



NOV/DEC
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News from the field of the premiere DoD Youth STEM education program.

The Wait is Over- STARBASE Vandenberg Has Launched!



Although the weather was unseasonably warm for California's central coast, this did not stop the ribbon cutting ceremony of the newly formed DoD STARBASE program, STARBASE Vandenberg. The long wait is now over! The 30th Mission Support Group Deputy Director, Kevin Kaysing, spearheaded its conception and believes that STARBASE Vandenberg will grow over time.

STARBASE Vandenberg will support the local Lompoc Unified School District, home to an array of diverse students both eager to learn and happy to grow. The ribbon cutting ceremony, narrated by MSgt Robert Goddard II of the 30 SW/IG, began with the feeling of excitement in the air as many attendees were present from local government, state government, and Vandenberg AFB base commands.

Dr. Belinda Jones, Education Executive Director, from Indtai, Inc. spoke about the DoD STARBASE program journey that led to the opening of the 70th site at Vandenberg AFB. She encouraged the community to accept the charge to excite and ignite the youth of the area in these uncertain times. The new program Director for STARBASE Vandenberg, Tonya Troup-Spurlock, spoke briefly of the charge she accepted to make STARBASE Vandenberg one of the leading programs in the nation.

Col Anthony Mastalir, the commander of the 30th Space Wing spoke last as he continued the charge to embrace the meaning of what STARBASE Vandenberg stands for and will represent to the youth of the Vandenberg AFB and Lompoc area and in the surrounding communities as it is designed "to inspire young minds."



"We are not what we know but what we are willing to learn."
-- Mary Catherine Bateson, Writer and Cultural Anthropologist

STARBASE Hanscom AFB to collaborate with Bridgewater State University on National Science Foundation Funded Pre-Service Teacher Project

The STARBASE Hanscom AFB Team is pleased to announce that they will be partnering with Bridgewater State University on a project designed to improve the way elementary pre-service teachers are prepared in teaching Science, Technology, Engineering, and Mathematics (STEM).

The program's collaborative work with Bridgewater State dates back several years, when they began hosting interns through the Noyce Teacher Scholar Program. This program brought undergraduate students to STARBASE Hanscom to explore STEM education and to consider STEM teaching as an educational and career option. The current project will also bring undergraduate students to STARBASE, but this time as pre-service teachers, to develop their STEM content knowledge and teaching skills, with special focus on teaching students who are English learners. Two three-credit courses and a field experience will be created for the pre-service teachers.

The first course will center on teaching STEM using the Department of Defense STARBASE curriculum. The pre-service teachers will integrate their understanding of science concepts with teaching models supported by educational research. The second course will provide pre-service teachers with the knowledge, skills, and best practices needed to assist English learners' success in learning science. Key concepts from the STARBASE curriculum will be used in teaching the pre-service teachers about useful instructional strategies to support the success of English learners.

For the research portion of the project, Bridgewater State Professors will be comparing pre-service teachers in the STARBASE project to pre-service teachers taking the traditional on-campus science content course and course on instruction for English learners.

The STARBASE Hanscom AFB Team is looking forward to this three-year collaboration with Bridgewater State University. They expect that the project will not only be beneficial to the student participants but will positively impact their staff's professional learning and development.

The project has been funded by the National Science Foundation, Division of Undergraduate Education and is set to begin in May of 2021 and run through April 2024.



Good News from the Field



One of STARBASE Los Alamos' 2.0 students, Regina Rodeghiero, got some good news today! She was accepted into the Fermilab's Saturday Morning Physics program. This program is typically a free series of eleven lectures and tour visits given by Fermilab scientists that students must apply and be accepted to.

"The program's purpose is to further the understanding and appreciation of modern physics among high school students. The lectures are aimed at high school students without any previous scientific knowledge."

This year's program will take place on Zoom, and Regina will be learning Particle Physics and the science of matter, space, and time. This class is being taught by Elon Musk's former Physics professor, and she is so excited about it! We are proud of her and know she is well on the way to her dream of becoming an astronaut!



A Call for Participation

Throughout the year, this newsletter will continue to spotlight the achievements, partnerships, and tips of the participants of the DoD STARBASE program. Please share your achievements, success stories, and helpful tips with us at email@dodstarbase.org.

Spaceport and STARBASE Burns Flat



A great time was had at the Oklahoma Air and Spaceport on Sept. 16, 2020, as future pilots, astronauts, engineers, and scientists from Erick, OK participated in the STARBASE program located at Burns Flat. The visit to the Spaceport was a highlight for the cadets after completing their five weeks of STARBASE curriculum. The students are fifth graders from Erick and were accompanied by their teacher, Heather Lowrance.

Craig Smith, Executive Director of Oklahoma Space Industry Development Authority Agency, briefed the group on space information and the history of the Spaceport, which is one of twelve facilities in the United States. The program took place in the Telemetry and Monitoring room. Following a question and answer session, Cadets were given the chance to share their STEM (Science, Technology, Engineering and Mathematics) experiences and knowledge they had gained by attending STARBASE.

Mr. Smith facilitated activities, and the students designed and flew their own paper airplanes on the tarmac, watched a KC-135 Stratotanker do touch-and-go's, and even launched a rocket (tea bag) from the Spaceport!

The connection between STARBASE and the Spaceport proved to be a valuable opportunity for young minds to expand into STEM careers for the future.

