

NASA Engineers Bios for USVI-GSDO

Deon Williams

My name is **Deon Williams**, I work in the Modeling and Simulation branch, in NE. I have a B.Sc. degree in Applied Physics, and a Master's degree in Solid State Physics/Material Science. My Master's thesis was studying the activation energy in semiconducting material; Gallium Arsenide doped with Zinc, in a <100> face lattice structure. The major diagnostic tool used in this study is the Rutherford Backscattering Spectroscopy (RBS) technique, using a pelletron accelerator, at approximately 1KeV to 5KeV. I also worked summers at Oak Ridge Labs in the solid state division, and then in the Health Physics, studying Electron Cyclotron Resonance (ECR) technology, for surface deposition. Before arriving to KSC NASA, I taught College Physics, and Physical Science, at the University of Oakwood in Huntsville, AL. When I arrived at KSC, NASA, July 1994, I worked at the Electromagnetic Lab (EML) for the first part of my career. I was responsible for the Re-radiating Antenna System (RAS) system, on KSC and the Cape side, which supported man and unmanned launches; shuttle and rockets. I also worked with a team from Goddard Space Flight center, studying RF effects, from the tree lining the runway, at the Shuttle Landing Facility (SLF). Then I moved to the payload organization, and work in the area of testing audio systems on payloads that flew on the shuttle. As we changed and moved in to Space Station, I was lead audio engineer for the US Lab, Copula, JEM module, and a few other elements, testing the communication system on Space Station. I also worked on a portion of the Hubble checkout system, when it arrived at KSC. Currently, I am working on developing processes of storing energy, in different forms, for deep space use, and green energy systems.

Trish Nicoli

Trish Nicoli was born in Thompson, Manitoba, Canada. The northern sky was a beautiful thing and sparked her interest in space and stars. Trish went on to study Electrical Engineering at the University of North Dakota. She also received a minor in Space Studies. The classes covered such topics as orbital mechanics, space mission design, and human physiology during spaceflight; it allowed her to further pursue her interests in space. Under a NASA space grant, Trish worked for the Upper Midwest Aerospace Consortium, which funded high altitude balloon research and used space-based imagery to help farmers understand how their crops were growing. That led to a position at Kennedy Space Center working test engineering for the International Space Station (ISS) Program. Trish helped to ensure the avionics systems and experiments (JEM, Node 2, Mobile Base System, Multi-Purpose Logistic Modules) destined for the International Space Station were working prior to launch. While working on the ISS Program, Trish pursued a Master's Degree in Industrial Engineering with a focus in Systems Engineering. That led her to become a Systems Engineer for Command, Control & Communications (C3) under the Ground Systems Development and Operations (GSDO) program. C3 includes launch control systems and the communication infrastructure required for the Space

Launch System (SLS) and Orion capsule. The test flight for SLS and Orion are planned in late 2018.

Amanda DePreta

Amanda DePreta is a Ground Integration Engineer for the Ground Systems Development and Operations Program at Kennedy Space Center in Florida. In that role, she is responsible for all of the design and operational requirements for the multiple engineering subsystems necessary to perform offline processing for the Orion vehicle. She received her B.S. in Aerospace Engineering and her M.S. in Mechanical Engineering both from the University of Central Florida. Prior to joining NASA in 2015, she worked as a Launch Integration Engineer for Millennium Engineering and Integration Company as a support contractor for the Ground Systems Development and Operations Program, responsible for advanced development activities for the Space Launch System.

Tony Bartolone

Tony Bartolone was born in Newburgh, NY. As the son of an Italian immigrant who wanted his children to know no limits to what they could achieve, Tony was encouraged from a young age to dare to dream big. His parents instilled in him and his brothers that anything was possible if you were willing to work hard to reach your goals. In April of 1981, Tony and his family were among the thousands that were drawn to Cape Canaveral to watch the launch of NASA's very first Space Shuttle mission, STS-1. As a young child, hearing the thunder of the rockets that blasted the Columbia Orbiter into space ignited a passion for all flying machines that would serve to set Tony on a path to aspire to become a professional pilot. At the age of 15, Tony began taking flying lessons and actually flew his first solo flight in an airplane before he received his driver's license to drive a car.

