# **DOD STARBASE**



**DoD STARBASE** is a national science, technology, engineering and mathematics (**STEM**) program in over 60 locations throughout the U.S. Since 1999, STARBASE Louisiana at Barksdale Air Force Base sponsored by the 307<sup>th</sup> Bomb Wing of the Air Force Reserve Command, has provided nearly 30,000 fifth through twelfth grade students experiences in STEM investigations and projects, leading- edge technology and innovative instructional methods, including:

• An average of 25-hours of exemplary instruction

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- Rigorous STEM curriculum
- Cutting-edge technology
- Proven track record of raised student performance
- 21<sup>st</sup> Century skills-critical thinking, creativity, communication, collaboration
- **Scientific literacy**, problem solving, hands-on inquiry, and growth mindset

## Goals of STARBASE

- · Raise the interest & improve the knowledge & skills of at-risk youth in STEM
- Provide for a highly educated, skilled and innovative American workforce
- Expose students to positive STEM role models from military and civilian communities
- Nurture a winning network of collaborators from education, business and military

## STARBASE Louisiana: An Investment in Louisiana's Future

### **Physics**

- Newton's Laws
- Energy

#### Chemistry

- Atomic and Molecular Structure
- Physical and Chemical Changes
- Properties of Matter

#### **STEM Careers**

827 Twining Drive

- STEM work applications
- Personal Investigations

#### **Character Development**

Citizenship and Service Learning

## 2.0 Middle/High School Additional Components:

- Professional STEM Mentors
- Multi-year participation options
- Advanced STEM topics and projects: Prototype Manufacturing, Competition Rocketry, Drone Technology



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## Technology

- **Robotic Programming**
- Coding
- Circuitry

### Engineering

- **Engineering Design Process**
- 3-D Computer-Aided Design and Prototyping

## **Mathematics Applications**

- Number Relationships
- Measurement
- Geometry
- Data Analysis







Barksdale AFB, LA 71110