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APL staff authored or co-authored the following unclassified books and technical articles that were recently published:

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PRESENTATIONS

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

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Cybernetic systems based on inductive logic, *Maximum Entropy and Bayesian Methods Conf.*, Gif sur Yvette, France (13 Jul 2000).

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DT-06 QRC Plans, THAAD Project Office at SMDC, Huntsville, AL (Jul 2000).

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Project Hercules QRC development and proposed DT-06 test participation, *BMDO Mtg. on Quick Reaction Capability and Plans for Participating in the Upcoming PATRIOT DT-06 mission*, Washington, DC (2 Aug 2000).

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Better than CGI: Servlets and JavaServer Pages™, *CyberTech Seminar*, JHU/APL, Laurel, MD (Sep 2000).

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Basic principles of MEMS processing with selected device applications, *IMAPS/SMTA Capital Chap. Symp.*, JHU/APL, Laurel, MD (May 2000).

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Miniaturized electronics with micro-via and flip chip technologies, *NASA Space Technology Provider Workshop, Spacecraft Miniaturization Technologies Breakout Session*, Arlington, VA (23 Aug 2000).

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The peripheral neural mechanisms of heat pain sensation, *Third Int. Workshop on Semiconductor and Solid State Lasers in Medicine '00*, St. Petersburg, Russia (26–27 May 2000).

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Peripheral neural mechanisms of hyperalgesia and neuropathic pain, *Workshop on HIV and the Peripheral Nervous System*, Arlington, VA (18–19 Sep 2000).

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Space flight microprocessors, *APL Space Department Advanced Technology Seminar Series*, JHU/APL, Laurel, MD (30 Jun 2000).

Panneton P, Dakermanji G, Temkin DK, and Jenkins JE
The preliminary design of the Comet Nucleus Tour spacecraft power system, *35th Inter-Society Energy Conversion Engineering Conf.*, Las Vegas, NV (20–28 Jul 2000).

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Technology development for anesthesia, Grand Rounds, Dept. of Anesthesia and Critical Care Medicine, Johns Hopkins School of Medicine, Baltimore, MD (15 Jun 2000).

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Structural features on Eros, *NEAR Mtg.*, Cornell University, Ithaca, NY (Jul 2000).

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CryoSat and U.S. opportunities for polar ice mapping, NOAA/NESDIS, National Ice Center, Suitland, MD (27 Sep 2000).

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Particle acceleration on the Sun and in the heliosphere; Recent insights into the physics of the Sun and the outer heliosphere: Highlights from SOHO and other space missions, *Int. Astronomical Union Symp.*, Manchester, England (7–11 Aug 2000).

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MESSENGER overview, *Fourth IAA Int. Conf. on Low-Cost Planetary Missions*, Laurel, MD (2–5 May 2000).

Swaminathan PK, Terry DH, Nance RP, Erlandson RE, Kumar CK, and Hershberger RL, and Miller JD
Optical observational basis for lethality evaluations, *9th Annual AIAA/BMDO Technology Conf. and Exhibit*, San Diego, CA (17–20 Jul 2000).

The following papers were presented at the *2000 Int. Geoscience and Remote Sensing Symp.*, Honolulu, HI (24–28 Jul 2000):

Elfouhaily TM, Zuffada C, and Linstrom L
On deriving near-surface wind vector information from GPS ocean reflections: Simulation and measurements.

Elfouhaily TM, Thompson DR, Vandemark D, and Chapron B
Consistency in the simulation of microwave remote sensing of the ocean surface in conjunction with a new hydrodynamic theory.

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Inclusion of hydrodynamic modulations to the improved electromagnetic bias theory.

Fleig AJ, Blanchette JJ, Kuyper JA, Seaton JM, Wolfe RE, and Masuoka EJ
Resources for developing algorithms and processing level 1A and geolocation information.

Monaldo FM, Beal RC, Thompson DR, Pichel WG, and Clemente-Colón P
Validation of wind retrievals from the RADARSAT SAR.

