



FACT SHEET

UNITED STATES AIR FORCE

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AFRL La Luz Academy DoD STARBASE Flight



DoD STARBASE is a premier educational program sponsored by the Office of the Assistant Secretary of Defense for Reserve Affairs. At DoD STARBASE, students participate in challenging "hands-on, minds-on" activities in science, technology, engineering, and math (STEM). The goal is to motivate students to explore STEM as they continue their education. The program provides students with 20-25 hours of stimulating experiences at National Guard, Navy, Marine, Air Force Reserve, and Air Force bases across the nation. The inquiry-based curriculum focuses on topics which include Physics, Chemistry, Technology, Engineering, Mathematics Operations and Applications, and STEM Careers.

AFRL La Luz Academy implements this program for fifth grade students at Kirtland Air Force Base (KAFB) as the DoD STARBASE Flight. Students come to the AFRL La Luz Academy for five days during the school year. They study Newton's Laws and Bernoulli's Principle; explore nanotechnology, navigation and mapping; and investigate engineering by using computers to design space stations. Students also use math to solve problems involving metric measurement, estimation, geometry concepts, and data analysis. Teamwork is stressed as students work together to explore, explain, elaborate, and evaluate concepts. Air Force Core Values (*Integrity First, Service Before Self, and Excellence in All We Do*) are embedded in the activities students complete.

Scientists, engineers, and military volunteers from the Air Force Research Laboratory (AFRL) and KAFB apply abstract principles to real world situations by assisting with the implementation of activities and giving demonstrations on the use of STEM in different

settings and careers. For example, cryogenics experts from the AFRL use liquid nitrogen to freeze various objects as students explore states of matter and thermal dynamics.

The DoD STARBASE Flight teaches STEM in ways that teachers may not have the time, resources, and expertise to do in a regular classroom. It's experiential, exploratory learning, and it ties directly to local educational common core state standards.

In an effort to extend the impact to DoD STARBASE, the AFRL La Luz Academy conducts STARBASE 2.0 programs at select middle schools that serve former DoD STARBASE Flight students. DoD STARBASE 2.0 incorporates mentoring and STEM projects to increase students' interest and knowledge, school attachment, and career awareness.

For more information, contact AFRL La Luz Academy at (505) 846-8042
or go to: <http://prs.afrl.kirtland.af.mil/LaLuz>.

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