

DOD
STARBASE
A Department of Defense Youth Program

IN PURSUIT OF EXCELLENCE AND LEADERSHIP
THROUGH SCIENCE, TECHNOLOGY,
ENGINEERING AND MATHEMATICS



2007
ANNUAL REPORT

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DOD STARBASE®
MISSION STATEMENT:
TO RAISE THE INTEREST
AND IMPROVE THE
KNOWLEDGE AND SKILLS
OF YOUTH IN THE AREAS
OF MATH, SCIENCE,
AND TECHNOLOGY.

“I am very concerned that our math/science skills are not what they should be... I think both at the level of basic education, at getting people, including women, into science and math education at an early age and sustaining them through it, we’ve just got to do that as a country.”



Condoleezza Rice,
Secretary of State

Addressing the
Organization of American States,
Washington D.C.
October 15, 2007

Although many people assume that the United States will always be a world leader in science and technology, this may not continue to be the case inasmuch as great minds and ideas exist throughout the world. We fear the abruptness with which a lead in science and technology can be lost – and the difficulty of recovering a lead once lost, if indeed it can be regained at all. ¹

The importance of a strong workforce in the fields of science, technology, engineering and math (STEM) cannot be overstated. Even though STEM careers represent only five percent of our nation's workforce, they are disproportionately responsible for our high standard of living, our national security, and finding solutions for pressing problems including global warming and terrorism.

The Department of Defense (DOD) is convinced that it is essential to develop the talent necessary to keep the United States an economic power and a world leader in strategic security. This means focusing at all levels of education on science, technology, engineering and math.

DOD employs nearly half of all federal physical scientists, mathematicians, and engineers. The department anticipates losing 13,000 scientists and engineers by 2015. Concurrently, it projects that the demand for these professionals will increase between 17 and 22 percent.² The need for individuals who have security clearance makes it increasingly difficult to hire well-educated immigrants. Today, in the United States, there is a greater percentage of immigrants earning advanced degrees in science and engineering than native-born citizens.³

¹ *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future*, National Academy of Sciences, pg 3.

² Dr. William S. Rees, Jr, Deputy Undersecretary of Defense (Laboratories and Basic Sciences), July 27, 2007 in prepared remarks to the National Defense Industrial Association.

³ The InfoBrief, *Why Did They Come to the United States? A Profile of Immigrant Scientists and Engineers* (NSF 07-324), is available on NSF's Division of Science Resources Statistics Web page: <http://www.nsf.gov/statistics/infbrief/nsf07324/>.





Addressing this critical need requires a multifaceted approach at all levels of education from elementary to post-doctoral. The National Defense University warns of the rapid growth of STEM knowledge and innovation in China, India, Japan, South Korea and Taiwan.⁴ This emphasis is in direct contrast to declining science and engineering education trends in the United States.

DOD STARBASE is a premier program designed to encourage elementary children to pursue careers in these exciting and challenging fields. The program targets students in the fifth grade. These children have few opportunities available to them to enroll in STEM classes with a “hands-on, minds-on” approach that actively engages them in the scientific process. Children who might never consider STEM careers within their reach are empowered to reach for the stars.

⁴ [The Science and Engineering Workforce and National Security](#), National Defense University, April 2004 (page number not available)

DOD STARBASE® A History of Excellence and Leadership

In 1989, Barbara Koscak, a recognized leader in education, was invited to the White House by President Ronald Reagan and awarded the Federal Aviation Administration's National Educator of the



Year Award. Koscak's teaching goal was to excite her students about science, math, and technology and to develop their potential for challenging careers. Knowing that all children love airplanes, she created curriculum in her classroom built around space and the physics of flight – a curriculum that was “hands-on, minds-on.”

Taking her dream to the next level, she contacted Brigadier General David Arendts, who was the 127th Wing Commander at Selfridge Air National Guard Base in Michigan. Together, they discussed the possibility of students seeing the application of classroom knowledge by observing the work of the men and women of the Air National Guard. They agreed that military personnel could explain and demonstrate the use of science, math and technology in their careers. National Guard personnel would also be great role models who could reinforce the importance of education, teamwork, goal setting and self-discipline. General Arendts embraced the idea and lent his full support for the creation of the project.

Rico Racosky, an accomplished F-16 pilot and author, was working on a project to inspire students to achieve their dreams through action. General Arendts recognized that Racosky's ideas would be a perfect match for STARBASE, and the model of “dreams plus action = Reality®” or “d + a = R®” became a critical

component of the STARBASE curriculum.

Rick Simms, a local university student, and individuals at the Mount Clemens School District completed the team. Together they created an educational program that offered stimulating “hands-on, minds-on” activities focusing on science, math, technology, personal development, teamwork, and drug awareness and prevention.

In order to make the dream a reality, the team needed funding. Koscak used her prestigious A. Scott Crossfield Teacher of the Year Award money to fund a one-week pilot program. The award was created by aeronautic legend Scott Crossfield to honor his heroes – teachers.

Crossfield achieved fame as the first pilot to fly at twice the speed of sound. An aeronautical engineer, he worked on the team that designed cutting-edge aircraft such as the X-15 rocket plane at Edwards Air Force Base, California. Crossfield always attributed his accomplishments to his team. To him, test pilots were “just people who incidentally do flight tests. It's a profession just like anything else. In my mind, we should divest ourselves of this idea of special people (being) heroes, if you please, because really they do not exist.”⁵ Crossfield believed that teachers had a greater influence because they worked with the future. Koscak described Crossfield using a quote by Albert Pines, “What we do for ourselves dies with us. What we do for others is immortal.” Crossfield's accomplishments were for his family, friends, and country - never for himself. The A. Scott Crossfield Award bought supplies, rockets, and treats for the first students of the pilot program called “Project STARS.” Teachers around the area donated their time and talents to the summer program in 1990.

The team debated whether to apply for a summer program or a year-round program from the W.K. Kellogg Foundation. The Foundation persuaded them to apply for a year-round program. The next decision was whether to focus on teachers or students and the team concluded that they would like to offer a year-round program for students, as well as a one-week training for teachers. Project STARS was awarded a



⁵ 1988 interview with *Aviation and Space Technology*.



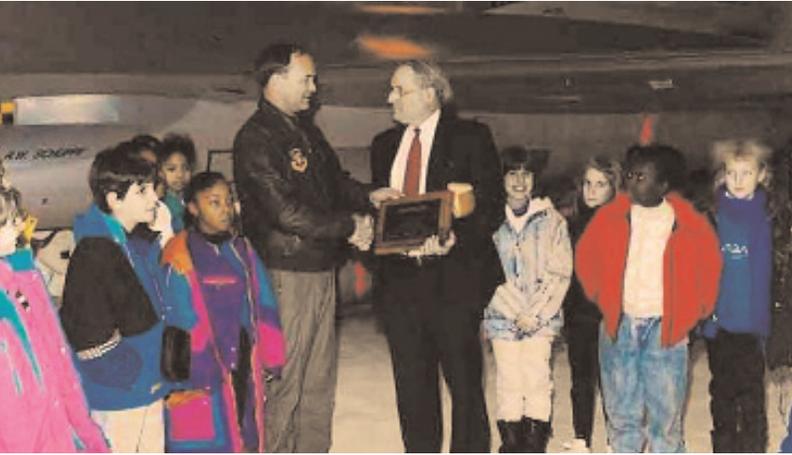
three-year grant on March 1, 1991. The response and results of the program were exceptionally impressive. In 1993, Congress allocated funds to expand the program to seven states. This was a momentous occasion. The program was enthusiastically embraced, and by year's end it had quickly grown from its original site at Selfridge to six additional academies. It was during this time the program changed its name to DOD STARBASE.

The dream of DOD STARBASE was to create a program that would respond to the needs of today's youth by providing stimulating, "hands-on, minds-on" science, technology, engineering and math, as well as motivational goal setting and self-esteem activities. After 16 years of success, the DOD STARBASE dream has blossomed from a single classroom to classrooms in 53 programs, in 33 states, on Indian Reservations and U.S. Territories. To date, the program has provided 20-25 hours of stimulating experiences at military bases for over 400,000 students. National Guard, Navy, Marine, Air Force Reserve and Air Force bases are home to the program. This rapid growth truly affirms the children of America have a need and that DOD STARBASE is rising to meet their need.

DOD STARBASE continues to be a premier program in science, technology, engineering and math. Today's students not only study flight, but use computer-assisted three dimensional software donated by Parametric Technology Corporation (PTC), to design space stations, land rovers, submersibles and unmanned aerial vehicles.

DOD STARBASE...making tomorrow happen today!

The dream of DOD STARBASE was to create a program that would respond to the needs of today's youth by providing stimulating, "hands-on, minds-on" science, technology, engineering and math, as well as motivational goal setting and self-esteem activities.



In 1992, Senator Carl Levin of Michigan visited Project STARS. He was impressed with what he saw. Fifth grade children were completely engaged in interesting scientific experiments as they learned about topics like the physics of flight, the properties of matter, and space exploration.

Senator Levin saw the value of the program not only for the children of his state, but also for children across the United States. He and Senator Sam Nunn supported

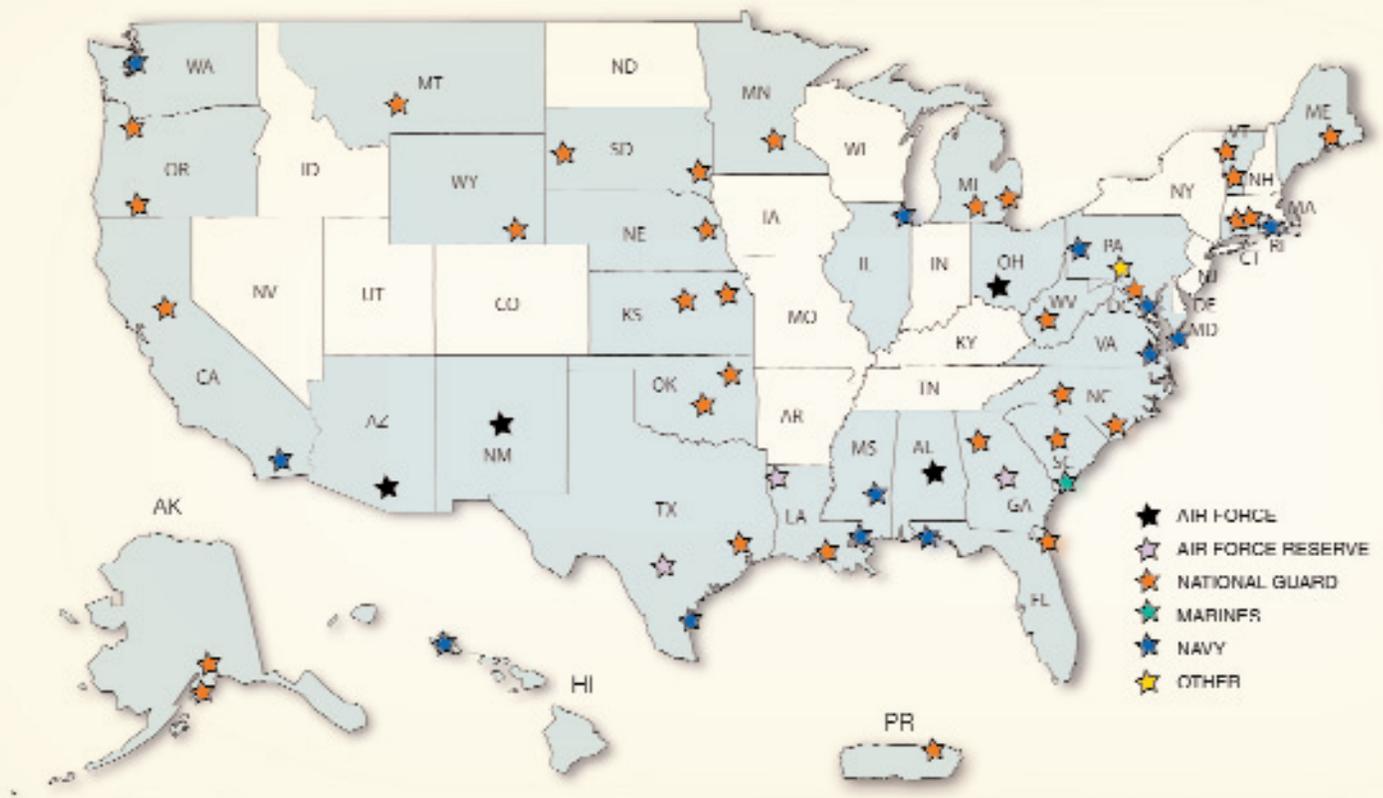
the program. It was included in the FY 1993 National Defense Authorization Act. In October 1992, President George Bush signed the legislation creating a national pilot program called DOD STARBASE. “There was so much enthusiasm for the program, it was not hard to get started,” commented Levin.

Koscak credits Senator Levin’s continuing support for the pilot program as extraordinary and essential for its growth to a permanent national program in 2000. She emphatically stated, “This program would not be here if it were not for Carl Levin.”

The reason for his support is simple. According to Levin, “it excites kids and opens their minds to real experience with people who are caring in a safe environment.”

“...it excites kids and opens their minds to real experience with people who are caring in a safe environment.”





DOD STARBASE® At-A-Glance

- 53 DOD STARBASE Academies in 33 states plus the District of Columbia and Puerto Rico
- 3 outreach programs to American Indians in MS, OK and SD
- Number of Students Since 1991: Over 400,000
- Number of Students Per Year: 53,545
- Cost of Program: \$15,994,000
- Average Cost Per Academy: \$301,773
- Average Cost Per Student: \$299



STEM literacy is important to “find measured yet creative solutions to problems which are today unimaginable.”

Leon Lederman
Nobel Laureate Physicist

Leading the Way Through Program Design

DOD STARBASE curriculum, developed on thirteen core concepts, captures the interest of students in science by teaching the physics of flight and rocketry. Students conduct challenging lab experiments that incorporate “hands-on, and minds-on” learning. Today, the focus of DOD STARBASE has expanded to incorporate more math and technology to give students an understanding and appreciation of engineering. This expansion of the curriculum is leading the way in teaching and exciting elementary students in science, technology, engineering and math (STEM).

National, local and state leaders in defense, government, business, science and education agree that all children require a strong foundation in STEM to be productive members of a rapidly changing work force. The rapid pace of change in the work force means that “we are currently preparing students for jobs that don’t yet exist using technologies that haven’t yet been invented in order to solve problems we don’t even know are problems yet.”⁷

The DOD STARBASE program is a world leader in introducing the latest STEM curriculum to elementary students. This emphasis reflects a change in curriculum from a focus largely on science to one that addresses all STEM topics. The curriculum addition of computer-assisted design (CAD) that incorporates technology, engineering and math has facilitated the transition.

This new emphasis continues a DOD STARBASE tradition that education should be rigorous, relevant and have a “WOW” factor to achieve maximum learning. The academies lead the way in promoting education that encourages students to become problem-solvers, innovators, and inventors and to work cooperatively to achieve the best results.

Parametric Technology Corporation (PTC) donated the Pro/Desktop software that makes it possible for students to learn and apply rigorous concepts such as extrude, align and mate. At the same time, they use math concepts/activities such



⁷ <http://shifthappens.wikispaces.com>



as circumference, symmetry, graphing, parameter, radius and diameter. The “WOW” factor – the students’ creations of their own space station, submersible, or all terrain vehicles!

This year, 20 academies piloted phase two of the CAD/engineering program: the manufacturing phase. The manufacturing unit exposed students to the complete engineering experience as they designed and manufactured a three dimensional flashlight. Students who participated in phase two were DOD STARBASE graduates familiar with the CAD technology. The manufacturing unit helps students understand why math is critical to engineering design and production. Students must carefully calculate, measure, and apply geometric principles for a successful product. The finished product is a testament to their learning that the students take home. As one student put it, “I loved designing the flashlight because WE made it.” Once manufacturing is operational across all academies, phase three will take them to global design where students at different academies will use the Internet to design a product together!

“CAD opens whole new worlds to our youngsters. They have never seen anything like it,” commented a director. Program directors report that after completing DOD STARBASE, students have a tremendous sense of pride in their increased technology skills and an understanding of the importance of engineering in their lives.

ALIGNING AND SUPPORTING STATE STANDARDS

All states now have educational standards and testing for students. Teachers and school administrators express appreciation that the DOD STARBASE curriculum



Core Curriculum Concepts

- Newton's Laws of Motion
- Four Forces of Flight
- Bernoulli's Principle
- Model Rocketry
- Aircraft Control
- Properties of Air
- Development and Innovative Use of Technology
- Properties and States of Matter
- Flight Simulation
- Space Exploration
- Goal Setting
- Teamwork
- Avoiding Substance Abuse



supports their state standards in science and math. Although 47 states⁸ report having technology standards, only three states actually test for technology and none test at the fifth grade level.

As in the past, DOD STARBASE continues to lead the way. As state standards expanded to include science, DOD STARBASE's exemplary curriculum enhanced the students' readiness for the test. Furthermore, the exciting lab experiences and 5E teaching method that included engaging, exploring, explaining, elaborating and evaluating, provided teachers with model instructional ideas.

Many of the schools served by DOD STARBASE have limited, if any, technology programming or access to computers for their students, just as they had limited science before state standards required science. At the academies, teachers who have not taught technology observe excellent teaching models, while at the same time their students gain appreciation for technology and future careers in the technological world. DOD STARBASE is once again leading the way!

⁸ Iowa, Missouri and the District of Columbia do not have technology standards. [Technology Counts](#), a special State Technology Report assembles key findings on the web.

“DOD STARBASE is a great program. It makes math and science exciting and those are the jobs of the future. I did not meet a kid who wasn’t just totally fascinated and completely engaged in what they were learning.”

Margaret Spellings, Secretary of Education
Visiting the Wright-Patterson Academy in Ohio
September 20, 2007



DOD STARBASE®: A Life Changing Experience

Tina Neigel was a school secretary when she encountered the South Dakota STARBASE outreach program on the Eagle Butte Reservation, which she describes as “90 miles from the closest anything.” She remembers the excitement not only of the students, but also of the parents. The same “personable” teachers came every year and developed strong relationships with the parents who were thrilled that their children had access to a program that provided enriching activities in science, technology, engineering and math.

She recalls that her son Scott attended the program in 1997 when he was in sixth grade. Scott and the other students loved the hands-on science activities, learning about flight, and making the rockets. She remembers that the parents were just as excited as the students were when it was time to launch the rockets. “Whose rocket would go the highest?” “Whose the farthest?” The turn out for the launch was a community event with lots of cheers and parents running with their children to retrieve the rockets.

The experience was a turning point in Scott’s life, a point when he decided that he wanted to be an engineer. Scott took the admonition “dreams + action = Reality” to heart and pursued advanced courses in math and science. Mrs. Neigel is amazed by details that her son recalls from the program. He still has his flight log of activities. He is putting his dreams into action and in September 2007, Scott entered the South Dakota School of Mines and Technology Engineering Program.

Today, Mrs. Neigel is a member of the Eagle Butte School Board where she is a strong advocate for DOD STARBASE. “Our school board wants opportunities to advance students’ horizons. We simply cannot finance the enrichment that we want for them. DOD STARBASE gives them experiences that we cannot. Every child that I’ve talked to about their STARBASE experience is thrilled with the program.”

“DOD STARBASE gives them experiences that we cannot. Every child that I’ve talked to about their STARBASE experience is thrilled with the program.”

“STARBASE is an awesome opportunity!”

