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## **SENATE JOINT RESOLUTION NO. 242**

Offered February 27, 2008

Commending Leland D. Melvin.

Patrons—Newman, Barker, Blevins, Colgan, Cuccinelli, Deeds, Edwards, Hanger, Herring, Houck, Howell, Hurt, Locke, Lucas, Marsh, Martin, McDougle, McEachin, Miller, J.C., Miller, Y.B., Norment, Northam, Obenshain, Petersen, Puckett, Puller, Quayle, Reynolds, Ruff, Saslaw, Smith, Stolle, Stosch, Stuart, Ticer, Vogel, Wagner, Wampler, Watkins and Whipple; Delegates: Abbitt, Albo, Alexander, Amundson, BaCote, Barlow, Bell, Bouchard, Brink, Bulova, Byron, Caputo, Carrico, Cline, Cole, Cosgrove, Cox, Crockett-Stark, Dance, Eisenberg, Fralin, Gear, Gilbert, Griffith, Hall, Hamilton, Hargrove, Hogan, Howell, A.T., Hugo, Hull, Iaquinto, Ingram, Janis, Joannou, Johnson, Jones, D.C., Jones, S.C., Kilgore, Landes, Lewis, Lingamfelter, Lohr, Loupassi, Marsden, Marshall, R.G., Massie, Mathieson, May, McClellan, Melvin, Miller, J.H., Miller, P.J., Moran, Morrissey, Nichols, Nixon, O'Bannon, Oder, Orrock, Phillips, Plum, Pogge, Poisson, Purkey, Putney, Rust, Saxman, Scott, E.T., Scott, J.M., Shannon, Sherwood, Sickles, Spruill, Suit, Tata, Toscano, Tyler, Valentine, Vanderhye, Ward, Ware, R.L., Watts and Wright

WHEREAS, Leland D. Melvin made his first space flight in February 2008 as a member of the STS-122 mission that delivered the European Space Agency's Columbus Laboratory to the International Space Station; and

WHEREAS, a native of Lynchburg, Leland Melvin graduated from Heritage High School in Lynchburg in 1982 and then earned a bachelor's degree in chemistry from the University of Richmond in 1986 and a master's degree in materials science engineering from the University of Virginia in 1991;

WHEREAS, Leland Melvin began working at NASA Langley Research Center in 1989, conducting research using optical fiber sensors to measure strain, temperature, and chemical damage in both composite and metallic structure; other projects included developing optical interferometric techniques for quantitative determination of damage in aerospace structures and materials; and

WHEREAS, in 1994, Leland Melvin was selected to lead the Vehicle Health Monitoring team for the cooperative Lockheed/NASA X-33 Reuseable Launch Vehicle program; the team developed distributed fiber-optic strain, temperature, and hydrogen sensors for the reduction of vehicle operational costs and to monitor composite liquid oxygen tank and cryogenic insulation performance; and

WHEREAS, in 1996, Leland Melvin codesigned and monitored construction of an optical nondestructive evaluation facility that will provide a means for performing advanced sensor and laser research for development of aerospace and civil health monitoring systems; and

WHEREAS, Leland Melvin was selected for astronaut candidate training in 1998, and since then he has been assigned to the Astronaut Office Space Station Operations Branch and the Education Department at NASA headquarters; as comanager of NASA's Educator Astronaut Program, he traveled across the country, engaging thousands of students and teachers in the excitement of space exploration and inspiring them to pursue careers in science, technology, engineering, and mathematics; and

WHEREAS, most recently Leland Melvin has served in the Robotics Branch of the Astronaut Office, and his role in the STS-122 mission was as the primary operator of the space station robotic arm, using it to inspect the space shuttle Atlantis' heat shield; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the General Assembly hereby commend and congratulate Leland D. Melvin on his momentous and successful first space flight; and,

RESOLVED FURTHER, That the Clerk of the Senate prepare a copy of this resolution for presentation to Leland D. Melvin as an expression of the General Assembly's respect and admiration for his many achievements and best wishes for all his future endeavors.