Raney RK, and Porter DL
WITTEX: An innovative three-satellite radar altimeter concept.

Raney RK, Gotwols BL, and Jensen JR
Processing strategies for Doppler-resolved radar ice soundings.

Sikora TD, and Thompson DR
Progress on remotely sensing air–sea fluxes using synthetic aperture radar (SAR).

Thompson DR, Elfouhaily TM, and Gasparovic RF
Polarization dependence of GPS signals reflected from the ocean.

Vandemark D, Chapron B, Walsh E, and Elfouhaily TM
Measurement and modeling of steep ocean wave slopes and absolute calibration of the radar altimeter.

Winstead NS, Sikora TD, Mourad PD, and Thompson DR
Coincident gravity waves and rolls over Lake Superior in SAR imagery.

The following papers were presented at the *COSPAR Colloquium on The Outer Heliosphere: The Next Frontiers, Technical Session: Modern Heliospheric Spacecraft and Missions*, Potsdam, Germany (24–28 Jul 2000):

Decker RB, Paranicas CP, and Krimigis SM
Recurrent ion events and plasma disturbances at Voyager 2 in 5–50 AU.

McNutt RL Jr, Wiltberger M, Lyon J, and Goodrich CC
A fluid approach to the heliosphere/VLISM problem.

McNutt RL Jr, Andrews GB, McAdams JV, Gold RE, Santo AG, Ousler DA, Heeres KJ, Fraeman ME, and Williams BD
A realistic interstellar probe.

Roelof EC
Simulation of ENA images of the heliospheric termination shock and interface region.

The following papers were presented at the *SPIE 45th Ann. Int. Symp. on Optical Science and Technology*, San Diego, CA (30 Jul–4 Aug 2000):

Boies MT, Green BD, Galica GE, Uy OM, Silver DM, Benson RC, Wood BE, Hall DF, and Dyer JS
Measurement of long-term outgassing from the materials used on the MSX spacecraft.

Galica GE, Green BD, Boies MT, Benson RC, Uy OM, Silver DM, Lesho JC, Wood BE, and Hall DF
Long-term observations of the particle environment surrounding the MSX spacecraft.

Humm DC, Murphy GA, Yee J-H, Morrison D, Morgan MF, Heyler GA, Shapiro HS, Wilson DS, Peacock K, Lees WJ, Persons DF, Heffernan KJ, and Pardoe CT
4125-21, SCHOONERS: Absorption and refraction of starlight from space for atmospheric profiles.

Uy OM, Green BD, Galica GE, Boies MT, Wood BE, Hall DF, Dyer JS, Layton EG, and Osborn MG
Outgassing of optical baffles and primary mirror during cryogen depletion of a space-based infrared instrument.

Wood BE, Green BD, Hall DF, Uy OM, Cain RP, Galica GA, Boies MT, and Bertrand WT
Update of the Midcourse Space Experiment (MSX) satellite measurements of contaminant fills using QCMs.

The following papers were presented at the *2000 Fall Simulation Interoperability Workshop*, Orlando, FL (17–22 Sep 2000):

Coolahan JE, Hartnett RJ Jr (Joint Strike Fighter Prog. Office), and Case FT
The Joint Strike Fighter (JSF) Strike Warfare Collaborative Environment (SWCE).

Pace DK
Simulation conceptual model development issues and implications for reuse of simulation components.

Rogers GD
A knowledge-based approach to collaborative modeling and simulation for spacecraft.

COLLOQUIA

The following topics were recently presented at the weekly APL Colloquium (*part of the Millennial Challenges: Colloquium 2000 series):

10 October 2000*
NASA in the 21st Century, DS Goldin, NASA

20 October 2000
Images of the Magnetosphere, DG Mitchell, APL

27 October 2000
Why Was Relativity Accepted? SG Brush, University of Maryland, College Park

3 November 2000
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