Tina Neigel, Member of Eagle Butte School Board





Brothers Make Their STARBASE Dreams a Reality

Joshua and Jeremy Martindale are brothers whose experience with the STARBASE program led them to careers in the US Navy. They attended the DOD STARBASE program in Pensacola, Florida during the summers of 1997 and 1998, respectively.

The DOD STARBASE experience affected the boys differently, according to their mother Julianna Martindale. She recalls that Jeremy “came out of his shell” and began to develop his leadership skills as the team motivator. He would remind his crewmates “there is no such word as can’t.” As a student, he was never interested in math or science. However, STARBASE lessons taught him the importance of math and science for a successful career. Intrigued by the science of aviation, he realized that he wanted a career in Naval Aviation. Today, he is a twenty-year-old mechanic who works on P-3C’s, a land-based patrol aircraft that detects submarines.

Jeremy recently took time to discuss his career with STARBASE-Atlantis students at the Naval Yard in Washington, DC. He told them about an important “dreams + action = Reality” (d+a=R) lesson that he carries with him today: the lesson, “always stand upright, look a person in the eye, and extend a firm handshake.” This advice improved his self-confidence. He told the students about the educational opportunities that were available to him in the Navy. He was excited when he discussed his current classes that are enabling him to cross train to be a plane handler and a flight engineer. His long-term goal is to become a Command Master Chief, as he would like to be in a position that would allow him to provide for the well-being of enlisted personnel.

Joshua is thirteen-months older than Jeremy. He was impressed by the recognition and status that the Blue Angel pilots and crew earned. Now twenty-one-years old he has risen from E1 to an E5 in three years and plans to become an officer. The Navy has already given him a new skill – he now speaks Korean fluently.

Their favorite souvenir is the STARBASE-Atlantis T-shirt, signed by members of the Blue Angels. The T-shirts are now safely stored with Mom!



DOD STARBASE[®] All-Around

What Educators Say

“Through the well developed curriculum, you continue to meet your primary goal of creating student interest in math, science and technology, something sorely needed in today’s workplace. That you have also been teaching our students goal-setting and problem-solving skills is another benefit of your program.”

Superintendent, Houston, Texas

“The program utilizes all senses and addresses all learning styles. The students are inspired and excited after each visit. It has a wonderful effect on students’ self-esteem. The program helps to boost science and math test scores. Thank you so much for your positive, loving approach. Our students adore your staff. The pre- and post-test scores truly indicate the effectiveness of the program.”

Principal, Shreveport, Louisiana

“What a wonderful experience for our children! The staff is super at what they do. Students were captivated from their first words and the knowledge they gained was astronomical and overwhelming. Our students learned so much from this experience because the teachers teaching the program cared for them.”

Teacher, Montgomery, Alabama

“When I began my association with STARBASE I taught in a Title 1 school. We saw a great improvement in their attitude and their ability to work together after their STARBASE experience.”

Teacher, Beaufort, SC

“Every single time I come with my class, I seem to get some new insight or strategy I can carry back with me into my classroom... Throughout the year, I will be able to reference this or that concept from STARBASE and have immediate buy-in from my group as they associate it with this very happy memory.”

Teacher, San Diego, California

What Parents Say

“What a wonderful way to get kids enthusiastic about math and science. Also, what a wonderful way to show kids that they can reach for high goals and that part of reaching those goals is studying hard and staying drug free.”

Tucson, Arizona

“This was a fantastic program for my child. I’m thrilled with the experience that STARBASE offered my son.”

Burlington, Vermont

Accolades

“My daughter thinks math and science are cool now and can see why these subjects are important in the real world.”

Pensacola, Florida

“Great program for students to see science in action rather than just a book. Lets children express themselves in a positive manner.”

Pensacola, Florida

What Students Say

“I want to thank you for all that you have done to teach science and math in a fun and interesting way. I also want to thank you for really working hard just for us to have the time of our lives...that is one awesome program I am definitely going to remember!”

Burlington, VT

“I loved the activities and the engineering focus.”

Tucson, Arizona

“This has been the best experience of my life. Thank you for everything I learned. God Bless You.”

Carolina, Puerto Rico

“I like STARBASE because it’s cool, fun, and educational.”

Whiting Field, Florida

**“I really got into math and science.
STARBASE is a journey of learning.”**

Pensacola, Florida

“STARBASE is awesome! My favorite parts were all the experiments, flight simulators, and launching rockets! I learned that you've got to have a positive attitude if you want to have your dream come true. PS. It was cool.”

Rapid City, South Dakota



The 2007 DOD STARBASE® Report

Section 2193b, Title 10, United States Code authorizes the DOD STARBASE program. The authorizing legislation requires the Secretary of Defense to submit an annual report to Congress on the conduct and effectiveness of the program.

Over the years, the annual reports document the growth, performance, operational effectiveness and the responses of the key participants in the schools, military bases, communities and the target population of DOD STARBASE. The story is impressive as all participants praise the program. The students' performance is consistently positive and the demand for reaching additional youth is constant and persistent. This year, there is greater attention to new initiatives promoted by DOD STARBASE leadership to upgrade and refine the quality of the program and the professional development of academy personnel. These initiatives introduced new technologies and skills in the core curriculum; and a professional development program for instructors on innovative curriculum delivery. The report also discusses the work of the academy directors on steering committees that introduce, review and refine new initiatives and requirements. These new initiatives lead to a higher quality level of performance in the DOD STARBASE program.

The FY'07 assessment process obtained information via structured interviews, questionnaires, testing and attitude assessment, program visits and conversations with all program participants. This year 25 academy visits were made and assessments were obtained from 3,022 students, 222 teachers, 152 military and civilian volunteers, and all DOD STARBASE directors.

Each section provides an assessment of the program's progress and describes the unanticipated and/or unresolved issues that emerge in program operations. The report is organized as follows:

- **Program Overview:** Partners, program elements, employment relationships, academy staffing, not-for-profit organizations, Web site and steering committees;
- **Program Assessment Overview:** Student and teacher composite results along with military and civilian volunteer assessments;
- **Program Growth:** Growth history, current growth data and growth issues;
- **Critical Events:** Events affecting the programs;
- **Program Compliance:** Compliance procedures and adherence;
- **Fiscal Information:** Program costs and supplemental funds;
- **Observations and Considerations:** Program operations, curriculum and instruction, data collection and analysis, and compliance issues;
- **Student Assessment Comprehensive Analysis:** Student knowledge and attitude assessment, and teacher assessment of the program;
- **Appendices:** Additional assessment charts, research instruments, and general information such as an academy directory, a listing of schools/school districts served and an academy time line;
- **Glossary:** Alphabetical listing of research and other terms used in this study.

“We are exceptionally proud of our DOD STARBASE Program. It provides great opportunities for our young people. The synergy between Selfridge ANGB and our DOD STARBASE opens young people’s minds to the military – its past, present, and future.”

Our DOD STARBASE program is great for the community and military. We are teaching people that would not otherwise be exposed to the military and displaying a positive image. I have received very positive feedback from our community members throughout the entire metropolitan area. I have personally escorted the Governor on a tour of our DOD STARBASE and she was thoroughly impressed.”

MG Thomas Cutler
The Adjutant General for Michigan



PROGRAM OVERVIEW

The DOD STARBASE mission is “to raise the interest and improve the knowledge and skills of at-risk youth in math, science and technology by exposing them to the technological environment and positive role models found on military bases and installations.”⁹ This successful program relies on the partnership of three separate entities to accomplish its mission – the military, the community and the local school districts. In FY’07, the program served 53,545 students from 981 schools at 53 academies in 33 states. The total amount allocated by OASD/RA to the academies was \$15,994,000, the average cost per academy was \$301,773 and the average cost per student was \$299.¹⁰

The Partners

The Military

Military installations provide the locations, infrastructure and volunteers for the academies. The base commander’s support and participation is essential from the program’s installation to each graduating class. The commander provides access to a secure classroom space, utilities, and volunteers. Occasionally, a commander provides necessary physical renovations.

The School District

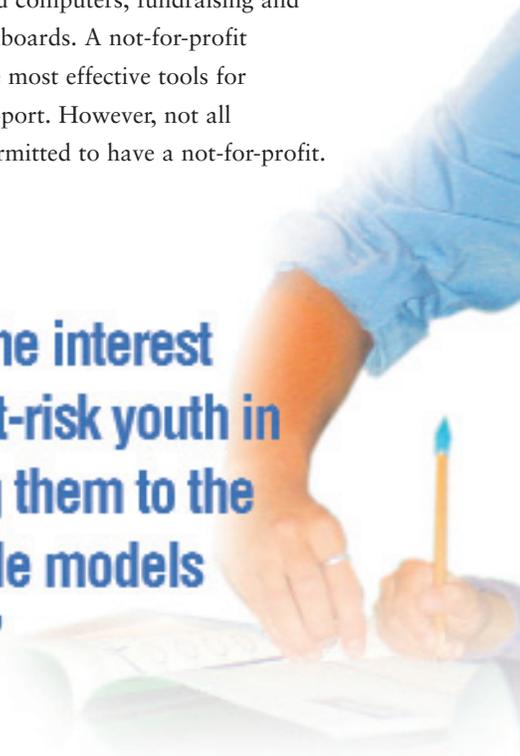
School district personnel (usually the superintendent) sign a formal agreement with a DOD STARBASE academy prior to the arrival of students. The school districts typically provide student transportation to and from the academy, student lunches, and classroom teachers as monitors. Transportation, in whole or in part, is a critical item of program support. In the partnership agreement, there is a request for full coverage of transportation costs. As fuel costs increase, schools, especially Title One schools, are experiencing difficulty in meeting these obligations. In some instances, academies provide some assistance or receive community donations. There was a six percent drop in schools providing transportation this year. The other areas of support are more limited in scope and costs and have not changed over the last five years.

The Community

DOD STARBASE enjoys wide support in all the communities. Contributions include volunteer hours, donations of software and computers, fundraising and serving on non-for-profit boards. A not-for-profit organization is one of the most effective tools for obtaining community support. However, not all academies have or are permitted to have a not-for-profit.

The DOD STARBASE mission is “to raise the interest and improve the knowledge and skills of at-risk youth in math, science and technology by exposing them to the technological environment and positive role models found on military bases and installations.”

⁹ Section 2193b, Title 10 United States Code authorizes the program. The Office of the Assistant Secretary of Defense for Reserve Affairs (OASD/RA) administers the program.
¹⁰ The total amount allocated to OASD/RA was \$17,797,000.



THE PROGRAM ELEMENTS

The future of our homeland security rests on our ability to produce the scientists, mathematicians and engineers that will maintain our technological strength. Currently only six percent of high school graduates plan to pursue engineering degrees, down from 36% a decade ago. At the same time, our scientific and research communities face a retirement crisis. Students at all levels from elementary to college should consider STEM subject matter and careers.

DOD STARBASE focuses on elementary students, primarily fifth graders, to interest as many students as possible in STEM. The goal is to motivate them to explore these subjects as they continue their education.



DOD STARBASE serves students that are historically under-represented in STEM. Students who live in inner cities or rural locations, those who are socio-economically disadvantaged, low in academic performance or have a disability are in the target group. The program encourages them to set goals and achieve dreams.

The program engages students through the inquiry-based curriculum with its “hands-on, minds-on” experiential activities. They study Newton’s Laws and Bernoulli’s principals and learn about the wonders of space and the properties of matter. Technology captivates the children as they use the computer to design space stations, all-terrain vehicles, and submersibles. Math is embedded throughout the curriculum and students use metric measurement, estimation, calculation and geometry to solve problems. Teamwork is stressed as they work together to explore, explain, elaborate and evaluate concepts.

The military volunteers apply abstract principles to real world situations by leading tours and giving lectures on the use of STEM in different settings and careers. Since the academies are located in different branches of the military, this experience is highly varied. Students may discuss how chemical fires are extinguished, learn how injured are transported, explore the cockpit of an F-18 or the interior of a C-130, or glimpse what life is like in a submarine.

Continued on page 20

The Department of Defense Instruction (DODI) manual guides the academies on many topics including grade level, class size, schedule and service area. Exceptions to the DODI must be sought in writing from OASD/RA.

Grade Level

Realizing that students begin to lose interest in math and science after the fourth grade and wanting to foster this interest in as many students as possible, the academies emphasize the fifth grade. However, the legislative mandate allows the program to serve students in K-12. This year, all but two academies served fifth grade students and these two sites served fourth and/or sixth grade.

Academy personnel develop innovative curriculum to serve other grades from kindergarten through tenth grade. This year academies offered more programs at the middle school level (sixth through ninth grade) due to the piloting of an advanced computer-assisted design program and the piloting of a middle school mentoring program.

Class Size

The average class size is declining. In 2007 the average class size was 23, as compared to 24 in last year's report. Small class size is essential for the inquiry-based curriculum to allow "hands-on, minds-on" experiential learning and individual computer time. This approach necessitates frequent student/teacher interaction to explain the processes and to evaluate students' learning. The DODI guidelines stipulate that average class size be between 20 and 35 students.

Class Schedule

Academies have the option of offering a four-day (20 hours) or a five-day (25 hours) program. The five-day program is the overwhelming choice for the academies. Eighty-nine percent of the 53,545 students attended a five-day program. Eleven percent participated in a four-

day program. The advantage of the five-day program is that subjects are taught in more depth, while the four-day program offers the benefit of serving more children.

Program Service Area

The majority of schools served are within a 50-mile radius of their academy. This is due to the logistics of getting the students to and from the academy in a low-cost and timely manner. Logistics include the academies' need to meet the DODI requirement for class hours and the schools' need to coordinate busing to get the students to and from their homes, as well as to the academies.

Academies that go beyond a 50-mile radius generally design special accommodations for delivery. In some cases, the program is designated an outreach program, such as those serving reservation areas, and linked to the primary academy. Stand-alone outreach programs usually do not meet DODI requirements for an academy, as they might teach fewer students, have fewer instructors and/or not be located on a military base.

In addition, a few academies have remote delivery programs, such as teleconferencing, to reach more students. These initiatives are only permissible after academies meet the required standards. Generally, these initiatives require supplemental funding from sources other than DOD. These initiatives are the exception and not the norm.



Ethnic Composition

The academies serve an ethnically diverse student population, as can be seen in Exhibit 1. As new academies become fully operational, there are accompanying shifts in the program’s ethnic composition.

The number of Hispanic/Latino students served has grown the most over the last six years. In FY ’07, 17% of the students were Hispanic/Latino compared to 11% in 2001 – a 6% increase. Academies anticipate a continued increase in the Hispanic/Latino students in the near term that will become proportionately higher than Black/African American population by the end of this decade. The growing number of Native American students since 2001 reflects the addition of outreach programs in Mississippi, Oklahoma, South Dakota and Alaska.

Ethnic Composition of Students 2001-2007							
Exhibit 1							
Ethnicity/Race	2001	2002	2003	2004	2005	2006	2007
Black/ African American	25%	27%	27%	23%	22%	21%	23%
Asian/ Pacific Islander	4%	5%	5%	4%	4%	5%	4%
White	54%	47%	46%	47%	48%	49%	47%
Hispanic or Latino	11%	14%	15%	15%	16%	15%	17%
Multiracial	0%	1%	2%	3%	3%	3%	3%
American Indian/ Alaskan Native	3%	4%	4%	5.5%	5%	6%	5%
Other	3%	2%	1%	3%	0%	2%	2%

Gender Composition

In FY ’07, 49% of the students were female and 51% were male. Over the years, this data has been relatively unchanged.

Employment Relationships

Academies hire and pay their staff through a variety of relationships including state, school district, local university, private contractor, not-for-profit board, and the federal government. The employer affiliation determines employee relations in terms of salary, benefits, administrative costs, and personnel practices. This creates major differences in salary, benefits, and hiring practices. OASD/RA provides general guidelines, which are currently under review.

The following chart shows that as new academies open there is a growing movement towards employer affiliation with either the federal or a state government. Federal and state employer affiliation assures that employees have access to retirement and health benefits.

Employment Affiliations Exhibit 2			
Organizational Affiliation	2005	2006	2007
Federal Employee	52	54	60
State Employee	69	69	78
Contract Employee	110	110	105

Increasingly, the organizational affiliation is becoming an important consideration in budget management, cost of operation, personnel practices and staff retention. Attention to these factors will play an important part in future DOD STARBASE operations.

Academy Staffing

The DODI outlines the staffing model for the academies. The model includes four full-time paid staff equivalent positions.¹¹

E2.1.1.1 Director. Develops, organizes, and manages day-to-day operations of the STARBASE Academy. Responsible for liaison with military, community, and business leaders; community relations; personnel; curriculum design; budget submission and execution; staff development and all other activities of the Academy. Pay authorized at Federal General Schedule GS-12, step 10 to GS-13, step 10.

E2.1.1.2 Deputy Director/Program Instructor. Assists Director with operations, management, development, and implementation of the STARBASE Academy. Has a dual function as deputy director and program instructor. Provides classroom instruction, maintains records and files; and organizes, manages, and prepares classes. Pay authorized at GS-11, step one to GS-12, step-10.

E2.1.1.3. Program Instructor. Organizes and manages classrooms; provides classroom instruction; maintains records and files; and organizes, manages, and prepares classes. Pay authorized at GS-9, step one to GS-11, step 10.

E2.1.1.4. Office Manager. Assists the STARBASE Academy staff by maintaining records, correspondence, and files; assists in preparing classroom materials and activities; assists program instructors in class activities as needed. Pay authorized at GS-6, step one to GS-9, step 10.

E21.2. Exceptions to the Academy manning model must be approved by the ASD(RA).

¹¹ DODI E2.1.1.

Over the years, academy directors requested and received permission to change their staffing model. The primary factor in changing a staffing model is the academy’s budget. Academies spend from 65% to 97% of their funds on personnel costs.¹² The directors modify their staffing module to maintain or improve the instructional day within budget restrictions. The most common change is the reorganization of the administrative position (see Exhibit 3) to one that provides more classroom support. Other factors, such as job sharing, expanding instructor time, consolidation of job tasks and limiting benefits, have introduced changes in the organizational structure.

Academy Staffing Profile¹³			
Exhibit 3			
Position	Number of Staff	Full-Time	Part-Time
Director	45 ¹⁴	44	1
Deputy-Director	44	43	1
Instructor	100	72	28
Office Manager	51	35	16
Other	3	0	3
TOTAL	243	194	49

Instructors

Certified, experienced and skilled instructors are the DOD STARBASE norm. They must be knowledgeable in math, science and technology in order to teach the rigorous “hands-on, minds-on” inquiry based curriculum. The addition of computer-assisted design was a challenge for many of the instructors. All sites are now successfully teaching this material. Classroom observations note that the majority of instructors are enthusiastic, dynamic teachers who make the DOD STARBASE experience interesting, challenging and fun.

Staff Development

Individual academies typically train new staff on the job. If possible, a new instructor observes/shadows for one cycle before teaching. Experienced DOD STARBASE instructors provide mentoring to new instructors as long as needed. The directors also mentioned employee handbooks, testing, visiting other academies, CPR, safety and sexual harassment training, and attending a teacher academy, as staff development at their academy. Continuing professional development is encouraged by the academies. This includes attending regional/national workshops in science, math or space.

The first professional development workshop for instructors convened on July 25-28, 2007. The Professional Development Committee designed the workshop to include professional speakers, as well as presentations from 19 academy personnel. The workshop offered opportunities for networking, upgrading skills, and sharing innovative classroom activities.

¹² Several factors lead to increased personnel costs. The factors include salary competitiveness, personnel guidelines prescribed by the affiliating agency, OASD/RA guidance, maturing staffs, and the need to retain key personnel.

