Biographical Data

Lyndon B. Johnson Space Center
Houston, Texas 77058

National Aeronautics and Space Administration

JOSÉ M. HERNÁNDEZ
NASA ASTRONAUT (FORMER)

PERSONAL DATA: Born August 7, 1962 in French Camp, California. Considers Stockton, California, to be his hometown.

EDUCATION: B.S., Electrical Engineering, University of the Pacific, 1984.
M.S., Electrical & Computer Engineering, University of California-Santa Barbara, 1986.

ORGANIZATIONS: Institute of Electrical and Electronic Engineers (IEEE), Society of Mexican American Engineers and Scientists (MAES).

SPECIAL HONORS: Ph.D. Science, University of the Pacific (honoris causa), 2006. NASA Service Awards (2002, 2003), Lawrence Livermore National Laboratory "Outstanding Engineer Award" (2001), Upward Bound National TRIO Achiever Award (2001), U.S. Department of Energy "Outstanding Performance Commendation" (2000), Society of Mexican American Engineers and Scientists (MAES) "Medalla de Oro" recipient for professional and community contributions (1999), Hispanic Engineer National Achievement Award, "Outstanding Technical Contribution" (1995), Graduate Engineering Minority Fellow (GEM) (1985), and Eta Kappa Nu Electrical Engineering Honor Society member.

EXPERIENCE: 1987-2001 were spent at the Lawrence Livermore National Laboratory, Livermore, California.

1987-1991 Electronics Engineer, Material Analysis Group. Refined signal and image processing skills for applications in radar imaging, computed tomography, acoustic imaging and other non-destructive evaluation techniques.

1991-1994 Electronics Engineer, Chemistry and Material Science Group. Developed quantitative x-ray film imaging analysis techniques that allowed the characterization of low-density materials for use in the development of an X-Ray laser as part of the Strategic Defense Initiative Program. Developed material x-ray transport models that allowed for the development of human tissue absorbed dose models useful for medical imaging applications.

1994-1996 Group Leader, Chemistry and Material Science Group. Managed the career development of twenty-nine professional technical staff members who supported chemistry and materials science research activities. Identified and developed the Group's programmatic research support opportunities. Carried out own research activities as a principal investigator in the area of x-ray physics and image processing.

1996-1999 Deputy Program Manager, Highly Enriched Uranium Implementation Program. Responsible for the implementation of a signed bilateral agreement between the U.S. and Russian Federation for the U.S. purchase of highly enriched uranium (HEU) in the form of low enriched uranium (LEU) derived from the dismantlement of Russian nuclear weapons. Responsibilities included utilizing national laboratory resources for the purpose of ensuring the U.S. government that the LEU purchased was derived from dismantled nuclear weapons. This was accomplished by developing technical training modules for U.S. multi-lab and multi-agency experts, which allowed them to visit Russian facilities and effectively perform inspections in accordance to U.S.-Russian signed agreements, protocols and annexes. Fiscal planning responsibilities for the $16 Million multi-lab implementation budget and direct oversight of the $6 million annual budget for the Lawrence Livermore National Laboratory component.

1999-2001 Program Manager, Office of International Material Protection and Emergency Cooperation. On a two-year change-of-station assignment at the U.S. Department of Energy, Washington, D.C. Managed the integration and allocation of Department of Energy assets and expertise, including the national laboratories and contractors, in planning, directing, and

implementing U.S. cooperation with the Russian Federation in the program of Nuclear Materials, Protection, Control and Accounting (MPC&A). Developed and implemented policies, strategies and plans and objectives to enhance U.S. national security and reduce threat of nuclear proliferation and nuclear terrorism. These goals were accomplished by rapidly improving the security of large quantities of attractive, weapons-usable nuclear material at the closed Ministry of Atomic Energy (MinAtom) cities that compromise Russia's nuclear weapons complex. Proposed, defended and executed annual budget of over $14 million to support extensive engineering, technical safety, security, and environmental research and policy development with regard to MPC&A at three of the seven MinAtom sites.

Feb 11-Present Executive Director for Strategic Operations at MEI Technologies, Inc. (MEIT) located in Houston, TX.

NASA EXPERIENCE:

In 2001, Hernandez joined the Johnson Space Center, in Houston, Texas.

During his NASA career, Hernandez had the following duties:

Mar 01-Jan 02 Materials Research Engineer, Materials & Processes Branch. Developed, evaluated, and selected advanced structural materials to aircraft and spacecraft structures and their power and propulsion systems. Conducted research in basic engineering materials and apply general engineering mechanics principles to define material behavior. Designed and fielded radiation effects experiments for electronic hardware. Served as the Engineering Directorate's liaison on the electrical wire integrity interagency working group.

Jan 02-Jun 04 Branch Chief, Materials, & Processes Branch. Materials and Processes (M&P) branch chief within the Structural Engineering Division. Duties included managing the careers of 30 professional civil servants with diverse set of skills in materials science. Also serve as the overall technical monitor of contractor support that included more than 20 contractors. Responsible for the oversight of the branch's activities in the areas of materials and processes, fracture control, non destructive evaluation, failure analysis, and nano materials research. More specifically, managed branch resources to address materials usage issues with respect to flammability, toxicity, contamination, space environment compatibility, and corrosion. Materials testing and fracture control analysis of flight and non-flight hardware were also significant activities within the branch. Served as the project lead for the development of a space qualified bore scope for future on-orbit EVA inspection applications.

May 2004 Selected by NASA as an Astronaut Candidate. In February 2006, he completed Astronaut Candidate Training that included scientific and technical briefings, intensive instruction in Shuttle and International Space Station systems, physiological training, T-38 flight training, and water and wilderness survival training. Hernandez was assigned to the Astronaut Office Shuttle Branch supporting Shuttle launch and landing preparations at Kennedy Space Center. He also trained as Mission Control Capsule Communicator. In 2010, he was on detail at NASA Headquarters' Office of Legislative and Intergovernmental affairs.

He departed NASA in January 2011.

SPACE FLIGHT EXPERIENCE: STS-128 Discovery (August 28 to September 11, 2009) was the 128th Shuttle mission and the 30th mission to the International Space Station. While at the orbital outpost, the STS-128 crew rotated an expedition crewmember, attached the Leonardo Multi-Purpose Logistics Module (MPLM), and transferred over 18,000 pounds of supplies and equipment to the station. The STS-128 crew conducted three spacewalks. The STS-128 mission was accomplished in 217 orbits of the Earth, traveling over 5.7 million miles in 332 hours and 53 minutes and returned to land at Edwards Air Force Base, California.

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