolton S (JPL), Gurnett DA (U. of Iowa), and Kivelson MG (UCLA)

Wienhold P, Mehoke DS, Roberts J C, and Schaefer ED

Williams DJ, Mauk BH, McEntire RW, Roelof EC, Armstrong TP (U. of Kansas), Wilken B (MPAe), Roederer JG (U. of Alaska), Krimigis SM, Fritz TA (Boston Univ.), Lanzerotti LJ (Lucent Tech.), and Murphy N (JPL)

Energetic particle observations by Galileo, EOS (Supplement) 78, S291 (1997).

Zinger W H, and K rill JA

PRESENTATIONS

APL staff members were among those who gave the following unclassified presentations:

Benson RC, Phillips TE, Silver DM, Boies MT, U y O M, and Galica GE
The M SX local water vapor environment, 35th A Aerospace Sciences Mtg. and Exhibit, Reno, NV (6-10 Jan 1997).

Cameron GE, and H ersman CB

Castella FR, and M oore J R

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Dakermanji G, Butler MH, Carlsson PU, and Tempkin DK
The Thermosphere–Ionosphere–Mesosphere Energetics and Dynamics (TIMED) spacecraft power system, 32nd Intersociety Energy Conversion Engineering Conf., Honolulu, HI (31 Jul 1997).

Dragonette RA
Improved efficiency through merging functions of mission operations and mission science data collection, 1997 PEO(TAO)SEA, National and Regional Symposium, National and Regional Symposium (17-21 Jul 1997).

Donohue DJ, Ku H C, and Thompson DR
Application of iterative moment method solutions to ocean radar scattering, Radar Scattering Workshop, Santa Barbara, CA (11-12 Aug 1997).
Dunham DW

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IOTA’s public campaign to video record AIonabar occultations, 16th European Symp. on Occultation Projects, Cambridge, England (7 Sep 1997).

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Ercol CJ, and K rein SJ

Erlandson RE, Anderson BJ, Uphorsky AJ, and Slavin JA


Erlandson RE, M ursula K, and Boisinger T

Erlandson RE, and Uphorsky AJ

Erlandson RE, Zetzer JI, Kiselev YN, Gavrilov VG, Meng CI, and Stoyanov B

Giannola R
A nalyses of mesoscale events and local climate using the automated weather source school weather network, Eighth U. S. Na tional Conf. on Wind Eng., Baltimore, MD (5–7 Jun 1997).

Goldhirsh J, and Musiani BH
Description of signal level statistics for an East Coast over-the-horizon coastal link operating at C-band, 1997 North American Radio Science Meeting, Montreal, Canada (13–18 Jul 1997).

Goldhirsh J, and Musiani BH
Two years of three site diversity measurements at 20 GHz with ACTS, 1997 North American Radio Science Meeting, Montreal, Canada (13–18 Jul 1997).

Goldhirsh J, and Vogel WJ (U niv. of Texas at Austin)

Gotwols BL, Champman RD, and Thompson DR
Radar backscatter from the ocean: From mid incidence to near grazing, U RSI Commission F, Montreal, Canada (14 Jul 1997).

Grebowsky JM, Erlandson RE, Uy OM, Meng CI, and Coulson JT

Haley DR, Strikwerda TE, Fisher HL, and Heyler GA
A trainable pointing accuracy with star trackers, Int. Workshop on Spacecraft A ttitude and Orbit Control Systems, ESTEC, The Netherlands (15–17 Sep 1997).

Harvey RJ

Harvey RJ, Hermes MJ, and Wichard D L

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Huffaker JD
Phased array radar: A system engineering approach, C hesapeake Electronics Symp., Greenbelt, MD (23 Sep 1997).

Klienman NL (Brigham Young Univ.), Hill SD, and I enda VA
SPSA/SIMO D optimization of air traffic delay costs, Int. Conf. on Airport Modeling and Simulation, Arlington, VA (17–20 Aug 1997).