¹³ One director, 7 instructors, 2 interns and 2 office managers are not included in the chart as they are paid from non OASD/RA funds.

¹⁴ Seven academies share a director: Alaska, Connecticut, Kansas, Michigan, North Carolina, Oklahoma, and Vermont

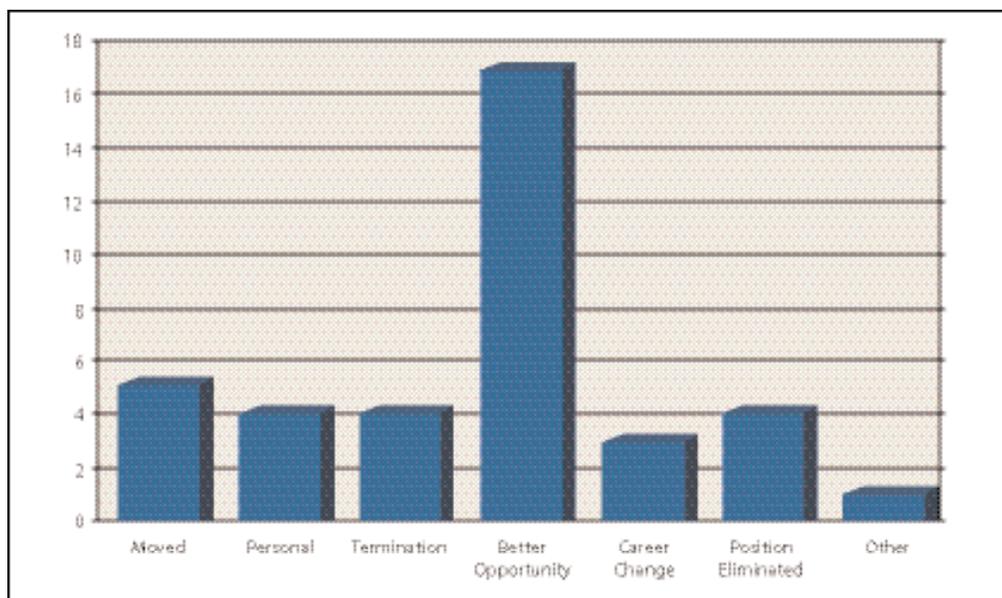
Sixty instructors and 17 directors, as well as representatives from the service branches, attended the workshop. The conference evaluation used a five-point scale to assess program effectiveness. Overall ratings were high, ranging from 4.21 to 4.47. The highest rating was the “usefulness of the program’s content to existing DOD STARBASE curriculum.” The attendees’ comments strongly indicate that the time, expense, and exposure were beneficial and useful in promoting new tools and teaching strategies.

Instructional staff and directors from twenty academies were trained to implement the new manufacturing component using computer-assisted design software.

Staff Departures

Fifteen percent of DOD STARBASE staff departed in FY’07. The primary reason for staff turnover was better opportunities. Twelve instructors, two directors, and three office managers left for this reason. Other reasons for departure include termination, moving, career changes, personal and the elimination of positions. See Exhibit 4.

Reason for Staff Departure
Exhibit 4



Academy instructors with outstanding skills in science, math and technology possess talents that are highly valued by school systems that must meet state standards. There is an emerging trend of school systems recruiting STARBASE instructors. The benefit packages offered are highly attractive, especially to employees of academies that do not offer benefits such as health insurance and retirement plans.



Nineteen percent of DOD STARBASE instructors left their positions, which is higher than the national average of 16% of teachers who leave public school positions.¹⁵ Furthermore, eight percent of those leaving public school positions move within the same school system to a different school. Their talent is not lost to the school system. The departure of directors (8%) and deputy directors (7%) was not as dramatic as the loss of instructors. The overall turnover rate among the 243 personnel was 15% or 37 staff, representing a significant loss of human capital.

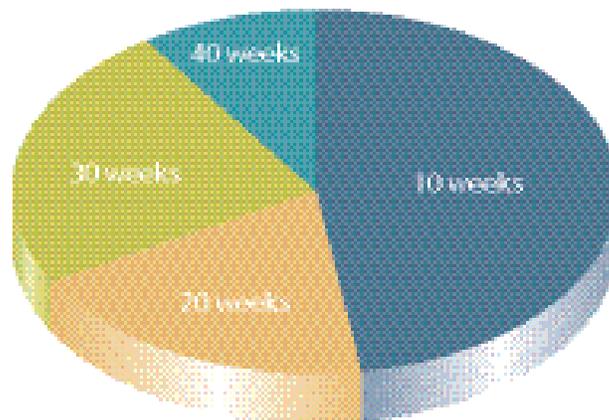
Staff Departure Rate 2003-2007
Exhibit 5

Program Year	2003	2004	2005	2006	2007
Number of Staff	168	238	231	233	243
Number of Departures	10	30	39	36	37
Turnover Rate	6%	13%	17%	15%	15%

This year's Director's Questionnaire asked how many weeks it took to fill a vacant position. The shortest time was one week and the longest was 34 weeks. The average time to fill a position was 11.3 weeks; eleven positions were filled in six weeks or less. Nine positions were open at the time the Director's Questionnaires were completed.

The following chart indicates the percentage of jobs filled within a time period in 2007. It took ten weeks to fill ten positions, twenty weeks to fill four positions, up to thirty weeks to fill five positions and two positions took up to forty weeks.

Length of Time to Fill an Open Position



¹⁵ Teacher Attrition and Mobility: Results from the 2004-05 Teacher Follow-up Survey, U.S. Department of Education, NCES 2007-307 page 3.

Not-For-Profit Organizations

Not-for-profit organizations are a popular resource for academy support.¹⁶ Military and civilian board members provide program guidance, access to community resources, fund raising, and other activities to enhance individual academies. In FY'07, the boards supported the academies in obtaining over a half-million dollars. Funding sources included grants, donations, fund raisers, and state and federal governments. The amounts per academy varied from \$450 to \$153,000. The academy directors with not-for-profit organizations ranked the top three functions for their boards as fund raising/marketing, program planning, and annual review and grants.

DOD permits, but does not require not-for-profit organizations. Most of the not-for-profits were established before 2001 when the program was being piloted and ongoing financial support uncertain. Today, a well-functioning and productive board is an outstanding resource to enhance the children's experiences.

Use of Not-for-Profits by Military Components			
Exhibit 6			
Military Component	# Academies	# Not-for Profits	% Academies With Not-for-Profits
National Guard	32	23	72%
Navy/Navy Reserve	13	0	0%
Air Force	4	2	50%
Air Force Reserve	3	3	100%
Marines	1	1	100%
Total	53	29	55%

Services Provided by Not-For-Profits			
Exhibit 7			
Service	2005	2006	2007
Marketing/Fundraising	80%	68%	72%
Grant Writing/Submissions	57%	42%	38%
Program Planning and Review	47%	58%	52%
Budget Planning and Review	47%	58%	41%
DOD Compliance Review	27%	52%	52%
Other	27%	13%	21%
Review of Potential Staff	23%	23%	38%
Review of Subcontractor Relations	23%	23%	27%

¹⁶ The Secretary of Defense and the secretaries of the military departments are authorized under Section 2193 (b) subparagraph (f) to accept financial support as well as other types of support from not-for-profits and other private sector organizations.

DOD STARBASE Web Site

The Web Site, located at www.starbasedod.com serves two primary program purposes. The first purpose is to provide information to the public. This includes information on history, curriculum, site locations, contact information, testimonials, annual report, links, and references. The second purpose is to provide pertinent information to DOD STARBASE personnel. Content for staff includes specific information on the DODI, curriculum innovations, a contact list, a message board, references, papers presented at conferences, annual reports, questionnaires, conference information, and surveys. A message board for staff has the capability of being a resource to share ideas and gather information on different topics. However, staff members prefer to contact each other through email and seldom use the board.

On average, there are 1,326 visits to the site each month from 836 unique visitors. The average visit lasts 321 seconds, or a little more than five minutes.

Steering Committees

Steering committees were formed to assist OASD/RA in guiding DOD STARBASE into the future. Composed of academy directors and military personnel, the committees recommend policy positions and curriculum changes, guide professional development, and suggest operations initiatives. This year, two committees, Middle School Component and Mentoring Initiative, combined to form the Middle School and Mentoring Committee. Below is a listing of the steering committees, their missions and an update on their progress during FY'07.

PARTNERSHIPS

- *Mission:* To identify, review, and recommend steps to enhance professional development and activities for all staff.
- *Action:* The partnership manual developed remains under review by DOD attorneys.

PROFESSIONAL DEVELOPMENT

- *Mission:* To identify, review, and recommend steps to enhance professional development and activities for all staff.
- *Action:* The committee planned and facilitated the first Professional Development Conference for instructors.

PROGRAM OPERATIONS

- *Mission:* To review and update the current program management and training manuals.
- *Action:* Members drafted a letter to academy directors soliciting ideas on teaching objectives for the thirteen core curriculum areas. The letter is under review at DOD.

MIDDLE SCHOOL AND MENTORING

- *Mission:* To identify, review, and assess instructional materials to strengthen and enhance the core curriculum and mentoring components of the middle school curriculum.
- *Action:* The committee convened and developed a middle school outline. Members of the committee tested parts of the curriculum at eleven academies during the 2007 summer session. A total of 217 students participated in the different pilots.

PROGRAM ASSESSMENT 2007 OVERVIEW

The mission of DOD STARBASE is to raise the interest and improve the knowledge and skills of youth in science, mathematics, and technology

DOD STARBASE is a national program designed to engage students in science, mathematics, and technology through demonstration and direct experiences with military personnel and resources. Boys and girls from inner cities and rural areas around the United States participate in four or five days of aviation, space exploration, and other applied science, math, and technology activities at a nearby military installation along with their classroom teacher. Teamwork, career exploration, and personal goal setting are emphasized in the program.

The focus for the 2007 DOD STARBASE program assessment¹⁷ was:

- Student achievement in the core science, mathematics, and technology concepts presented in DOD STARBASE.
- Student attitudes toward learning, personal goals, military personnel and resources, and DOD STARBASE program effectiveness.
- DOD STARBASE program impact and effectiveness in the classroom, with parents, and in the community via teachers, program directors, military personnel and others involved with the program.

As part of the assessment process, students were administered pre- and post-program knowledge tests and attitude surveys. Students' classroom teachers were surveyed for impact of the program on students, their parents, and the community and were asked for their professional views on program effectiveness resulting from their observations of their students in the program. The student and classroom teacher results were compared with past years of DOD STARBASE for program delivery.

The mission of DOD STARBASE is to raise the interest and improve the knowledge and skills of youth in science, mathematics, and technology.

¹⁷ Vangent, Inc., One North Dearborn, Suite 1600, Chicago, IL 60602, provided external oversight for the assessment process, tallied the data, and issued [STARBASE Student and Teacher Assessment Results](#) as a report for 2007. These results are the basis for the composite summary that follows.



Treatments of the mean, standard deviation, T-Test, and Pearson's Correlation were used to calculate the data. Data from 3,022 students and 222 classroom teachers (DOD STARBASE 2007) are the focus for this part of the assessment.

DOD STARBASE 2007 Student Composite

DOD STARBASE uses military personnel and installation resources of the National Guard, Navy, Air Force Reserves, Air Force, and Marines installations as a site for students to learn about science, mathematics and technology through demonstrations and direct experiences. Since 1993, the program has grown to a five-day or an accelerated four-day military base experience at 53 academies in 33 states, the District of Columbia and Puerto Rico, with additional outreach to Native American Reservations in South Dakota, Mississippi, and Oklahoma. Students use teamwork, personal goal setting, and career exploration in the activities.

The composite students Kelsey and Jerome¹⁸ from South Carolina are like typical fifth graders across the country that completed DOD STARBASE 2007. Their 5-day STARBASE program was held at a National Guard Base. As other 10 or 11 year olds in the program, Kelsey had a family friend in the military, but had not heard about STARBASE. Jerome knew about the program from a friend that participated in a previous program but had not known a military person before. Prior experience with the military tended to improve the students' attitudes about DOD STARBASE and their experience at the military installation. These and other student attitudes and student knowledge scores influenced Kelsey and Jerome's overall student performance at the academy.



¹⁸ Kelsey and Jerome are composite children that reflect the data results from the 2007 analyzed student knowledge assessments and student attitude surveys in DOD STARBASE Student and Teacher Assessment Results. This report was prepared by Vangent, Inc. Numerical student data results are also available for review in the section Student Assessment Comprehensive Analysis

Students' mean knowledge scores improved significantly from pre-test to post-test.

Student Knowledge Before and After DOD STARBASE 2007

Jerome and Kelsey and 2,675 other students took DOD STARBASE knowledge assessments before and after their academy experience. Jerome scored 65% while Kelsey scored 60% on the pre-test. The science, mathematics and technology concepts in DOD STARBASE included activities in aviation and space exploration and other applied science and mathematics related topics. Their instructors challenged the students to learn about real world concepts that would be useful to them.

"I can make my dreams come true."*

- I set goals for myself.
- I think I can graduate from high school.
- You can accomplish a lot in a group.
- STARBASE instructors are kind and helpful.
- I think about what I want to be when I grow up.
- Learning is easy for me.
- I make good decisions.
- I like math.
- I am good at math.

* If students have the bullet self perceptions, then they can achieve their dreams, according to 2,468 student participants of DOD STARBASE 2007.

Jerome improved his score by 17% in the post-test with an 82% post-test. Kelsey improved her score by 19% for a post-test score of 79%. While boys had higher pre- and post- test scores, the girls had the greatest change in score from the DOD STARBASE program.

Sample Knowledge Assessment Items:

What is the smallest particle of water?

1. A water molecule
2. A water atom
3. A water nucleus
4. A water drop

If you are landing an airplane in a city that is 5,000 feet above sea level and your altimeter reads 5,500 feet, how many feet are you above the ground?

1. 500 feet
2. 1,000 feet
3. 5,000 feet
4. 5,500 feet

If you launched two rockets, one with a mass of 50 grams and one with a mass of 100 grams, using the same amount of force, which rocket would go highest?

1. The heavier rocket would go the highest.
2. The lighter rocket would go the highest.
3. The two rockets would go the same height.
4. The heavier rocket would go twice as high as the lighter rocket.





DOD STARBASE Program Knowledge Comparisons for Previous Years

Over the past five years, the rate of change from pre-test mean scores to post-test mean scores has averaged about 18%. In 2007, the rate of change was slightly below the average at 17.5%. The core curriculum and test items have changed conservatively during this time. Student knowledge about science, mathematics, and technology, and attitudes about learning and personal goals are integral in student achievement in DOD STARBASE.

Student Attitudes Before DOD STARBASE

Both Kelsey and Jerome were excited to start their DOD STARBASE experience at the base. They shared the enthusiasm of most children their age. They were ready to learn, work on teams, try out new ideas, and work with a helpful teacher. Both had thought about setting goals to help their futures turn out as they hoped.

Students' Top Ten Attitudes After DOD STARBASE 2007

- I think I can graduate from High School.*
- STARBASE Instructors are kind and helpful.
- You can learn a lot by trying things.
- At STARBASE, I learned a lot of things that I can use.
- I think about what I want to be when I grow up.
- I can make my dreams come true.*
- I like to make new things.
- I am enjoying coming to a military base.
- Military people do lots of different things.
- You can have fun working in a group.

* Student views improved the most this year over five years of DOD STARBASE.

Student Attitudes After DOD STARBASE

As optimistic as Kelsey and Jerome were before DOD STARBASE, their attitudes in every aspect of the program improved during their experiences. By the end of the last activity at DOD STARBASE they knew that they had learned a lot of useful things. The military base experience was memorable and they liked the teamwork approach used for problem solving. Their attitudes in regards to “Military bases are fun” had improved significantly by the end of DOD STARBASE. Instructors’ efforts were appreciated. Both children had seen military personnel in careers using science, mathematics,

and technology. As a matter of fact, their views on their own futures and what they needed to do to better their possibilities had improved. Views of science and mathematics had improved during DOD STARBASE. Kelsey and Jerome agreed, “I would tell my friends to come to DOD STARBASE.”

While Jerome tended to have more positive attitudes about science and math at the start of the program, Kelsey improved more in her views of science. Kelsey tended to enjoy learning and personal goal setting from the start. Jerome looked forward to the military base experience before the program started. After the program, both children had improved views about science and mathematics, the military base experience, the military as a good place to work, their own futures and the helpful instructors at DOD STARBASE.

“All student attitudes improved significantly after DOD STARBASE® 2007.” Vangent, Inc.

Other children with variable views mostly agreed with Kelsey and Jerome’s strong positive response after DOD STARBASE. The program improved their outlooks toward their futures and goal setting. Their views improved about science, mathematics, technology and team activities. The instructors and military personnel they observed were helpful. “DOD STARBASE is not boring,” they agreed.

Kelsey and Jerome attended a five-day DOD STARBASE, while some students attended an accelerated four-day program. Both programs had increased positive attitudes and improved knowledge scores. Kelsey and Jerome’s five-day program had better attitude and knowledge scores.

Drivers of “At STARBASE, I learned a lot of things that I can use.”*

- STARBASE Instructors are kind and helpful.
- I like to think of new ways to use things.
- STARBASE is (not) boring.
- I am enjoying coming to a military base.
- You can have fun working in a group.
- I like science.
- I (do) think STARBASE will help me do better in school.

*If the rank-ordered conditions listed here are present at a DOD STARBASE academy, then students will find a lot to use from the program. Data is from 2475 student participants.



Previous Years DOD STARBASE Program Attitude Comparisons

Since 2003 the attitudes of student participants after the program have been consistently high. Kelsey and Jerome's positive views of DOD STARBASE match well with the positive student views of past years. In particular, Kelsey and Jerome's views of "I am good at math" and "I can make my dreams come true" were better than any past year's scores. The improved attitude toward math may be due to an increased emphasis on math in the curriculum. Kelsey and Jerome also improved their attitudes over 2006 in "Learning is easy for me," "I think I can graduate from high school," "I like to make new things," "I think about what I want to be when I grow up" and "I like to think of new ways to use things." The high response for "I think I can graduate from high school" was matched only one other year.

Student Perceptions "I am good at math" and "I can make my dreams come true" were better than any past years.

Even with the five-year span of consistently high positive student attitudes after DOD STARBASE, some variations in overall means in post-program attitudes have occurred. A closer look at the pre- to post- change in attitude from DOD STARBASE treatment might be considered for a program of this longevity.

Importance of Classroom Teachers to DOD STARBASE

The perceptions of classroom teachers attending DOD STARBASE with their students are an important influence on students' views before the program. It also affects students' follow through on science, mathematics, and technology concepts, personal goal-setting and positive views of learning after the program ends. Classroom teachers have the opportunity to observe their students as they learn and then use the resources provided by DOD STARBASE to reinforce the concepts learned in the program. Teachers and their administrators appreciate that the concepts in the program are tied directly to their state science curriculum learning goals so that the students' time is used in focused learning.