After Tony had finished high school and received his FAA Private Pilot License, he was accepted into Embry Riddle Aeronautical University (ERAU) in Daytona Beach, FL, to continue his studies towards becoming a professional pilot. At the end of his freshman year at ERAU, Tony severely broke his left leg, ankle and foot which prevented him from being able to pass the FAA medical exams necessary to allow him to reach his goal of becoming a commercial airline pilot. Despite this setback, Tony's passion for airplanes was undeniable. He was determined to devote his life to aviation and subsequently switched majors to Aerospace Engineering at ERAU. Designing aircraft was the next best thing to being able to fly them. While pursuing his undergraduate degree at ERAU, Tony completed an internship with a major US airline which exposed him to the many challenges that come with operating, managing and maintaining large aircraft. After receiving his Bachelor of Science degree in Aerospace Engineering from ERAU in 1999, Tony enrolled in the Human Factors Engineering (HFE) graduate program at ERAU to enhance and compliment his Aerospace Engineering skills. While pursuing his master degree, Tony completed an internship at NASA Langley Research Center (LaRC) in Hampton, VA. The research Tony was involved in at NASA LaRC ultimately became to focus for his

masters thesis at ERAU. After receiving his Master of Science degree in Human Factors Engineering from ERAU, Tony accepted a Flight Test Engineer position at NASA LaRC in 2002. During his career with NASA LaRC, Tony was involved the development and flight tests of a variety of ground breaking new advances in aircraft avionics designed to help pilots fly their aircraft more safely and efficiently.

Following the tragic loss of the Columbia Orbiter during its STS-107 mission, Tony had an opportunity to take his flight test skills and education and apply them to helping NASA safely return the Space Shuttle fleet to flight status. In 2005, Tony accepted a position at NASA Kennedy Space Center (KSC) as an External Tank & Solid Rocket Booster (ET & SRB) Project Engineer getting an unbelievable opportunity to work on the very same rockets that 24 years earlier had ignited his passion for aviation. After only a short time, Tony became the Lead ET & SRB Project Engineer and a key member of the Space Shuttle launch team having the honor and privilege of performing a critical operations role in the safe and successful launch of the final 24 missions of the Space Shuttle Program that finished the assembly of the International Space Station (ISS) and prolonged the life of the Hubble Space Telescope (HST).

Fourteen years later, Tony is as passionate as ever about aviation and space exploration and continues to play a crucial role in the Ground Systems Development and Operation (GSDO) Program at KSC. Tony is currently responsible for overseeing NASA's agency wide team that is developing the new set of Launch Commit Criteria (LCC) requirements that will be implemented during launch countdown for the Space Launch System (SLS) launch vehicle and Orion spacecraft that NASA will use for future human exploration missions to Mars. The LCC are the final launch countdown checks performed by the ground and on-board flight software that will insure all the safety and mission success critical systems and components on the SLS rocket, Orion spacecraft and KSC ground systems are "go for launch".

As a former and future member of the KSC launch team, Tony is looking forward to the day where the thunder from the new SLS rocket will inspire the next generation of engineers, scientist, and explorers to dream big and reach for the stars. In the meantime, Tony shares his passion for NASA human spaceflight by sharing his experiences as a NASA flight test engineer and launch team member through outreach events and public speaking opportunities. Tony enjoys astronomy, woodworking, scuba diving, sailing and traveling with his fiancé' Kristie.