K u HC, and Donohue DJ

Kupperman DG, Paxton L, Carbary JF, and M cE vaddy PJ

Kuttler JR, and Docke ry GD

Le BQ, N han E, Maurer R, Lew A, Lander J, Lehtonen S, and D arrin M (G SFC)
Evaluation of die coating materials for chip-on-board technology insertion in spaceborne applications, 6th Int. Conf. on Multichip Module, Denver, CO (2–4 Apr 1997).

Le BQ, Schwartz PD, Peacock PK, Strohbehn K, and Scholar T

Glass peck composite promotes proliferation and osteocalcin production of human osteoblastic cells, Society for Biomaterials 23rd A nnual M eeting, New Orleans, LA (30 Apr–4 May 1997).

Loesch JE, and Ammerman DM (H oward Co. DILP)

Lui AYT and Wing S
Marshall MH


Mehoke DS, and Vernoorn SR The design of the CAS S I M I M I N C A shutter door mechanism, 31st A reospace M echanism Symp., Huntsville, A L (17 May 1997).

Mehoke DS, and Wienhold P Thermal design of an integrated electronics/spacecraft enclosure, 27th Int. Conf. on Environmental Systems, Lake Tahoe, N V. (17 Jul 1997).


Potemra TA T he dynamic cusp, N A TO A dvanced Study Institute on Polar C ap Boundary Phenomena, Longyearbyn, Svalbard, Sweden (10 Jun 1997).


Raney RK T R E I S: A S AR system concept that puts the user first, S AR S ystems in the 21st C entury, Copenhagen, Denmark (Jun 1997).
The following papers were presented at the American Geophysical Union Spring Meeting, Baltimore, MD (27–30 May 1997):

Benson RC, Phillips TE, Boies MT, Uy OM, Leary JC, and Keating GM
Atmospheric helium density measurements at 900 km from the neutral mass spectrometer on MSX.

Statistics of the spatial distribution and geomagnetic activity dependence of magnetospheric plasma regimes.

DeMajistre R
Combined spatial and spectral retrieval techniques for use with stellar occultation data.

Eastman TE, Roelof EC, McEntire RW, Lui ATY, Williams DJ, and Christon SP
Geotail/EPIC survey of energetic proton anisotropy in the Earth's magnetotail.

Ozone and molecular densities retrieved with multispectral stellar occultation observations.

Charge exchange processes in the Io plasma torus: Possible explanation for depletion of energetic sulfur ions at high pitch angles observed with the energetic particles detector on board the Galileo spacecraft.

Hot plasma parameters of Jupiter's middle magnetosphere as derived from Galileo EPD measurements.

Observations of energetic particle flux variations during Europa encounters by the Galileo energetic particles detector (EPD).

Studies of atmospheric structure by MSX UVISI instrument.

The following papers were presented at the RIPE XXI Annual Conf., JHU/APL, Laurel, MD (23 Oct 1997):

Crum LH
Educational outreach.

Drake GR
Human resources training and development and technical publications.

Good RM
Paperless resources for on-line editing.

Gresehover RS, and Halbrook LP
Collaboration across boundaries for Intranet development and maintenance.

Nelson SE
The redesign of the JHU/APL home page.

Peck A
Marketing your services within your organization.

Peck A, and Winters PD
Publication work teams—Teams that have impact.

Suther MB, and Talbott BJ
Computer systems services and technical publications.

COLLOQUIA

The following topics were recently presented at the weekly APL Colloquium:

3 Oct
Tiny-TOF Mass Spectrometer for Biosensing, WA Bryden, APL

10 Oct
Solar Corona and Solar Wind: A New View, K Dere, Naval Research Laboratory

17 Oct
Brownian Motion and Biomolecular Motors, RD Astumian, University of Chicago

24 Oct

31 Oct
The Enigma of Efficiency, R Kanigel, author

7 Nov
Micromechanical Systems (MEMS): Past Successes and Future Challenges, SD Senturia, MIT