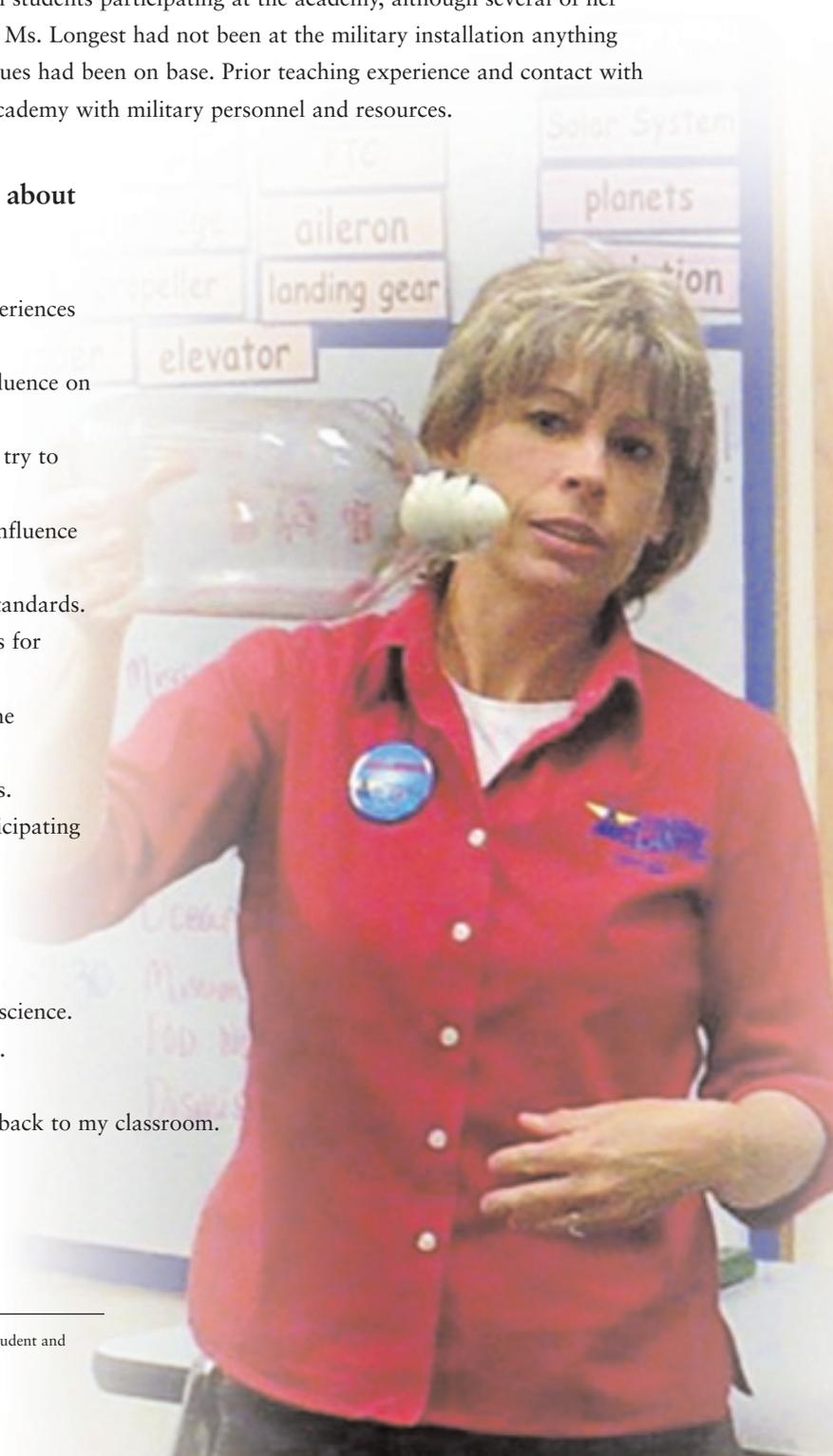
DOD STARBASE 2007 Classroom Teacher Composite

At the 53 DOD STARBASE academies, 222 teachers provided feedback about their students and professional insight about the impact of the DOD STARBASE 2007 experience. For insight on the typical teacher who attended STARBASE 2007 with the students and provided feedback, a composite teacher, Ms. Longest, is utilized.¹⁹ Numerical assessment results are in Student Assessment Comprehensive Analysis.

Ms. Longest, composite 5th grade teacher for Kelsey and Jerome, has been teaching in South Carolina for six years. STARBASE 2007 was Ms. Longest's third year with students participating at the academy, although several of her colleagues who attended were new to the program. Ms. Longest had not been at the military installation anything for other than STARBASE, but a few of her colleagues had been on base. Prior teaching experience and contact with the military base seemed to put her at ease at the academy with military personnel and resources.

Classroom Teachers Rank-Ordered Views about DOD STARBASE 2007

- The children enjoy sharing their STARBASE experiences with others.
- The STARBASE experience will be a positive influence on students in coming years.
- STARBASE reinforces many positive behaviors I try to teach my students.
- The STARBASE experience has been a positive influence on me personally.
- The STARBASE curriculum supports our state standards.
- The STARBASE instructors are good role models for the students.
- The students talk about STARBASE long after the program has ended.
- The students admire their STARBASE instructors.
- Parents are delighted that their children are participating in STARBASE.
- STARBASE has helped improve the students' understanding of science.
- The students enjoyed being on a military base.
- (Students are) more interested in learning about science.
- My principal is a strong advocate of STARBASE.
- (Students are) more willing to try new things.
- I would like more STARBASE resources to take back to my classroom.
- (Students are) more confident in what they can accomplish.



¹⁹ The results for the composite teacher data are provided by STARBASE Student and Teacher Assessment Results report, Vangent, Inc.

In 2007, classroom teachers' views that students were "more interested in learning about math" increased.

Kelsey and Jerome have a better understanding of science after DOD STARBASE. Since their experience on base, students seem more interested in studying science. Students are willing to try new things and confident about their own futures. Ms. Longest wants to reinforce these attributes with more DOD STARBASE resources for the classroom.

Classroom Teachers' Top Views about DOD STARBASE (2003-2007) in Rank Order

- The children enjoy sharing their STARBASE experience with others.
- The STARBASE experience will be a positive influence on students in coming years.
- STARBASE reinforces many positive behaviors I try to teach.
- The STARBASE experience has been a positive influence on me personally.
- The STARBASE curriculum supports our state standards.
- The STARBASE instructors are good role models for the students.
- The students talk about STARBASE long after the program has ended.
- The students admire their STARBASE instructors.
- Parents are delighted that their children are participating in STARBASE.
- STARBASE has helped improve the students' understanding of science.
- The students enjoyed being on a military base.
- More (students) are interested in learning about science.
- My principal is a strong advocate of STARBASE.

The views of Ms. Longest about DOD STARBASE could hardly have been more positive. She sees her students talking with others about DOD STARBASE and suspects the program will influence them in the future. She appreciates the positive behaviors of the program and the instructor role models. The concepts taught are among her state science curriculum expectations. Her students' parents are pleased that their children participate in the program.

DOD STARBASE Teacher Perception Comparisons for Previous Years

Over the past five years, classroom teachers have consistently viewed the DOD STARBASE program impact on their students positively. In 2007, compared to other years, the highest increase in perception about the program conveys this view: "The children enjoy sharing their STARBASE experiences with others." From teachers' perspectives, the proof of their students' increased interest is seen in their students' behaviors. That the program aligns with state science and mathematics curriculum standards is very important to teachers. DOD STARBASE program models positive learning and goal-setting attributes. Teachers view the program as "a positive influence on me personally."

As in past years, the teachers agree that DOD STARBASE improves students' knowledge in the science, mathematics, and technology concepts in the academy while influencing positive learning and personal goal-setting views of participants. DOD STARBASE utilizes military personnel and resources to show students how science, mathematics, and technology concepts are applied in the military. DOD STARBASE provides positive programmatic impact for student participants and their parents, and the classroom teachers who see continuing positive attributes from the program.

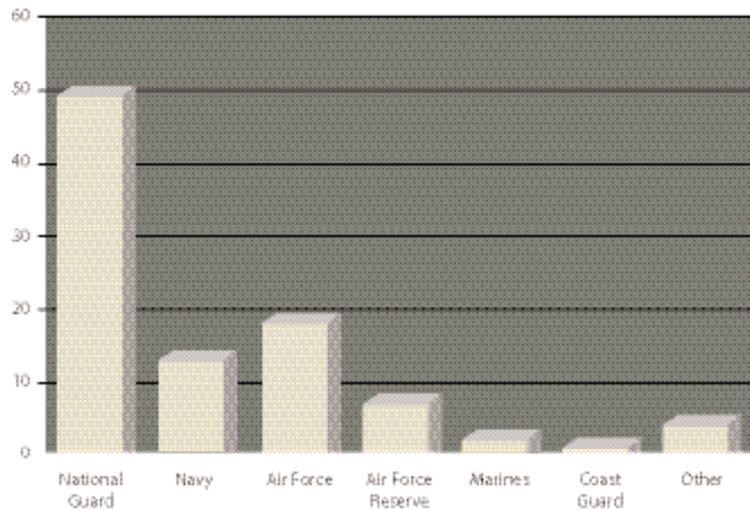
Military volunteers provided tours, made classroom presentations, facilitated experiments, supported program administration, served as a teacher aides and assisted with other tasks.

Military Volunteer Assessment

In FY 07, 2,463 military volunteers donated 11,611 hours to the DOD STARBASE program. Military volunteers enhance the DOD STARBASE experience and allow students to understand the application of science, math, technology and engineering in real world situations. They also teach students about the critical importance of teamwork to a successful mission. Volunteers provided tours, made classroom presentations, facilitated experiments, supported program administration, served as a teacher's aide and assisted with other tasks.

A survey completed by 97 volunteers ranging in military rank from an E5 to a major general and representing all participating service branches revealed the importance of the program for the students, the community and the volunteers. (See Exhibit 8) The volunteers answered questions in three general areas: how the experience affected them as individuals; if the military had made a difference in their local community through its sponsorship of DOD STARBASE; and they offered suggestions/recommendations to improve the volunteer experience. They also responded to a question asking if they would volunteer in the future.

Survey Respondents by Military Branch
Exhibit 8



Sixty-eight percent of the volunteers reported that the experience affected them personally. Interacting with the children inspired the volunteers and helped them see their jobs and the country's future in a different light. Volunteers wrote:

- “The look on the children’s faces when they understand a new concept cannot be described.”
- “Every time I attended a STARBASE function I walked away with the greatest feeling. There is nothing like being able to positively affect a child’s life.”

- “I have been involved with science/aerospace education for most of my military career, but my volunteer work at STARBASE has been among my most enjoyable and fulfilling.”
- “I love to see the kids get wide-eyed when they see the aircraft. I also love to hear what a great day they had when they leave. A couple of kids have remarked that this was the best day of their life.”
- “it gives me a sense of pride that what we are doing is all worth it.”

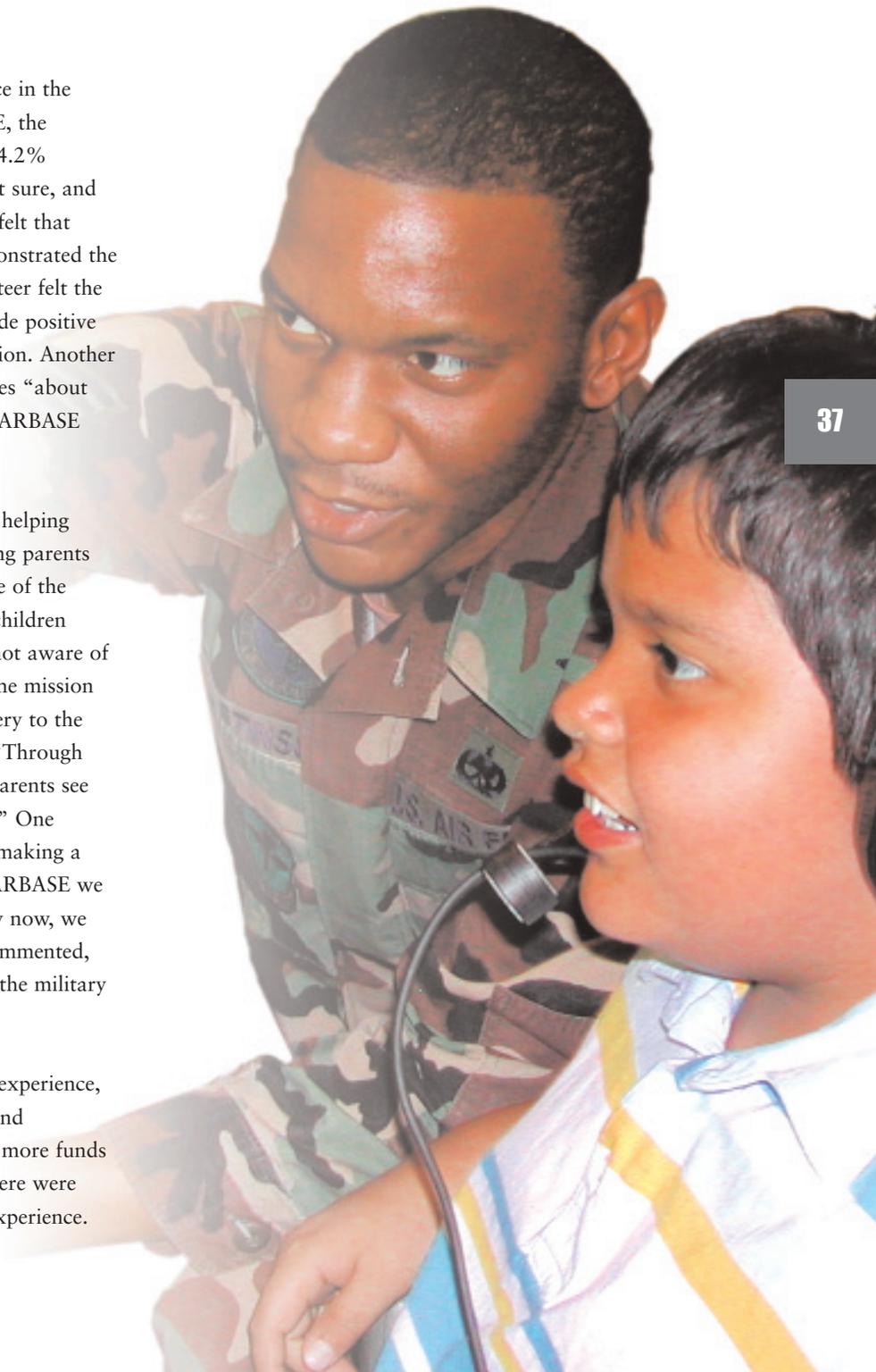
When asked if the military made a difference in the community by sponsoring DOD STARBASE, the volunteers were overwhelmingly positive: 74.2% answered a resounding yes, 24.7% were not sure, and only one volunteer said no. The volunteers felt that students met positive role models who demonstrated the importance of staying in school. One volunteer felt the program’s emphasis on drug prevention made positive inroads in stemming the tide of drug addiction. Another volunteer reported that he often heard stories “about problem youth who have excelled in the STARBASE environment.”

Volunteers saw the relationship as not only helping students improve in STEM, but also allowing parents and educators to understand the importance of the civilian/military partnership. Prior to their children attending an academy, many parents were not aware of the military presence in their community. The mission and operation of the military were a “mystery to the general public.” Another volunteer wrote, “Through educating the children about our mission, parents see how vital we are to the total military force.” One volunteer wrote that the military is always making a difference in her community, but “with STARBASE we not only make an impact on the community now, we make an impact on the future.” Another commented, “This program shows that there is more to the military than just fighting wars.”

When asked how to improve the volunteer experience, several respondents focused on improving and expanding the program itself. They wanted more funds for the program to reach more children. There were also suggestions to improve the volunteer experience.

It was recommended that academies reach out to military members and encourage more to volunteer to reduce the demands on those currently involved.

Volunteers said it was important to recognize their services through letters or pins to acknowledge services. When asked if they planned to volunteer in the future 97% said yes. Three percent said that they would not be available. *No one said no.*



DOD STARBASE: An Adjutant General's Perspective

South Dakota has two academies and an outreach program. What do you think the programs' greatest benefit is for the children?

It would be tempting to answer that the program does so much for our kids educationally. While that is definitely true, I have to say that the greatest benefit is the immersion in new ideas that students do not necessarily get in their day-to-day classroom activities. It is this "spark" that we are after to show them the value of science and technology and how it can help them achieve their dreams.

Do you think DOD STARBASE is important for our country's future?

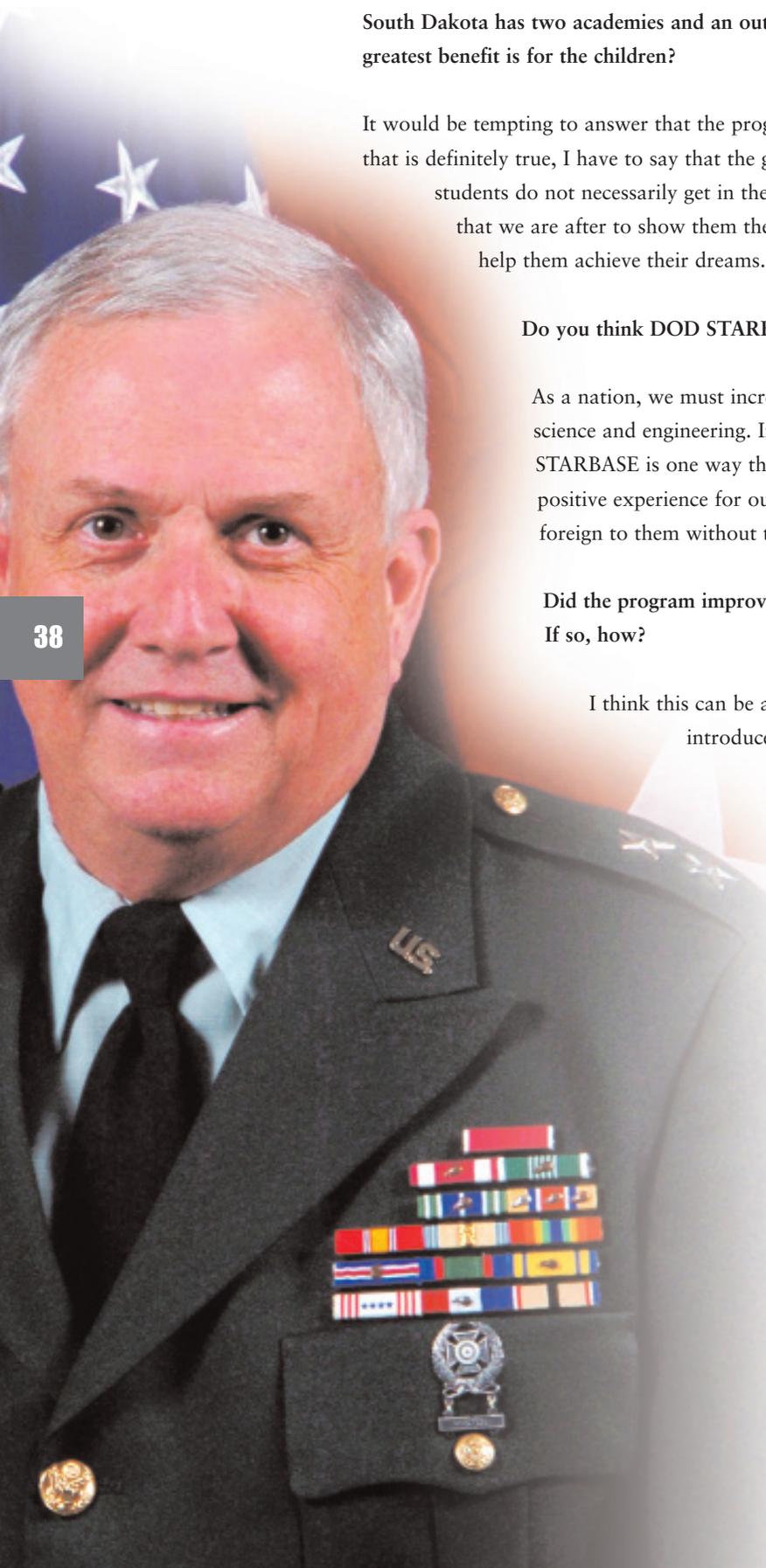
As a nation, we must increase the number of our kids who go on to careers in science and engineering. In my mind, this is a National Security issue. DOD STARBASE is one way that we can improve these numbers by creating a positive experience for our kids with subject matter that may be mostly foreign to them without the DOD STARBASE experience.