Jenifer Levitt

Jennifer Levitt was born in Pikeville, Kentucky. She spent the first 15 years of her life in participating in 100's of 4-H activities, piano lessons, and science fairs. While participating in the Cedar Regional Coal Fair at age 12, Jennifer saw a space related project that was submitted into the fair with a picture of Astronaut Shannon Lucid. She became fascinated by Lucid and researched her time spent on MIR and her upcoming missions. Jennifer wrote to NASA requesting pictures of astronauts, information and ultimately a Shuttle launch pass. At age 13 Jennifer witnessed her first launch, STS-79, a night launch that lit of the sky as if the sun were rising. That mission brought back Lucid from setting the world record for longest duration in space by a woman (188 days). From that moment on, Jennifer dreamed of working for NASA. At age 15 Jennifer's parents moved from Kentucky to Titusville, Florida to allow her to be closer to the Kennedy Space Center.

In the summer of 2001, Jennifer began a NASA internship working in the environmental sciences. This internship developed her curiosity for the environmental sciences and engineering to ultimate help NASA improve life on Earth. In 2003, Jennifer officially began her career at NASA through the Cooperative Education (Co-Op) Program where she acted as an environmental engineer for diverse groundwater and soil remediation projects. Committed to pursuing a career in Environmental Engineering she went on to graduate with a Bachelor's and Masters degrees in Environmental Engineering from the University of Florida.

Thirteen years later, Jennifer is still excited to be a part of NASA and share its mission with others. She went on to work in Operations for the Ground Systems Development and Operations Program to facilitate operations planning process and launch the next-generation vehicles and spacecraft designed to achieve NASA's goals for space exploration. Jennifer then led the Program through its Preliminary Design Review and Critical Design Review to ensure all systems are ready to proceed to fabrication and assembly. Currently, she is acting as the Deputy Division Chief for Commercial Crew Safety and Mission Assurance. In this role she is ensuring the safety of commercial launches that will take humans to low earth orbit.

Throughout her childhood and adult years, one thing has remained constant for Jennifer – always keep dreaming. A dream to become an astronaut along with hard work and determination became a career with NASA. Jennifer continues to share her passion for human spaceflight by sharing her journey and the NASA mission through outreach events, local Robotics competitions, and public speaking. Jennifer enjoys the beach, fitness, playing with her dog, baking and all things pink.

Marvin Oyola

Marvin Oyola is a Lead Design Engineer for the NASA Engineering Directorate at the Kennedy Space Center in Florida. During his 10 years at NASA, he has held different positions in the Construction of Facilities Integration Office, including Systems Engineer and Project Manager, in support of various upgrades to the Kennedy Space Center's infrastructure. He was born in Bayamon, Puerto Rico, where he also attended Discipulos de Cristo's high school. In 2003, he obtained a Bachelor's Degree in Civil/Structural Engineering from the University of Puerto Rico's School of Engineering at Mayaguez. He moved to Central Florida in 2004 to participate in a federal career internship program with NASA. In 2008, he obtained a Masters in Industrial Engineering from the University of Central Florida. He currently works in various projects to upgrade the center's infrastructure to have it ready for future missions. That includes projects at Launch Pad B, the Vehicle Assembly Building, the center's water systems, the demolition of old buildings and structures, and civil engineering support for new facilities, like the new Headquarters building. Marvin lives in Orlando, Florida and returns often to Toa Baja, Puerto Rico to visit family and friends.

Lester Morales

Dr. Lester Morales is the Education Professional Development Specialist at Kennedy Space Center and serves the states of GA and FL and the US territories of Puerto Rico and Virgin Islands. Previously, Dr. Morales worked with the NASA Aerospace Education Services Project and the INSPIRE project. Dr. Morales taught middle school science, anatomy, physiology, algebra, and geometry for the Miami Dade County Public School System in Miami, FL. He holds a current Florida teaching certificate in mathematics and biology. Dr. Morales received a Bachelor of Science degree in Biological Sciences from Florida International University and a Medical degree from American University of the Caribbean School of Medicine.