

## AWARDS

2008 December

### Medal:

NASA Exceptional Service Medal, "for leading the Shuttle Radar Topography Mission Global Positioning System design, development, test, and delivery task." May 7, 2001.

### Patent:

Patent # 4990922, "System and Method for Measuring Ocean Surface Currents at Locations Remote from Land Masses Using Synthetic Aperture RADAR" LE Young, JM Srinivasan, TK Meehan, TN Munson, GH Purcell, Jr., JB Thomas, CB Duncan, Feb 5, 1991. \$1750 award total.

### Awards:

NASA Board Award for NTR: "Mission Operations and Navigation Toolkit Environment (MONTE). \$1750. Date will be on certificate, TBA.

NASA Certificate of Recognition for NASA Tech Briefs, "Mars Approach Navigation using In-Situ Orbiters." July 13, 2006. \$350. Tech Briefs Vol. 31 No. 7 July 2007, p. 64.  
[http://www.techbriefs.com/component/option.com\\_docman/task.doc\\_details/Itemid.Array/gid,2918/](http://www.techbriefs.com/component/option.com_docman/task.doc_details/Itemid.Array/gid,2918/)  
<http://www.techbriefs.com/content/view/2029/34/>

NASA Space Act Award for NTR no. 204111 "Autonomous Operation Algorithm for Orbiting GPS Receiver." 2006 June 15. \$2400.

NASA Space Act Award for NTR no. 20323 "Attitude Determination Using Single Antenna GPS." With Dr. Charles Dunn. 2005 May 19. \$2000.

NASA Space Act Board Award Ceremony – Monday, October 4, 2004. Formal presentation of the next four entries. Four photos with JPL Director Charles Elachi were "inadvertently destroyed by the developer" but I still have the certificates.

NASA Space Act Board Standard Award for NTR no. 20058, "Autonomous, Continuous, Dual Frequency Bias Removal within a GPS Receiver." 2004 June 3. \$650.

NASA Space Act Board Standard Award for NTR no. 19609, "An Elegant Method of Embedded, First Order Orbit Smoothing". 2004 March 25. \$1450.

NASA Space Act Board Exceptional Award for NPO 20686: Rogue OS Real-Time Executive. 2004 March 11. \$500.

NASA Space Act Board Standard Award for NPO 20891\_30200: Black Jack GPS Firmware. 2004 January 29. \$500.

NASA Group Achievement Award for the Space Interferometry Mission Microarcsecond Metrology Testbed, for demonstrating that an optical interferometer can be used to measure the positions of stars with an accuracy greater than three one-millionths of an arcsecond. 2003 May 15.

Section 312 Spot Award, \$100, for unexpectedly getting UDU Smoothing working for the Verde 3.0 delivery and having it work the first time. 2003 August 19.

Spaceflight Awareness Award, including Silver Snoopy presented for SRTM work by (not SRTM) astronaut Grunsfield. September 2002.

Lump Sum Merit, \$1000, 2002 September 30. Part of the annual raise cycle.

Certificate of Recognition – NASA. "For the creative development of technically significant software which has been accepted and approved for dissemination to the public by NASA, entitled 'Blackjack GPS Firmware.'" \$350

Award 2001 November 12

~\$832 Bonus for work on Pointing, sometime in late 2000.

NASA Group Achievement Award for the Shuttle Radar Topography Mission Mission Design and Payload Operations Team. 2001 May 7.

NASA Group Achievement Award for the Shuttle Radar Topography Mission Attitude and Orbit Determination Avionics Team. 2001 May 7.

Bonus Award, \$1750, 2000 May 12. From SESPD for work related to SRTM GPS development.

Certificate of Recognition – NASA. “For the creative development of technically significant software which has been accepted and approved for dissemination to the public by NASA, entitled ‘Rogue Os Real-Time Executive.’” \$350 Award 2000 March 25.

Lump Sum Merit, \$2288, 1999 October 29. For work related to SRTM GPS development.

NTR - Docket CP-20411 in progress. Autonomous Operation Algorithm for Orbiting GPS Receiver. Courtney Duncan.

Patent Pending, NPO-20058/9692. Autonomous Continuous, Dual Frequency Instrumental Bias Removal with GPS Receiver. Courtney Duncan, Thomas Meehan, Donovan Spitzmesser. CIT-2550.

NTR- NPO-20323/9928. Estimating Attitude from GPS Measurements on One Antenna. Charles Dunn, Courtney Duncan. \$150 Award 20 November 1997. Published in NASA Tech Briefs, June 1998, Vol. 22, No. 6, item 107, page 62.

NTR-19609/9212. Method for Smoothing Estimates of Orbits. \$150 Award 22 October 1996. Courtney Duncan. Published in NASA Tech Briefs, November 1996, Vol. 20, No. 11, item 53 page 97.

NASA Group Achievement Award - GPS Receiver Development Team, "For the development of innovative Global Positioning System receivers of unprecedented precision and versatility for scientific applications on the ground and in space." Thomas Meehan (leader), Ab Davis, Courtney Duncan, Charley Dunn, Timothy Munson, Donovan Spitzmesser, Jeffrey Srinivasan, Scott Stevens, J. Brooks Thomas, Jeffrey Tien, Larry Young (all of JPL), Bor Chang, Kwok Chang, Yongky Mulhadi, Allen (Skip) Osborne, Michael Yoo, Lee Zhou (all of AOA), Michael Exner (of UCAR), April 24, 1996. Presented to TKM, June 20, 1996.

The Lyndon B. Johnson Space Center: Group Achievement Award. STS-69 Global Positioning System Relative Navigation Risk Mitigation Experiment Team. March 1996.

American Astronomical Society and AAS Division of Planetary Sciences: Certificate of Appreciation to the Deep Space Network. November 4, 1994.

NASA Group Achievement Award - Rogue Receiver Development Team, "For development of the Rogue Global Positioning System receiver now serving as the global reference for precise geodesy and satellite orbit determination." Courtney B. Duncan, Elgin L. Hushbeck, Jr., Thomas K. Meehan, Steve P. Monacos, Timothy N. Munson, Donovan J. Spitzmesser, Jeffrey M. Srinivasan, J. Brooks Thomas, Lawrence E. Young, May 9, 1992.

AMSAT:

Plaque, Presented To Courtney Duncan, N5BF, In Recognition of His Outstanding Service to the Radio Amateur Satellite Corporation, November 9, 1991.