Did the program improve the Guard's relations with the communities?
If so, how?

I think this can be answered "yes" in two ways. First, the students are introduced to our uniformed members who help throughout the program. This role model approach to learning gives the kids a positive impression about our service members and their missions. Secondly, the students, classroom teachers, and parents come to our bases for the DOD STARBASE experience. This lets them unveil the mystery surrounding our bases that is an unfortunate result of the necessary security required at this time.

What years did you serve South Dakota as TAG?

I served as South Dakota TAG for four and one-half years. I was appointed by Governor Mike Rounds on 1 March 2003 and retired on 15 September 2007.

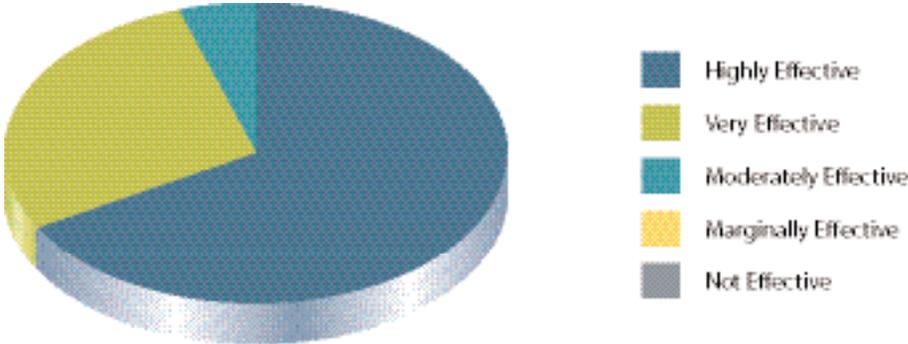


Civilian Volunteer Assessment

Civilian volunteers play an important role in DOD STARBASE. This year 55 volunteers from fifteen sites completed the civilian’s survey. They represented the 2,591 volunteers who donated 38,160 hours to the academies. Volunteers came from a variety of backgrounds including fire inspector, retired school administrator, Chamber of Commerce president, pharmacist, parents, teachers, counselors and aerospace engineers. Twenty-five percent of the respondents served as board members, 22% gave classroom presentations, 14.5% were technology experts, 14.5% were teacher aides and 24% did “other” tasks. The majority of respondents (68.6%) volunteered for more than one year and 71.2% had a family member who had attended DOD STARBASE.

When asked to estimate the programs effectiveness (see exhibit 9) the volunteers overwhelmingly saw the program as either highly effective or very effective.

Volunteer Assessment of Programs Effectiveness
Exhibit 9



The volunteers were excited about the program and described sites as being “exceptionally strong in math, science, technology and substance abuse prevention.” Seven respondents recommended expanding programs to serve more students. One volunteer summed up staff sentiments by stating, “Our STARBASE staff can only improve by being financially able to expand in order to serve even more children.”

Suggestions for program improvement included the need to increase program visibility and volunteers. A volunteer coordinator to reach out to retirees and community groups to inform them of volunteer opportunities was recommended.

Respondents applauded academy teachers for their excellence, leadership and subject knowledge. A respondent recommended that school districts place faculty members at academies for residencies to improve STEM teaching in local school systems.

One hundred percent of the respondents would recommend that others volunteer their time to the program and 77% of the volunteers plan to return for the next academic year.

PROGRAM GROWTH

DOD STARBASE continues to grow in multiple ways. While the demand for additional academies is persistent, the availability of federal funds limits growth. In 2007, one academy was added in Helena, Montana. The demand for the DOD STARBASE program to expand is practically universal. Demonstrated capability and observed results are credible and effective marketing instruments. Eighteen states now have two or more academies. Almost all the academies request to expand their program to other sites. Meeting the demand for expansion and outreach is a major challenge.

Growth also occurs when existing academies increase the number of classes, schools, and school districts participating. Adding supplemental and outreach programs also leads to growth. Supplemental programs typically occur when school systems are not in session. These programs include advanced curriculum for program graduates, and experimental curriculum in courses like model rocketry, robotics or advanced naval technology. Another popular offering is “The Best of STARBASE” that exposes students who cannot attend the four- or five-day program to two or three days of the curriculum. One academy reaches hundreds of students across the state through video teleconferencing. In FY’07, the academies served an additional 4,770 children through supplemental programs. Outreach programs typically occur off site and serve hard to reach areas such as reservations.

Several factors limit academies ability to respond to demand and growth. A major factor is the availability of facilities and personnel. Most academies operate in one or two classrooms with two instructors. Class size is limited as dictated by state policy and by DODI guidelines (20-35 students per class). Balancing demand and growth with available resources remains a constant challenge. Offering additional services without damaging the quality of existing commitments or overburdening staff is a continuous balancing act. At this point, directors meet the challenge through innovative programming, economies of scale and personal energy.



Critical Events

STAFF TURNOVER: Twenty percent of the directors listed staff turnover as a critical event for their academy. Staff turnover occurs for a variety of reasons, as noted in the section on academy staffing; however, there appears to be a new trend emerging. As mandated state testing moves to include science and math, the knowledge, skills and experience of academy personnel make them highly desirable to local school systems. Recruitment often includes the offer of impressive benefits such as paying for graduate degrees.

STATE TESTS: High stakes state testing that affects student promotion and school accountability reduces the availability of days to schedule students as schools hesitate to attend the academies during the weeks prior to testing. Academies often “fill-in” with private schools and home schooled children.

THE IRAQ WAR: The war continues to be a critical event for many sites. The deployment of military units reduces the number of volunteers available for tours and presentations. Increased security reduces parent participation at some academies.

SITE IMPROVEMENT: Renovation and/or moving affected three sites that cancelled classes during this process.

WEATHER: Inclement weather is a concern in northern states where academies need to keep dates open for rescheduling during the winter months. The aftermath of Hurricane Katrina affects class size and demographics for two sites.



Almost all DOD STARBASE academies request to expand their program to other sites. Meeting the demand for expansion and outreach is a major challenge.

PROGRAM OVERSIGHT

Program oversight is the responsibility of the Office of the Assistant Secretary of Defense for Reserve Affairs (OASD/RA). This responsibility includes insuring that start-up programs follow the DODI when installed and overseeing all programs for compliance. Tasks include managing program funding, developing and implementing regulatory guidelines, monitoring programs' compliance with regulations and DODI, assessing academy effectiveness in meeting goals and objectives, submitting an Annual Report to Congress, and providing administrative oversight as needed.

In the early years, from 1993 to 2000, the program was a pilot and operated in relative independence. Differences in program emphasis, operational procedures, and program delivery emerged. Variations included differences in classroom hours, core curriculum, program location and teaching methodologies. Academy flexibility to design curriculum content and delivery within the core curriculum areas was permitted, allowing academies to use their local and community resources to enhance students' knowledge. The result was often innovative curricula and methodologies.

As the program matured and the number of academies increased so did concerns that key concepts, best practices and proven methodologies were being lost. In the fall of 2000, the DOD STARBASE program received Congressional language making it a permanent DOD program. OASD/RA distributed a set of instructions and guidelines regulating DOD STARBASE under DODI 1025.7. Designed to guarantee consistency across academies, the DODI contains guidelines for the core elements in the content, delivery, methodology and operational integrity of the program. The DODI emphasizes class size, core curriculum, number of classroom hours, participant eligibility, military base delivery, fiscal and property audits. The policies developed by OASD/RA staff originated from the pilot program, directors input, time-proven educational practices and proven methodologies.

Academies continue to have flexibility in program delivery and content, as long as they meet the basic core requirements. Exceptions to the DODI require written approval from OASD/RA. Academy directors can apply to OASD/RA for a written waiver by documenting the need for exceptions, noting whether the conditions are temporary or permanent. If an exception or waiver is refused, the academy develops a plan for corrective action. The Director's Questionnaires, site visitations, and audits are the primary sources to monitor compliance.

Compliance Procedures

OASD/RA developed a compliance program to assure academies meet the DODI requirements. The program begins with orientation sessions for academies that are in the start-up phase. Older academies are required to receive compliance visitations, and outside property and fiscal audits every three years. Academy directors submit a detailed report to OASD/RA in October of each year.

Compliance visitations occur at least once every three years and may occur more frequently at the discretion of OASD/RA. During the visitation, the team observes curriculum delivery, reviews required documents, and interviews school officials and academy staff to assure DODI compliance. The team revisits sites that have difficulty reaching full compliance and assist them in developing an action plan to rectify deficiencies.

Compliance Adherence and Considerations

This year, academies improved in attaining full compliance to the DODI. The FY'07 compliance issues occurred in six areas: average class size, number of classes, required PTC hours, hours spent at a nonmilitary location without a waiver, absence of property and fiscal audits, and manning module.

Thirteen of the 53 academies had average class sizes below the minimum class size recommendation of 20. This appears to be due to factors beyond the academies control, as school systems reduce class size to provide academic support for students to meet state standards. Nonetheless, these academies must formally notify and explain to OASD/RA their need to reduce class size and request an exemption.

Two academies, down from five in FY'06, did not meet the guidelines for the required number of classes; one of these was significantly below requirements. The DODI requirement is 700 classroom hours (i.e. 35 classes for a four-day program and 28 classes for a five-day program).

Academies made impressive improvement in meeting the three-hours of required PTC, with only one academy not in compliance. All academies were fully compliant in other areas of the core curriculum.

The directors improved in securing the required annual fiscal and property audits. Four academies, down from eight in FY'06, had not had an audit since 2003. One academy has never had an audit. When an academy submits a formal request to the auditing agency and the auditing agency does not respond within timelines, then the director should notify OASD/RA of the reasons for the delay and request a waiver.

The recommended staffing module is one director, one deputy director/instructor, one instructor and one administrative assistant. A majority of the sites has made changes in the module. This is permissible and often desirable. However, changes to the module require that directors submit written documentation of the change to OASD/RA with a request for a waiver. OASD/RA must approve all changes to the DODI staffing module.

Overall, the compliance adherence by the academies is improving. The considerations section of this report suggests ideas for achieving full compliance.

FISCAL INFORMATION

Program Cost

Funds to operate the program originate with a Congressional appropriation to the Department of Defense. Within DOD the Office of the Assistant Secretary for Reserve Affairs administers and oversees fund allocation. This year, Congress appropriated \$17,797,000 for the program. The amount allocated for academy operation was \$15,994,000 and is the amount used for the analysis in this report.

In FY'07 there were 53 academies two of the academies were in the start-up phase and 51 were operational. The average cost per academy was \$301,773, which is slightly higher (\$8,189) than the cost in FY'06 of \$293,584. This increase can be attributed to professional development and cost of living.²⁰

Cost per Academy/Student from FY'04 to FY'07
Exhibit 10

Year	Average Cost Per Academy	Average Number Students Per Academy	Average Cost Per Student
FY'04	\$272,469	932	\$292.35
FY'05	\$273,040	1042	\$262.03
FY'06	\$293,584	1002	\$292.78
FY'07	\$301,773	1010	\$298.78

Operational costs vary between academies. Several factors contribute to variance in operational cost including geographic location, outreach programs and salary scales used by the sponsoring affiliate. OASD/RA reviews each academy's budget and tries to maintain an equitable distribution of funds.

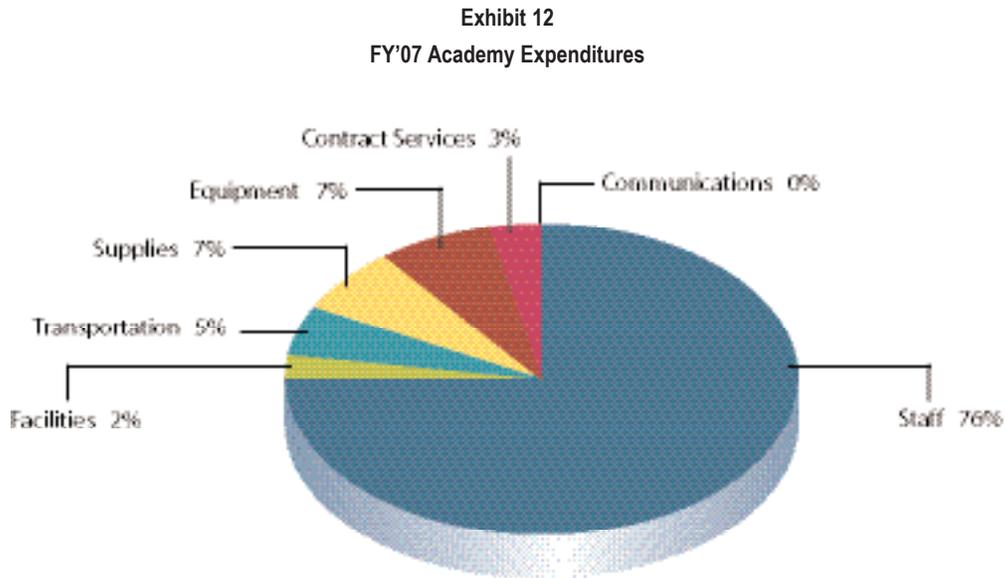
Each academy submits a budget request to its command or affiliate system for review and approval prior to submission to OASD/RA. Budgets include salaries/benefits, transportation, supplies, equipment, communication, furnishings/facilities and contract services. A budget variation from prior budget requests requires documentation and explanation. Academies in the start-up process have additional funds to upgrade facilities, purchase computers, furnishings and equipment. Exhibit 11 identifies the cost per academy by military affiliate.

²⁰ There were three required professional development opportunities for staff. Training on the use of PTC software in Michigan for individuals not trained previously; training for the new manufacturing unit for professional staff from twenty sites, also in Michigan; and a professional development conference for half of the instructors held in Washington, D.C.



Average Cost Per Academy by Military Affiliate		
Exhibit 11		
Military Affiliate	Number of Academies	Average Cost Per Academy
National Guard	32	\$291,594
Navy/Navy Reserve	13	\$334,077
Air Force/AF Reserve	7	\$283,000
Marine Corp	1	\$339,000

Personnel costs average 76% of an academies budget and continue to be the most significant budget expenditure. The percentage for all expenditures is virtually identical to those reported for FY'06. The following chart, Exhibit 12, shows the rounded percentages per category.²¹



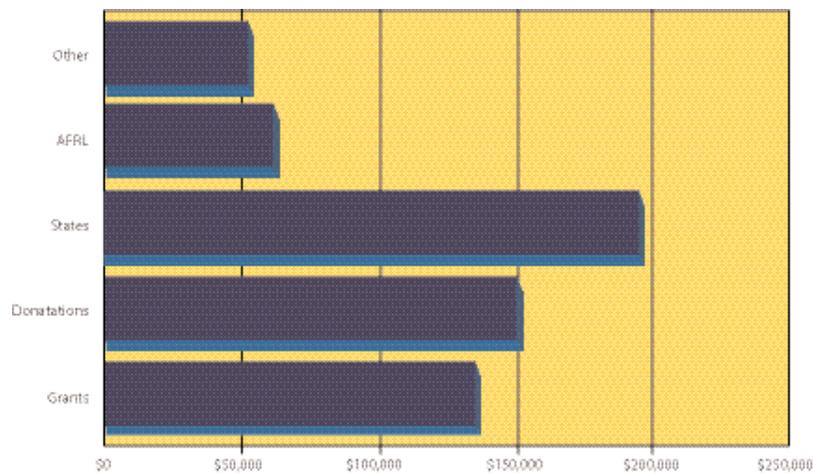
²⁰ Communications were .5%.

Supplemental Funds

Supplemental funds change yearly and include all funds not allocated through OASD/RA. This results in high variances in discretionary funds among the academies. The total raised in supplemental funds was \$593,114; 21 out of 53 academies (40%) secured these funds. This is a significant decrease in supplemental funds from FY'06 when over a million dollars were received, but more than the \$457,276 in FY'05. The top three funding sources include state allocations (\$195,000), Air Force Research Lab (\$61,401) and grants (\$134,900). Funds were spent on facilities, transportation, supplies, equipment, contract services, staff and staff development. Exhibit 12 shows the source of supplemental funds.

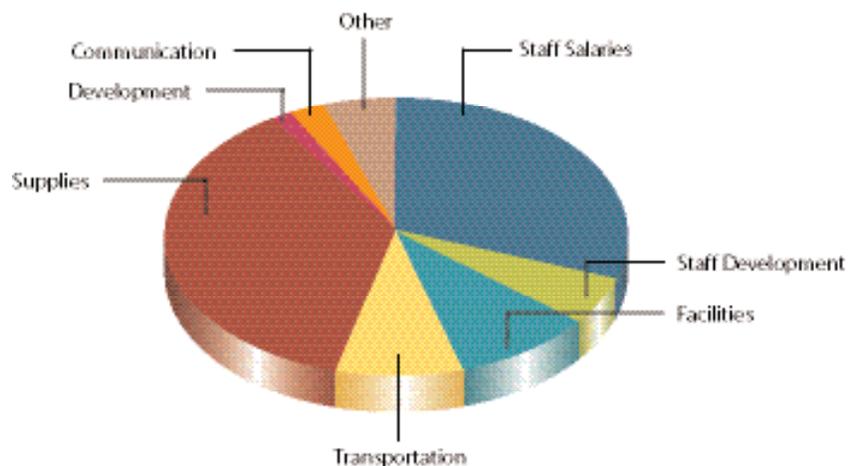
Source of Supplemental Funds

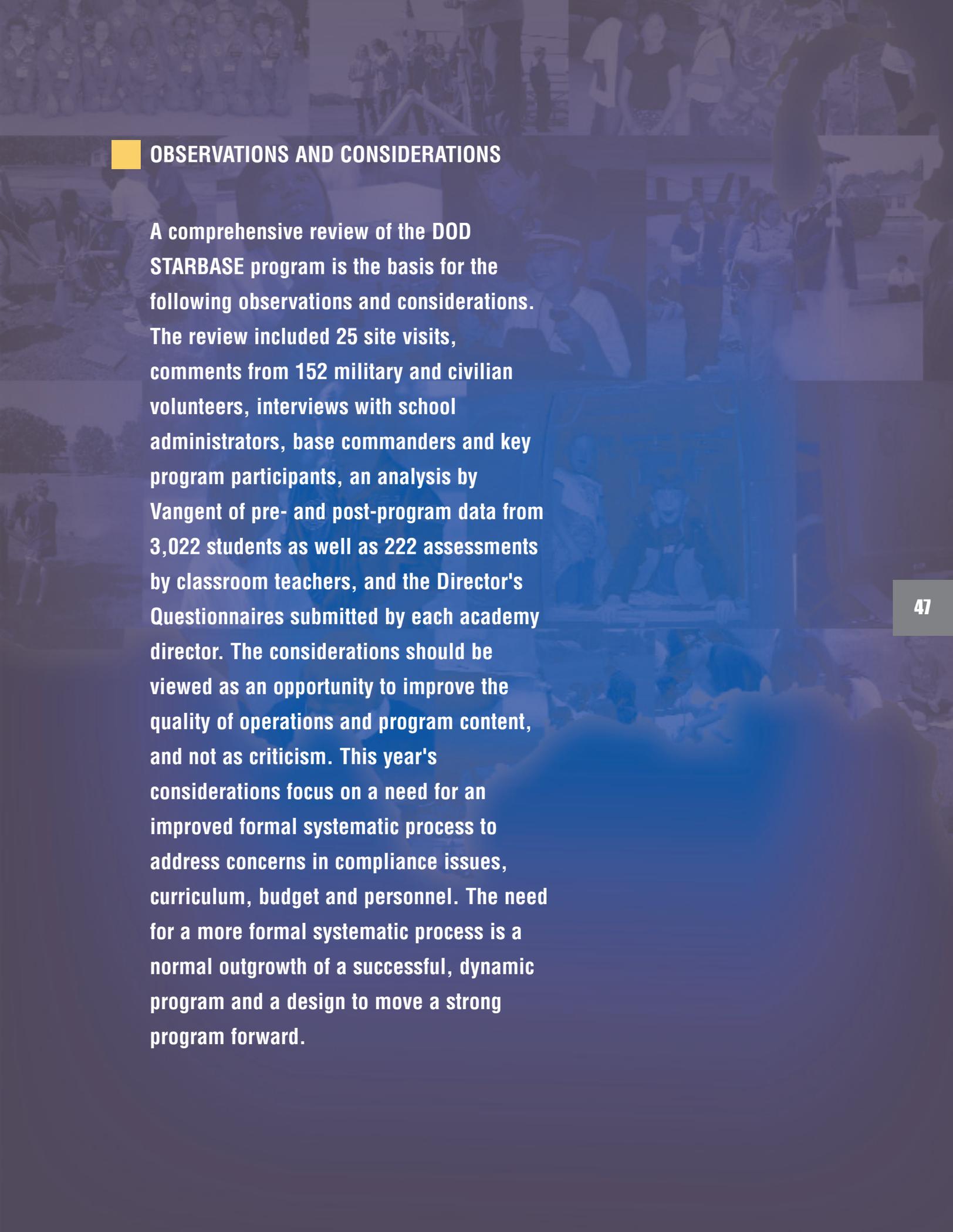
Exhibit 12



The largest expenditure of funds (\$139,578) was for supplies, followed closely by personnel (\$122,125). With the exception of FY'06, these have been the two largest sources for expenditures over the years. Exhibit 13 illustrates the use of supplemental funds in FY'07.

Exhibit 13





OBSERVATIONS AND CONSIDERATIONS

A comprehensive review of the DOD STARBASE program is the basis for the following observations and considerations. The review included 25 site visits, comments from 152 military and civilian volunteers, interviews with school administrators, base commanders and key program participants, an analysis by Vangent of pre- and post-program data from 3,022 students as well as 222 assessments by classroom teachers, and the Director's Questionnaires submitted by each academy director. The considerations should be viewed as an opportunity to improve the quality of operations and program content, and not as criticism. This year's considerations focus on a need for an improved formal systematic process to address concerns in compliance issues, curriculum, budget and personnel. The need for a more formal systematic process is a normal outgrowth of a successful, dynamic program and a design to move a strong program forward.

DATA COLLECTION

The 2007 Teacher's Questionnaires were collected using an online survey format. Out of the 2,313 teacher participants, fewer than 10% responded to the assessment. Teachers are an important participant and assessment panel and their views are critical to the assessment process.

Considerations

- Explain to directors the importance of having teachers respond to the survey and request that each academy obtain a minimum of ten teacher assessments each reporting period.
- Directors should consider having the teachers complete the questionnaire on their last day at the academy while students complete their post-tests.

PROGRAM OPERATIONS

Staff Turnover

Staff turnover remains high at 16%. This turnover rate, specifically in the area of instructors, is higher than the education profession as a whole. With growing national and state emphasis on math and science standards, DOD STARBASE is a great recruiting ground for school systems that are seeking excellent teachers in the STEM fields.

Considerations

- Address the issue of staff turnover and retention at the Directors' Conference.
- Develop an interview schedule for outplacements to capture areas of concern and counterpoint action.

Staff Replacement

In FY'07, over half of the vacant positions required more than ten weeks to fill. One position remained open for over 40 weeks. Although this is a complex issue because of different academy employment affiliations, it is an area that needs focus.

Considerations

- Examine staff replacement procedures.
- Consider developing guidelines regarding the appropriate length of time for staff replacement.
- Examine budget management and allocation of downtime funds.

Staff Duties

Although the DODI generically defines the role of the director and other staff members, it does not have a written set of standards that staff members, especially the director, can use for guidance and self-audit.

Considerations

- Address the issue of a self audit at the Directors' Conference.
- Clearly define the director's role into four areas:
 - * Public affairs, which includes outreach efforts
 - * Review the credentials of teachers
 - * Check core curriculum areas periodically
 - * Review academies coverage of Title One schools

Website

The website technology is dated and subject to breakdowns. It does an adequate job of informing the public but lacks the “WOW” factor expected from a program that emphasizes innovative technology and engineering. Its appearance is difficult to improve or change with the current software.

Considerations

- Investigate new software to manage the site.
- Incorporate a “Kid’s Page” with activities and links that program graduates can use to continue their interest in STEM generated at the academies.
- Add animation and audio to the site.
- Add the capacity for short films or videos. This would allow sites to post video of successful classroom strategies to share with other sites.
- Add a photo gallery that would tell the DOD STARBASE success story through pictures.

Transportation

Traditionally, it has been an unwritten policy that school systems pay the transportation costs for their students to attend the DOD STARBASE program. Increasing state and county budget concerns result in the reduction of funds for transportation, especially in low-income communities. Some directors seek external sources of funding, but when none are available, schools have declined attending the academy.

Consideration

- Assess how transportation costs are affecting Title One schools and those schools serving a high number of economically disadvantaged youth.

Safety and ADA

Observations during site visits report that some academies are not handicapped accessible. Staffs accommodate students by strategies such as carrying them into a classroom, creating liability exposure. In addition, all sites should have routine inspections by their fire departments to evaluate hazards.

Consideration

- Require directors review their sites for Americans with Disabilities Act (ADA) and safety issues and report non-compliance to OASD/RA and the base commander. A plan of action to bring the site into compliance should accompany the report.
- Add instructions in the DODI stating that when a new academy is established the host installation shall assure safety and ADA regulations are met.

CURRICULUM & INSTRUCTION

Core Curriculum

DOD STARBASE academies have a valued history of curriculum flexibility within the core content areas. This flexibility has generated creative and intriguing delivery of curriculum; however, inherent in this flexibility is the danger of losing uniform coverage of core concepts. A systematic process is needed to determine how new content, methodologies and instructional objectives will be evaluated for inclusion into the curriculum.

Considerations

- Add a new steering committee to conduct a systematic review of the curriculum to evaluate the core requirements.
- Review the curriculum to assess what should be the proportional representation of each content area.
- Field test/Beta test any change in the core curriculum or knowledge base (i.e. essential, highly recommended, highly desirable, etc.).
- Present information to directors at their annual conference prior to curriculum change.
- Develop clear definitions for experiential learning and guidelines for time allocated to experiential learning in the curriculum.
- Develop clear definitions and guidelines for embedding math in the curriculum.
- Develop a format for directors to audit curriculum content.

Technology & Engineering

Site evaluations indicate that there is an uneven capability among teachers to implement the CAD program. The growing use of technology necessitates a process to plan for future training and equipment upgrades.

Considerations

- Develop and implement a long-term staff development plan to assure that new instructors/directors receive the initial training.
- Contemplate ongoing training for all staff on new software and technology.
- Develop a process to evaluate current equipment and its usability with new curriculum requirements. Prepare a plan to replace, upgrade and install technological and manufacturing hardware.
- Implement technological support for staff.

Professional Development

The first national conference for DOD STARBASE instructors convened in July 2007. This was a successful and necessary step to upgrade the program. One instructor per academy attended. Ongoing training of instructors, as well as directors, is necessary to continue program quality, updating of technology information and exchange of ideas.

Considerations

- Continue to offer professional development for instructors.
- Conference should reinforce new curriculum concepts, especially those introduced in computer-assisted design. This conference is not the appropriate time for initial training, but structured time should be available to discuss implementation issues and new techniques/designs.
- Review ways to identify key instructors that could best demonstrate certain areas of instructional delivery.

COMPLIANCE ISSUES

Minor technical violations continue to occur because directors do not notify and/or receive a written waiver/exemption from OASD/RA. This year, the visitation team and OASD/RA conducted several visitations to assist academies in achieving full compliance. The visitations provided the necessary support for sites and facilitated base understanding of DODI requirements. In order to assist academies in meeting requirements, a process of formal closure is suggested.

Considerations

- Require directors to submit a written statement to OASD/RA when they realize that the academy is out of compliance in any area. The formal statement would present the issue and their planned corrective action or request for a waiver/exemption.
- Require a documented written response from an academy when a corrective action is completed.
- Send a written response from OASD/RA to the site indicating whether the corrective action removes the site from non-compliance status.
- Require academies to submit all audits to OASD/RA at the time of their completion.



STUDENT ASSESSMENT COMPREHENSIVE ANALYSIS

Testing Instruments and Applications

The tests measure the students' mastery of the concepts presented at DOD STARBASE and attitudes that affect learning. There are two standardized testing instruments: one focuses on the students' knowledge and skills and the other assesses pro-social, citizenship, curricula and community awareness attitudes.

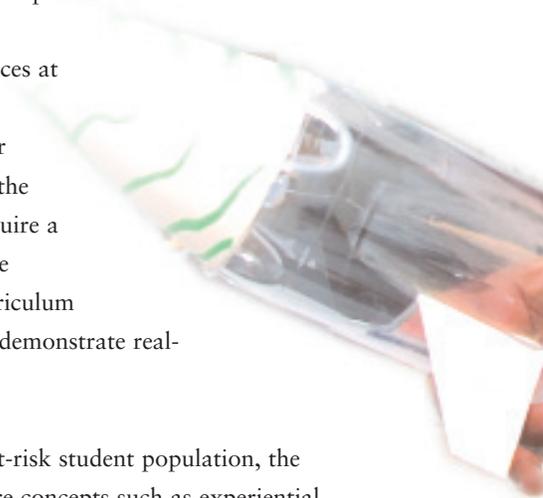
The constructs used in the student assessment process include:

- knowledge, skills, and problem-solving items presented in the DOD STARBASE core curriculum;
- math, science, and technology attitude items;
- citizenship, community awareness, and pro-social behavior perception items;
- military, military personnel, the military environment and military career attitude items;
- DOD STARBASE experiences and effectiveness perception items; and
- the program's impact on the students and their future behavior attitude items.

To develop a single standardized test for a wide range of abilities presents a number of challenges in design and application. The 53 academies across the United States and its territories represent diverse cultural and geographical differences, which include the at-risk student composition, special needs students, the size of schools and classes, available resources at the local level, funding, enrollment policies, curriculum emphasis and demographic composition. The different skill levels that the students bring to the program further confound testing. For instance, our pre-tests indicate that some students come into the program with a good understanding of gravity and its applications while others require a quick primer on the concept and its use in problem solving. Another challenge is the discretion given to each academy in covering the core curriculum. Variations in curriculum presentations include lab applications, the use of base and community resources to demonstrate real-life applications, and teacher variances in emphasizing key concepts.

To reduce some of these variations, the test design concentrates on the fifth grade at-risk student population, the core curriculum content, and the design of test items at the middle-ability level. Core concepts such as experiential applications, team-building and embedded math are key modalities in program design, as is the administrative make-up of academy operations. Changes in selected items and word-use have occurred over the life of the program, but the basic design and coverage of content is relatively constant. The number of items, content emphasis, scales and analytical approach is a constant concern. The goal is to create as much standardization as possible while positioning for trends and annual changes. Each instrument is reviewed annually for readability.

All academies are now teaching computer-assisted design, using PTC software. In order to test the students' learning of the new concepts, twenty assessment items were field tested this past summer/fall. Test designers added three of the tested questions to the FY'08 assessment.





DOD STARBASE[®] uses two standardized testing instruments: one focuses on the students' knowledge and skills and the other assesses pro-social, citizenship, curricula and community awareness attitudes.

The Knowledge and Skills Assessment

The knowledge and skills tests evaluate eleven of the thirteen core curriculum areas. This year's test items covered:

- Properties and states of matter
- Properties of air
- Bernoulli's Principle
- Four forces of flight
- Aircraft controls, surfaces, and components
- Newton's Laws of Motion
- Space exploration
- Development, innovation and use of technology
- Avoiding substance abuse
- Goal-setting
- Teamwork

Designed on a four-point scale, the test questions include true/false, multiple choice, and matching words to images. Overall, there is more than one test item for each of the eleven-core curriculum areas tested. Some items are simple knowledge constructs while others are application of concepts that require problem solving and/or applications to other constructs. Changes in the 2007 knowledge/skills test include:

- Removing the item "Which of the following is not one of the states of matter?"
- Refining the wording on two knowledge items
- Removing the item "What is Sir Isaac Newton's Law of Inertia?"
- Inserting two items piloted in the 2006 test, "What scientific law is operating that makes it important to wear a seat belt?" and "In what state of matter do molecules have the least amount of energy or motion?"

Student Attitudinal Assessment

The second instrument, the student attitudinal assessment, measures several key program objectives, i.e. the encouragement of positive attitudes about self, life choices, citizenship, problem-solving attitudes, social responsibility and team building. The pre- and post-attitudinal and perception instrument is given at the same time as the knowledge assessment. Analysis focuses on attitudinal shifts because of program participation. Twenty-three items comprise the pre-test and twenty-six items comprise the post-test. The post-test includes all twenty-three items in the pre-test. The attitudinal and perceptual constructs include:

- attitudes towards math, science, and technology
- perceptions about the military, military personnel, the military environment and military careers
- community awareness, citizenship and social responsibility
- program effectiveness
- program impact on self, students and others

The additional three items in the post-test relate to specific program experiences and are not applicable to comparative analysis. These test items, included in both the knowledge and attitudinal instruments, are designed to assess rating scale reliability and the students' understanding of the scales. Item analysis indicates that students understand the difference in the rating process and the use of scales. The attitudinal instrument uses a seven-point scale from strongly agree to strongly disagree; graphics enhance rating direction.

Instrument Review Process

All tests and assessment instruments are reviewed and revised annually, including operational and participant data collection instruments. Field personnel, professional testing staff, and participants suggest improvement and revisions. This input includes test item revision, test administration, sample size, and constructs changes. Item analysis and curriculum content changes also contribute to instrument alterations. There is a strong tendency to keep test item size, construct coverage and item integrity for comparative and trend analysis. However, incremental modifications and improvements in instrument design are parts of the annual review process. The following considerations determine modifications:

- The balance of item difficulty, with a range from easy to difficult items, is essential. Students enter the program with different levels of background knowledge and skill on the curriculum concepts. The range of item difficulty establishes a pre-program baseline to measure post-program improvement.
- Changes and additions to test items should reflect changes in the core curriculum and program constructs while maintaining the degree of item difficulty and content coverage.
- Continual review of core curriculum coverage requires the rotation of new and/or past items, with similar degrees of difficulty, in the instrument design with a view toward balanced coverage of content and degree of difficulty. This often requires rotating new and/or old items on an annual or occasional basis.
- Replace some knowledge-only items with questions requiring conceptual application and/or problems solving of basic constructs.

Using these guidelines, the FY'07 test removed two items, refined the wording of two others and added two items.²² Field staff review of item analysis and curriculum changes drive the changes.

Data Collection, Administration and Logistics

The assessment was administered during the winter and early spring of 2007. Assessment instruments were sent directly to the academies with instructions for administration, sample size, scheduling and submission for analysis. Matched data on students was obtained from all academies on a pre-post basis. The academies sent 6,564 student tests, from 3,282 students, to Vangent, Inc²³, for processing and analysis. Out of this total, 3,022 questionnaires matched (92.1%) as compared to last year's 92.4%. There are 788 more matched tests this year than last year.

This sample is representative of the total student population that attended the program during the 2006-2007 school year. Most academies test every student on a pre-post basis. The national test uses a sample format to reduce the intrusiveness of the testing process on scheduling and instructional time.

Directions for test administration are included for the DOD STARBASE instructors. The directions include guidance on sample size, scheduling and general test administration. The instructors are asked to give the test prior to program start and upon program completion. When the students finish the tests, instructors review the tests for completion, identification of site location, student number assignment, class affiliation, and matching requirements. After the instructors complete their review, they send the test to Vangent for scanning, processing and analysis.

²² Details are available in knowledge-skills section of this report.

²³ Previously known as Pearson Performance Solutions.

As indicated by the large number of matched respondents (3,022), the majority of students responded to most or all of the items. Lack of completion, loss of matching and no responses to one of the assessments accounted for the remaining small number of non-matched respondents, i.e. less than eight percent. The pre-test results describe a wide range of student knowledge and skills, which suggest that for some students the DOD STARBASE concepts were not unique. The pre-program assessment establishes a baseline of what the students knew before they entered the program. Upon completion of the post-program assessment, data suggests the student's knowledge and skills demonstrate significant increases.

Analytical Approach

Pre-and post-program assessments of student performance track knowledge/skill shifts. Several analytical constructs demonstrate what factors may have influenced differences in those shifts on the pre-post program comparisons:

- age and grade
- gender differences
- test item difficulty
- program strengths
- academy maturity of operation
- high performers verses low performer differences
- difference and trends in performance over time
- identifying “drivers” of preferred student outcomes
- branch of service and regional comparisons

Attitudinal analysis mirrors the above approach. In addition, it included:

- prior experiences with the military
- comparisons by gender
- age and grade difference
- comparisons with teacher attitudes along similar constructs
- site location comparisons
- attitudinal clusters
- trends over time and dramatic shifts

The final data results are the bases for the current analysis. The analysis will reveal a wide array of variance in students' response to the curriculum and program delivery. The differences in the demographics of the respondent base and the locations of the program affect the variables in a wide range of ratings. With 53 academies in operation, students come to DOD STARBASE with different expectations and knowledge. They finish the program with new perceptions and skills. The analysis in this report offers insight and observations about the program's strengths and weaknesses. This permits the consumers and program participants to build on the program's effectiveness, remediate operational shortfalls, and redesign program delivery and content.

The report demonstrates that DOD STARBASE achieves basic program objectives, program efficiencies and student performance. Attention to future considerations in compliance, program operations, cost-effectiveness, curriculum enhancements, and program delivery are provided when the data analysis and observation merit such considerations.

Student Assessment Results

The student respondents who matched in the pre-post assessment analysis were comparable in demographic and background data found in the 2006 report. Other than an increase in numbers, the results on demographic attributes have remained relatively similar over the past several years. The few incomplete tests did not have a significant effect on the sample size or analytical results. As in previous years, the DOD STARBASE student population is almost evenly split between boys (49%) and girls (51%). The fifth grade level, the preferred target grade, accounts for 75% of the student participants. Eighty-one percent of the students were 10 or 11 years of age. All regions are well represented. The majority of schools had a high percentage of students participating in the free/reduced lunch programs.

STUDENT KNOWLEDGE AND SKILLS RESULTS

The 2007 pre- and post-test scores on the knowledge and skills test have a mean increase of +5.26 that compares to the mean increases over the past six years. The highest mean increase over the past six years was in 2005 with a mean increase score of +5.47 and the lowest in 2002 at +4.23. The scores for the 2007 post-test were significantly higher than the pre-test scores.

Pre/Post Knowledge Test Mean Scores 2002 –2007						
Exhibit 14						
Scores	2002	2003	2004	2005	2006*	2007
Pre-test Mean	18.44	19.12	19.09	17.81	18.02	19.05
Post-test Mean	22.67	24.42	24.25	23.28	24.08	24.31
Mean Increases	+4.23	+5.30	+5.16	+5.47	+6.06	+5.26

*2006 mean scores were adjusted because of higher item numbers.

Many of the 2,667²⁵ students had a basic understanding of several concepts taught at DOD STARBASE, particularly concerning goal-directed behaviors and the impact of using drugs or alcohol. However, there are some concepts that appear new to most students. This demonstrates that while the students knew some of the concepts before DOD STARBASE, they generally did not have the depth of knowledge taught at DOD STARBASE. This pre-program knowledge provides a good foundation for building knowledge and comfort both within and beyond the DOD STARBASE program. Participation in the program resulted in a statistically significant increase in understanding and application of the program's constructs.

Entry-level scores, which are the base line from which performance is measured, show the unfamiliar items for students at the start of the program. All items demonstrated a positive change. Curriculum exposure reinforced concepts that students knew at the start of the program. Only one item, "Which of the following is not a team," did not display a significant increase. Knowledge items that were low in scores at the pre-program level demonstrated larger increases at the post-program assessment (e.g. the item regarding air pressure increased from 29% to 77 %.)

²⁴ Regional distribution of respondents favored the southeast as the dominant region; the eastern region had the fewest respondents.

²⁵ The analysis results are based on just the 2,677 students who had no more than three omitted responses for both the pre-test and the post-test. Mean scores on the pre-test and the post-test are slightly lower and standard deviations are slightly higher for the entire sample of 3,022 students, but the difference in pre-test and post-test scores is still significant. The 2007 Student Assessment Report, Vangent, Inc. p.13

**Pre/Post Knowledge Test Percents Correct
Exhibit 15**

Test Item	Pre-test % Correct	Post-test % Correct	+/-% Change
Which of the following is not a team?	95%	96%	+1%
Negative actions may make it hard for you to reach your goals	90	93	+3
Which of the following can damage an individual's dreams?	90	93	+3
If you have something you want to do, or something you want to be in life, you should...	89	94	+5
Wing	85	94	+9
Which planet has more than 30 moons and thousands of rings?	81	91	+10
Drinking alcohol may decrease our bodies' ability to do easy things	80	86	+6
Cockpit	79	97	+18
The Earth is the closest planet to the sun	78	89	+11
Force that pulls an aircraft down	78	88	+10
Matter does not take up space	74	88	+14
If you launched two rockets, one with a mass of 50 grams and one with a mass of 100 grams, using the same amount of force, which rocket would go highest?	71	87	+16
Forward movement produced by a propeller, jet, or rocket engine	68	83	+15
Which planet do humans believe they could inhabit in the future?	66	85	+19
Elevator	64	83	+19
Rudder	60	84	+24
Slows the forward movement of an aircraft	60	81	+21
The development of something new or improvement of something already existing is	57	77	+20
Produced by air flow over the wings and the angle of the wing into the wind	57	79	+22
The earth's atmosphere is how thick?	55	79	+24
If you are landing an airplane in a city that is 5,000 feet above sea level and your altimeter reads 5,500 feet, how many feet are you above the ground?	51	71	+20
Technology usually decreases in cost after many units are sold	49	77	+28
In what state of matter do molecules have the least amount of energy or motion?	48	70	+22
What scientific law is operating that makes it important to wear a seat belt?	47	74	+27
What force causes a rocket to launch?	41	61	+20
To move an airplane's nose to the left, you would move the...	37	59	+22
What is the smallest particle of water?	33	61	+28
The air is composed mostly of what element?	29	68	+39
Air presses down 14.7 pounds on every inch of our bodies. Why don't we feel this pressure?	29	77	+48
One reason an airplane is able to gain lift is because the air moving across the top of the wing	26	53	+27

Mean Score on Post-Program Knowledge Test

The mean post-program score for this year's knowledge test is 24.31. There is little change in the scores over the past five years as demonstrated in the Exhibit below. The mean is based on a 30-item test survey, which means that the students' post scores were above 81%.

Mean Scores Post-Program Knowledge Test 2003-2007					
Exhibit 16					
Year	2003	2004	2005	2006	2007
Post Mean Score	24.42	24.25	23.28	24.08*	24.31

*2006 scores were adjusted on mean because of higher item numbers.

Gender Differences on Knowledge Test

The press and government agencies are studying gender differences of students in college, entry into previously male dominated careers and general academic performance. The test results for male and female students reflect these national trends. The female students who attended an academy improved their post-test more than the male students did. The following Exhibit 17 shows the individual gap (i.e. the difference between the score on the pre-test and the score on the post-test).

Mean Scores by Gender Pre and Post-Program Knowledge Test 2007			
Exhibit 17			
Sample Size	Pre-test Mean Score	Post test Mean Score	Individual Gap Difference
Boys (N= 1480)	19.37	24.46	+5.09
Girls (N= 1537)	18.01	23.82	+5.81

Boys score higher in both of the pre-post tests. Girls demonstrate greater improvement because of program participation as shown by a significant difference in gap score performance. This gender difference has been increasing over the past four years in both knowledge and attitudinal assessments.

Gender Knowledge Test Improvement (2004-2007)				
Exhibit 18				
Gender	2004 Knowledge Test Gap Score	2005 Knowledge Test Gap Score	2006 Knowledge Test Gap Score	2007 Knowledge Test Gap Score
Boys	+5.08	+5.33	+5.6*	+5.09
Girls	+5.25	+5.64	+6.1*	+5.81
Difference	.17	.31	.49	.72

*2006 mean scores were adjusted because of higher item numbers.

Mean Score on Post-Program Knowledge Test

Mean scores over the past five years demonstrate stability in performance. There was a wide difference between the pre- and post-average score on each item. The following chart provides differences in post-test scores over the past five years in percentages of correct responses. Vacant slots indicate changes in items over time. Simple face observation of the graph demonstrates strong stability in the item scores.

2003-2007 Post-Program Knowledge Test Scores Percents Correct Exhibit 19					
Attitudinal Item	2003	2004	2005	2006 ²⁶	2007
<i>A team works together to achieve a common goal²⁷</i>	99%	99%			
Drinking alcohol may decrease our bodies' ability do easy things		81	88%	87%	86%
<i>Drinking alcohol may decrease our bodies' ability to do simple tasks.</i>	89				
Matter does not take up space	85	86	82	87	88
The Earth is the closest planet to the sun	90	87	90	90	89
Negative actions may make it harder for your to reach your goals	94	93	94	94	93
Technology usually decreases in cost after many items are sold	70	70	71	74	77
What is the smallest particle of water			49	60	61
<i>Using teamwork results in</i>	98	98			
What force causes a rocket to launch?			53	58	61
Which of the following is not a team?	96	95	99	98	96
<i>Which of the following is not one of the states of matter?</i>	68	66	69	79	
<i>How thick is the earth's air?</i>	60	68			
The Earth's atmosphere is how thick?			69	77	79
Air presses down 15 pounds on every inch of our bodies.					
The reason we don't feel this is	70	67	70	74	77
The air is composed mostly of what element?	56	63	63	65	68
Cockpit	97	96	95	96	97
Wing	94	95	93	93	94
Elevator	87	82	82	81	83
Rudder	86	82	82	81	84
If you are landing an airplane in a city that is 5,000 feet above sea level and your altimeter reads 5,500 feet above sea level what will your altimeter read when you are on the ground?			64	69	71
<i>If you are landing in a city that is 5,000 feet above sea level what will your altimeter read when you are on the ground?</i>	58	57			
To move an airplane's nose to the left, you would move the ...	58	60	56	63	59
One reason an airplane is able to gain lift is because the air moving across the top of the wing	51	55	52	55	53
Produced by air flow over the wings and the angle of the wing into the wind	84	84	80	81	79
Forward movement produced by a propeller, jet or rocket engine	84	85	84	84	83
Force that pulls an aircraft down	84	88	87	87	88
Slows the forward movement of an aircraft	80	82	80	83	81
<i>What is Sir Isaac Newton's Law of Inertia?</i>	70	66	67	73	
<i>If you threw two balls of different weight using the same amount of force...</i>	84	82	77		
If you launched two rockets, one with a mass of 50 grams and one with a mass of 100 grams, using the same amount of force, which rocket would go highest?				84	87
<i>Our Solar System consists of how many planets?</i>	91				
<i>Which planet is the smallest of all planets and the farthest away from the sun?</i>	97				
<i>Which planet has 23 known moons and thousands of rings?</i>		90			
Which planet has more than 30 moons and thousands of rings?			89	89	91
Which planet do humans believe they could inhabit in the future?		89	86	84	85
The development of something new or improvement of something already existing is	80	79	78	79	77
If you have something you want to do, or something you want to be in life	96	95	96	96	94
Which of the following can destroy an individual's dreams?	95	95	94	95	93
What scientific law is operating that makes it important to wear a seat belt?				70	74
In what state of matter do molecules have the least amount of energy or motion?				63	70
Post-test score	24.42	24.25	23.28	24.08*	24.31

*2006 mean scores were adjusted because of higher item numbers.

²⁶ Scores based on 32 questions only in 2006.

²⁷ Items in italics were removed from the assessment.

Knowledge Test Performance by Length of Academy Operation

For purposes of this analysis, academies are in three categories based on their start date. The mature group consists of programs begun between 1991 and 1996; the established academies started operations between 1998 and 2001; and the final group of relatively new academies originated between 2002 and 2006. The sample sizes of 1301, 960, and 759 respectively, represent the different academy ages. Differences on the knowledge assessment were significant across the groups with the newer academies demonstrating higher post-test scores, as well as higher gap scores. One possibility for this difference may be that new academies may have a more rigorous adherence to the core curriculum. The following chart presents the results.

Knowledge Test Mean Scores by Length of Academy Operation Exhibit 20				
Length of Operation	Sample Size	Pre-test Score	Post-test Score	Gap Score
Mature academies	1301	18.43	23.50	+5.07
Established academies	960	18.55	23.92	+5.37
New academies	759	19.27	25.48	+6.21

There are many more differences for the knowledge items than the attitudinal items. There does not seem to be a consistent trend of students from one of the academy age groups having attitudes that are more positive. While all three groupings displayed high mean performance and high gap scores, they were not as high as 2006.

Knowledge Test Scores by Military Service Branch

The differences are highly variable by service branch. Sample size of the representative groups is also highly differentiated with the National Guard comprising more than 61.2% of the total sample while the Air Force accounted for about 5.2%. There is variability of the post-test scores by the five participating branches, which may be due to incidental test pool samples.

The items in bold have significantly different percents correct across the branches.



Student Post-Program Knowledge Test Responses Percent Correct by Branch
Exhibit 21

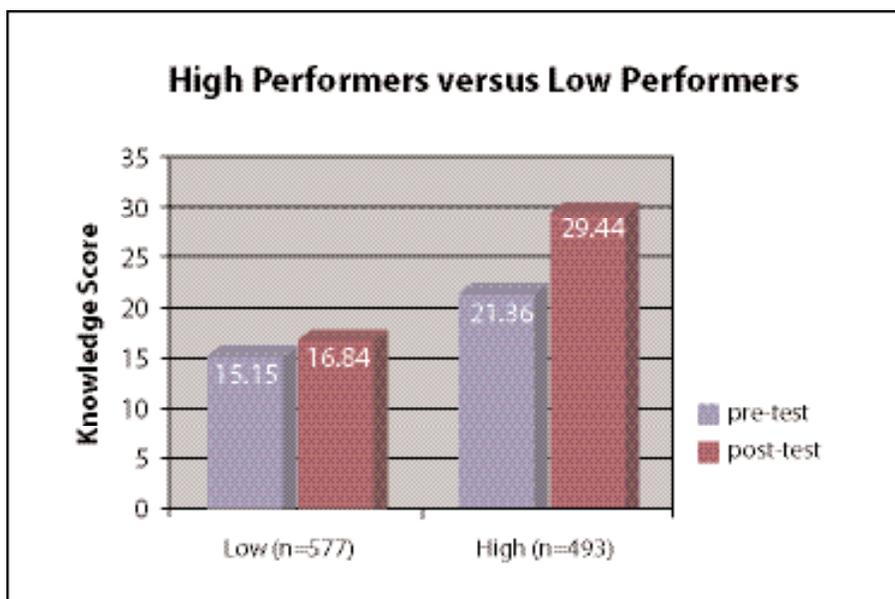
Knowledge Item	Air Force (n=158)	Air Force Reserve (n=245)	Marines (n=125)	National Guard (n=1851)	Navy (n=643)
<i>Drinking alcohol may decrease our bodies' ability to do easy things</i>	94%	84%	78%	85%	90%
Matter does not take up space	92	95	91	85	91
The Earth is the closest planet to the sun	98	84	82	89	88
Negative actions may make it hard for you to reach your goals	96	96	93	92	95
Technology usually decreases in cost after many units are sold	81	72	78	77	78
<i>What is the smallest particle of water?</i>	84	55	39	54	79
<i>What force causes a rocket to launch?</i>	74	60	42	61	64
Which of the following is not a team?	99	98	98	94	100
How thick is the earth's atmosphere?	79	65	75	78	87
<i>Air presses down 14.7 pounds on every inch of our bodies. Why don't we feel this pressure?</i>	80	66	68	75	85
The air is composed mostly of what element?	77	79	72	66	70
Cockpit	99	97	95	98	93
Wing	97	95	92	95	92
Elevator	90	75	80	84	82
Rudder	92	77	81	85	81
<i>If you are landing an airplane in a city that is 5,000 feet above sea level and your altimeter reads 5,500 feet, how many feet are you above the ground?</i>	83	75	66	69	75
<i>To move an airplanes nose to the left, you would move the...</i>	78	54	50	56	67
One reason an airplane is able to gain lift is because the air moving across the top of the wing...	51	55	60	53	54
Produced by air flow over the wings and the angle of the wing into the wind	77	82	77	80	79
Force that pulls an aircraft down	92	85	92	89	86
Forward movement produced by a propeller, jet, or rocket engine	86	87	85	83	82
Slows the forward movement of an aircraft	87	78	78	82	80
If you launched two rockets, one with a mass of 50 grams and one with a mass of 100 grams, using the same amount of force, which rocket would go highest?	93	86	86	85	91
Which planet has more than 30 moons and thousands of rings?	94	91	86	91	90
Which planet do humans believe they could inhabit in the future?	93	81	80	86	82
The development of something new or improvement of something already existing is...	84	73	74	77	80
If you have something you want to do or something you want to be in life, you should...	96	95	98	92	95
Which of the following can damage an individual's dreams?	99	95	94	92	95
<i>What scientific law is operating, that makes it important to wear a seat belt?</i>	88	71	66	74	76
<i>In what state of matter do molecules have the least amount of energy or motion?</i>	87	68	54	70	71
Post test score	26.20	23.65	23.10	23.89	24.70

High Verses Low Performers by Knowledge Test Performance

The distribution by location, consolidated into the service units, was disparate in student composition. The construct for the low versus high performers was one standard deviation plus or minus the mean. Those with post-test scores less than or equal to 20 were designated as low performers and accounted for approximately 19% of the sample while high performers accounted for approximately 16% of the total sample with post-test scores greater than or equal to 29.

Low performers scored low on both the pre-test and the post-test and their average gap score was less than two points. The high performers had an average gap score of eight points. There were more girls and more students in grade four in the low performers. The composition by gender of low performers was 55.5% girls and 44% boys. The reverse distribution at the higher performance group was 55.6% for boys and 44.2% for girls. The following chart illustrates this point.

Exhibit 22



When examined by military branch, some interesting comparisons emerged. The Air Force and Navy had a disproportionately high percentage of high performers. The Air Force had a disproportionately low percentage of low performers. The Marines and National Guard had a disproportionately low percentage of high performers.

The program has its greatest impact on the higher performers as revealed in the knowledge gap score. This suggests that the use of the pre-test may identify some emphasis on remedial attention to those who need assistance and further encouragement. However, at this point in program design we do not identify students through performance testing but rather group and normative analysis.

Student Attitudinal Results

This year's pre-and post-program attitudinal assessment involved 3,022 students who successfully completed both questionnaires. The average mean score for the pre-test was 5.75 on a seven-point scale. 30.4% of the students rated 23 items above the 6+ level. The remaining items were above the 5+ rating. (Two items are the exception and they were negatively stated for control and reliability purposes.) These high ratings suggest that the students enter the program with high expectations and positive attitudes about trying new things and have positive views of their futures. Overall, the students are eager to participate in the program and expect to try new experiences. Given these high ratings, there would appear to be little room for improvement. However, the data demonstrates substantial improvement in the post-test ratings with 50% of the ratings above the 6+ level at program completion and a post mean average of 6.00. Pre-test ratings were slightly lower this year than last year. There has been a slight decline in the ratings over the past three years on the pre-test format 5.83 in 2005, 5.81 in 2006, and 5.75 in 2007 but the differences are slight and are not substantial enough to demonstrate a significant trend.

Post-Program Attitudinal Ratings

Upon completion of the experience, the students have a more favorable attitude about DOD STARBASE, the military and science. All items have significant favorable increases from the pre-program ratings. The data support the view that the program promotes a positive shift in student attitudes towards themselves, their future, trying new things, team building and the military. The top 13 rated attitudinal items in the post-program assessment had mean score ratings above +6.0 on the seven-point scale used in the assessment. See the exhibit below.

**Highest Ranked Post-Program Attitudes
Exhibit 23**

Item	2007 Rank	Mean	2006 Rank	Mean
I think I can graduate from High School.	1	6.54	2	6.53
STARBASE instructors are kind and helpful.	2	6.51	1	6.61
You can learn a lot by trying things.	3	6.47	3/4	6.51
At STARBASE, I learned a lot of things that I can use.	4	6.46	3/4	6.51
I think about what I want to be when I grow up.	5	6.39	5	6.36
I can make my dreams come true.	6	6.28	9	6.21
I like to make new things.	7	6.25	8	6.24
I am enjoying coming to a military base.	6	6.23	6	6.28
Military people do lots of different things.	9	6.23	7	6.26
You can have fun working in a group.	10	6.11	10	6.20
I set goals for myself.	11	6.09	12	6.14
I would tell my friends to come to STARBASE.	12	6.07	11	6.19
I like to think of new ways to use things.	13	6.06	15	6.00

While the rank order in 2007 may be different from 2006, the items are essentially the same. Two items that were above 6+ in mean rating scores in 2006, but did not reach that level this year were. “You can accomplish a lot in a group” and “Learning can be fun.” These items were in the top 15 and just below the 6.00 level at 5.98 and 5.93 respectively. Overall, the top 15 were slightly lower in mean scores this year than 2006. These ratings are high when you consider that a seven-point scale is in operation and not one item out of the 30 went below the 5.0+ point level.

Significant Shifts in Attitude

Mean scores in attitudes over the past several years are relatively stable. The items that displayed the greatest percentage of shift from the pre-program means to the post mean scores are relatively the same items as found in the 2006 report. The shift scores are generally higher this year than last and range from +.46 to +.19 in 2007; while 2006 ranged from +.43 to +.14 on the same items. This suggests greater emphasis and/or broader content coverage on these concepts during this program year.

Significant Attitude Shifts from Pre- to Post-Program Exhibit 24			
Attitudinal Item Mean	Pre-Program Mean	Post-Program	%Shift
Military bases are fun.	5.38	5.84	+.46
I am enjoying coming to a military base.	5.86	6.23	+.37
I can make my dreams come true.	5.91	6.28	+.37
STARBASE instructors are kind and helpful.	6.18	6.51	+.33
The military is a good place to work.	4.93	5.25	+.32
I am good at science.	5.18	5.42	+.24
I set goals for myself.	5.86	6.09	+.23
Learning is easy for me.	5.27	5.49	+.22
You can accomplish a lot in a group.	5.77	5.98	+.21
Learning can be fun.	5.72	5.93	+.21
Military people do lots of different things.	6.02	6.23	+.21
I like science.	5.45	5.65	+.20
I make good decisions.	5.53	5.72	+.19
I am good at math.	5.17	5.36	+.19

Military Attitudinal Items

There is a pronounced impact of the DOD STARBASE program on student perceptions and attitudes about the military, as demonstrated by the above shift scores from the pre- to post-assessment. Positive experiences and interaction with military personnel and the base environment proves to be a positive and reinforcing activity. Those same items emerged in the top ten ranked positive shifts in 2006 and in relatively the same order, but slightly higher in 2007.

Shift Percentages and Ranking for Military Related Items (2006-2007)
Exhibit 25

Military Attitudinal Item	2007 Shift in Pre-Post	2007 Rank	2006 Shift in Pre-Post	2006 Rank
Military bases are fun.	+.46	1	+.43	2
I am enjoying coming to a military base.	+.37	2	+.31	4
The military is a good place to work.	+.32	5	+.24	6

These attitudinal scores in relation to the military are primarily experiential and not content directed. Students relate to military personnel, their work environments, their skills and tasks and make experiential judgments through daily contact on the base, not by instructor contact presentations.

Math and Science Attitudinal Items

The data indicates that math and science attitudinal scores improve at the completion of the program. In fact, three items ranked in the top eleven in the highest percentage shift increases in this year's assessment. Several other items showed significant improvement, but were lower in the overall item rankings. The mean pre-post ratings and rankings, while demonstrating improvement still indicate relatively low ranking when compared to other attitudinal items. All rankings on the post-assessment are below the 19th position with "I like math" at the bottom.

Math and Science Attitudinal Mean Scores
Exhibit 26

Math and Science Attitudinal Item	Pre-Program Mean	Post-Program Mean	Gap Score
I like science.	5.45	5.65	+.20
I am good at science.	5.18	5.42	+.24
I am good at math.	5.17	5.36	+.19
I like math.	5.04	5.16	+.12

Post-Program Attitudinal Assessment

All attitudinal items in this year's post-program assessment score significantly higher than the pre-test. The average mean scores for 2006 were lower than the two previous program years with a slightly higher shift score. In general, the scores across all items did not shift dramatically from previous years.

2004-2007 Attitudinal Mean Scores
Exhibit 27

Attitudinal Mean Score	2004	2005	2006	2007
Pre-test Mean Score	5.78	5.83	5.81	5.75
Post-test Mean Score	5.97	6.06	6.05	6.00
Score Shift +/-	+.19	+.23	+.24	+.25

While the means are relatively stable over the past five years and remain positive, over half the items this year ranked their lowest rating compared to the means for each of the previous years. The differences are small and represent less than 0.1 standard deviation from last year. If the trend persists, the analysis should examine the differences. Interestingly, group activities, i.e. “accomplishing a lot in a group” and “having fun in a group,” both went down this year in rating.

Post-Program Attitudes 2003-2007²⁸
Exhibit 28

Post-Program Attitude Item	2003 Mean	2004 Mean	2005 Mean	2006 Mean	2007 Mean
I like math.	5.24	5.33	5.39	5.25	5.16
I am good at math.	5.27	5.26	5.35	5.28	5.36
I like science.	5.56	5.67	5.78	5.72	5.65
I am good at science.	5.39	5.43	5.50	5.53	5.42
I am good at following directions.	5.77	5.70	5.79	5.82	5.74
Learning is easy for me.	5.51	5.55	5.54	5.48	5.49
Learning can be fun.	6.16	6.15	6.12	6.03	5.93
You can learn a lot by trying things out.	6.48	6.51	6.57	6.51	6.47
I think I can graduate from high school.	6.43	6.47	6.54	6.53	6.54
Military people do lots of different things.	6.31	6.29	6.30	6.26	6.23
I set goals for myself.	6.02	6.07	6.07	6.14	6.09
I make good decisions.	5.62	5.73	5.79	5.86	5.72
<i>I think I could grow up to be a STARBASE Instructor.*</i>	4.49				
STARBASE instructors are kind and helpful.		6.54	6.54	6.61	6.51
I can make my dreams come true.	6.16	6.17	6.23	6.21	6.28
You can accomplish a lot in a group.	6.34	6.29	6.10	6.11	5.98
You can have fun working in a group.	6.35	6.34	6.24	6.20	6.11
I like to make new things.	6.29	6.29	6.36	6.24	6.25
I think about what I want to be when I grow up.	6.40	6.38	6.37	6.36	6.39
<i>I want to be like my STARBASE Instructor.</i>	4.52				
The military is a good place to work.		5.40	5.40	5.38	5.25
I am enjoying coming to a military base.	6.37	6.35	6.30	6.28	6.23
<i>Military bases are cool.</i>	6.22				
Military bases are fun.		6.01	5.93	5.94	5.84
I do not think STARBASE will help me do better in school.*			1.97	1.98	1.97
I like to think of new ways to use things.	6.13	6.17	6.13	6.00	6.06
At STARBASE, I learned a lot of things that I can use.	6.53	6.53	6.53	6.51	6.46
STARBASE is boring.*	1.64	1.56	1.64	1.55	1.68
I would tell my friends to come to STARBASE.	6.15	6.21	6.15	6.19	6.07

*Due to unfavorable wording, higher mean values reflect lower endorsement levels when reverse scoring is applied.

²⁸ Items in italics are no longer used.

Gender Comparisons and Differences

As in past years, the gender differences on attitudes are significant. Girls had higher attitudinal pre- and post-mean scores than boys. On individual items, the girls demonstrated significantly more positive scores on the majority of the expressed preferences while the boys scored significantly higher on only two items.

Gender Differences on Attitudinal Assessment Exhibit 29				
Gender	Sample Size	Pre-Program Mean	Post-Program Mean	Performance Gap Score
Boys	1,192	5.73	5.97	+.24
Girls	1,207	5.82	6.07	+.25
Mean Difference		.09	.10	

Girls were more positive on items that reflect greater confidence in the educational process as a means to improving their lives and pro-social factors. The boys had positive scores in attitudes on math, science and the military. Boys had significant higher scores on two items: “I like math” and “The military is a good place to work.”

Both genders had higher scores on the top ranked items than last year. The top four items in each highly ranked preference were above the highest items last year. Boys moved up on pro-social attitudes, while girls improved positive attitudes toward the military. The performance gap scores were more comparable this year; the girls demonstrated a slight increase over previous years.

Post-Program Rank Order on Attitudinal Differences By Gender Exhibit 30				
Attitudinal Item	Girls' Rank	Girls' Mean	Boys' Rank	Boys' Mean
I think I can graduate from high school.	1	6.63	2	6.44
STARBASE instructors are kind and helpful.	2	6.56	1	6.45
You can learn a lot by trying things out.	2	6.56	4	6.37
At STARBASE, I learned a lot of things that I can use.	3	6.50	3	6.43
I think about what I want to be when I grow up.	4	6.48	5	6.30
I can make my dreams come true.	5	6.36	8	6.21
I like to make new things.	6	6.32	9	6.17
I am enjoying coming to a military base.	7	6.23	7	6.23
Military people do lots of different things.	8	6.22	6	6.25
I set goals for myself.	9	6.18	12	5.99
I would tell my friends to come to STARBASE.	10	6.15	12	5.99
You can have fun working in a group.	11	6.14	11	6.07
I like to think of new ways to use things.	12	6.03	10	6.08

Prior Experience with Military

A majority of the students had prior experience with the military i.e., 1,633 as compared to 1,288 without prior contact. Overall, those who had prior military exposure were more positive about the military, both pre- and post-assessments, and more positive about their personal abilities (math, science, learning and dreams).

Students' Prior Knowledge of DOD STARBASE

Students who had prior knowledge of the program were most positive about the program in both pre- and post-assessment ratings. The majority of students (1,767) were familiar with the program prior to attendance. Prior knowledge students were more positive about their futures, abilities and about the military than students who were unfamiliar with the program.

Age and Grade Impact on Attitudes

There are statistically significant correlations between student's age, grade in school, other items on the survey and the post-test score. The correlations are quite small and do not seem to represent any particular themes outside of a less positive response trend among older students. These findings are most likely the result of the tendency of some of the younger children being more willing to display unabashed enthusiasm for and high ratings of STARBASE. Their enthusiasm has created a statistical artifact, or perhaps a statistical artifact may be taken as evidence of their enthusiasm. All correlations were small and displayed little evidence of trends or themes. These results are consistent with prior year results.

Academy Location and Student Attitudes

With 53 academies responding to the surveys, it is noteworthy that location produces more differences and variation across all survey items than any other single factor. This observation has been consistent throughout all the years of the assessment process. There is more variation and differences as described by the assessment tools than there are commonalities. This suggests that each academy, even with a common core curriculum, delivers its material differently and with varying degrees of intensity and emphasis. Variances in the socio-demographic characteristics of the students at each academy as well as the base differences and environmental experiences may also influence the differences in test scores. While location differences persist, the positive direction on each item also persists.

Collapsing the location of the academies into five regions (East, Southeast, Midwest, South and West) cancels some differences, but most remain. This indicates that the differences are more location specific than region specific. Standardization of key elements on content and organizational delivery is part of the DOD STARBASE program. Location pushes key elements to varying degrees of adherence and commonality.

Student Assessment Summary

The 2007 program year demonstrated continued positive performance in both the knowledge/skills and attitudinal performance assessments. The positive shifts and gap performance ratios are consistent with stated program goals and objectives. The scores of the post-test assessment in almost all areas were significantly higher the pre-test. Gender differences, prior knowledge of the program, contact with the military, academy location

and length of academy operation yielded significant positive differences in test scores and attitudinal assessments. Location of academy continues to produce the highest level of variability and differences in ratings and performance. This factor is consistent and persistent over the life of the program, which suggests that program content, emphasis and instruction is highly variable in spite of the standards in core curriculum content and operational formats. The analysis suggests that each academy review their assessment results with the normative data and create their own profiles of variances and differences from the norm. This information is useful for analyzing and improving core curriculum delivery, coverage, intensity of themes and desired outcomes.

Classroom Teacher Assessment Results

Classroom teachers are an important and essential participant group in the DOD STARBASE program. They accompany their students to the academy and serve as monitors. Many use materials provided by the academies to expand and enrich content. They are expert observers of their students' behavior, performance, and attitudes before and after participation in the program. Many, because of their long-term involvement, observe downstream results of the experience on their students. Most are familiar with the program's methodology, curriculum and teaching constructs. Each teacher understands how the DOD STARBASE objectives fit state and national standards for student performance. They serve, in very real terms, as a body of experts for this program.

This year's teacher assessment has 222 respondents, a smaller sample than last year. Eighty percent are fifth grade teachers with more than five years of teaching experience. Almost 40% have fifteen or more years of teaching. The vast majority were familiar with military institutions prior to this year's experience. Over 60% had multiple years experience with DOD STARBASE and were familiar with program content and methodology.

The 2007 teacher assessment was positive and similar to previous evaluations. The overall mean rating was +6.08, which was higher than last year's rating of +6.00, but lower than the three years prior to that assessment. The following chart displays the mean ratings over the past five years.

Mean Ratings by Teachers (2003-2007)				
Exhibit 31				
2003	2004	2005	2006	2007
6.10	6.15	6.18	6.00	6.08

Teachers rate the DOD STARBASE program highly for their students, their schools, themselves and their students' families. The program penetrates beyond the DOD STARBASE classroom since teachers use the curriculum materials in their curriculum and report student improvements in their attitudes and performance when they return to their school. The ratings that they give to science and math suggests that the program probably puts more emphasis upon science than on math, although the math ratings somewhat improved over last year's assessment.

Math and Science Mean Ratings Classroom Teachers (2003-2007)					
Exhibit 32					
Item	2003	2004	2005	2006	2007
More interested in learning about math.	5.33	5.58	5.51	5.39	5.43
More interested in learning about science.	6.43	6.44	6.41	6.39	6.37

When comparing this year's results to those from the past five years, the results are generally comparable, although there are some shifts in ranking and rating from year to year. Overall, the rate scores, assessed on a seven-point scale, are high.

Ten Highest Teacher Ratings over a Five-Year Period (2003-2007)					
Exhibit 33					
Stem Item	2003	2004	2005	2006	2007
The children enjoy sharing their STARBASE experience with others.	6.70	6.74	6.68	6.68	6.70
The STARBASE experience will be a positive influence on students in coming years.	New Item	New Item	6.70	6.68	6.68
STARBASE reinforces many positive behaviors I try to teach my students.	6.68	6.71	6.67	6.63	6.64
The STARBASE experience has been a positive influence on me personally.	New Item	New Item	6.65	6.59	6.64
The STARBASE curriculum supports our State standards.	6.75	6.75	6.63	6.60	6.64
The STARBASE instructors are good role models for the students.	6.82	6.75	6.72	6.68	6.61
The students talk about STARBASE long after the program has ended.	6.66	6.57	6.53	6.47	6.47
The students admire their STARBASE instructors.	6.66	6.59	6.58	6.49	6.45
Parents are delighted that their children are participating in STARBASE.	6.41	6.52	6.48	6.49	6.43
STARBASE has helped improve the students' understanding of science.	6.48	6.40	6.52	6.41	6.38
The students enjoyed being on a military base.	6.61	6.70	6.52	6.37	6.38
More interested in learning about science.	6.43	6.44	6.41	6.39	6.37
My principal is a strong advocate of STARBASE.	6.39	6.27	6.37	6.34	6.30

The first five items are the same items as in previous years and are consistently high. The teachers positively rate the influence the program has on them, principals, parents and students after their return to the classroom in their top ten.

Teacher perceptions seem to support student perceptions. DOD STARBASE offers positive pro-social advantages that include positive role models, opportunities to build and maintain self-esteem, and a "can do" attitude. Students' attitudes about enjoyment and ability in math and science tend to be lower than many of the other attitude items. However, teachers rate students' improved interest and understanding of math and science relatively high.

Teachers with more experience with the program tend to include DOD STARBASE curriculum and materials in their classroom. In addition, teachers with more experience with the program indicate that their students are better at following directions and more interested in learning about math and technology. This suggests that more teacher exposure to DOD STARBASE influences the transportability of program materials and content back to the classroom. These observations are consistent with previous year findings.

Teacher perceptions are important in that they influence program expectations, program delivery, and student perceptions about themselves and their performance. The teacher assessments support and mirror the student perceptions. Students and teachers agree on pro-social attitudes, self-esteem and a “can do” attitude. In addition, teachers rate students’ attitudes about enjoying learning, their willingness to learn more about math and science as improved. The students’ ratings are slightly higher than teachers’ ratings in several other items such as their abilities in math and science.

Teacher Assessment Summary

Teachers are, and have been, strong advocates and transporters of DOD STARBASE curriculum and experience. Many reinforce the content and themes in their classroom environment; support administrative commitments; and re-establish their on-going commitment by scheduling future classroom involvement. As program experts, they rate the program’s operation, its content and its reinforcement of state and national curriculum standards as high. They also indicate a desire for the program to increase the use of math applications in future program delivery. They do not perceive STARBASE as repetitive of their existing science and mathematics curricula. Teachers see the science, mathematics, and technology concepts and military resources as curriculum depth and enrichment.



APPENDICES

U.S. REGIONAL MAP

DRIVERS OF OPINION

RANK ORDERED ATTITUDES

PRE-FLIGHT AND POST-FLIGHT QUESTIONNAIRE

DOD STARBASE TEACHER QUESTIONNAIRE

CIVILIAN VOLUNTEER QUESTIONNAIRE

MILITARY VOLUNTEER QUESTIONNAIRE

2007 DIRECTOR'S QUESTIONNAIRE

DIRECTORY OF DOD STARBASE ACADEMIES

LISTING OF SCHOOL DISTRICTS AND SCHOOLS SERVED

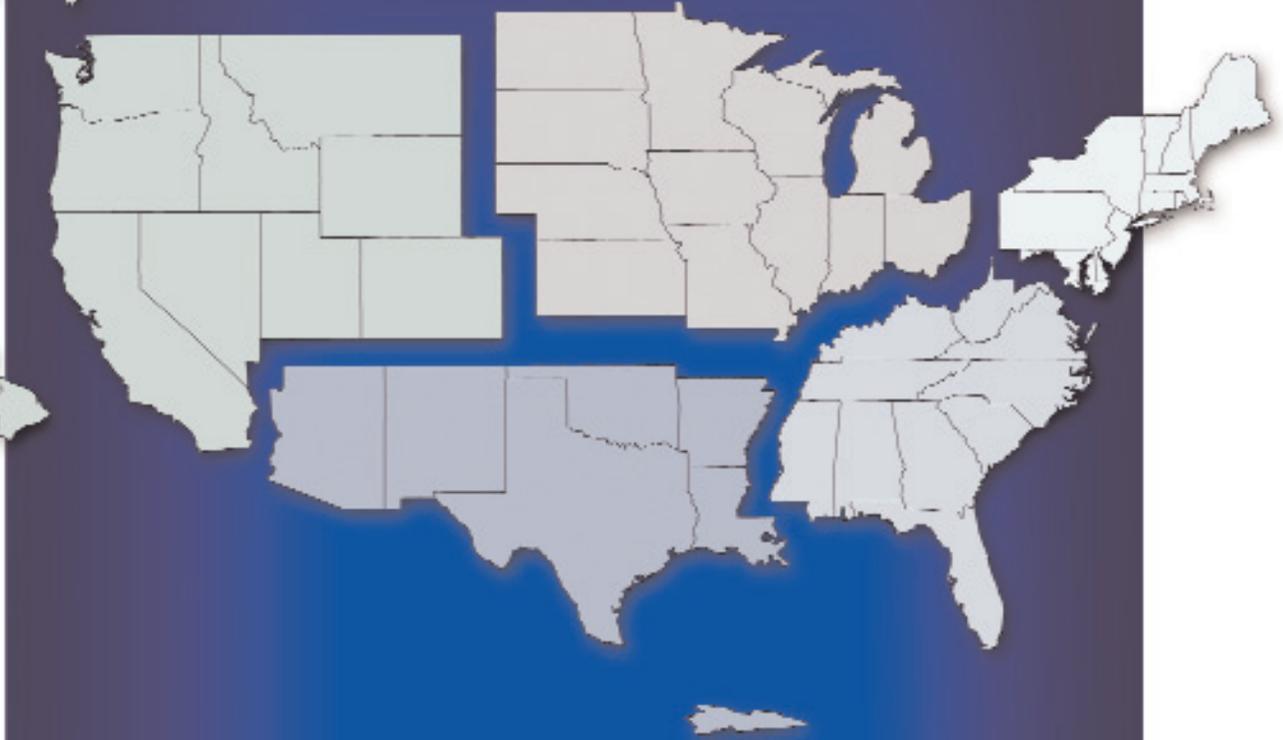
GLOSSARY

STATISTICAL FORMULAS

ACADEMY TIME LINE



US REGIONAL MAP



West

Washington
Montana
Oregon
Idaho
Wyoming
California
Nevada
Utah
Colorado
Hawaii
Alaska

Midwest

North Dakota
South Dakota
Nebraska
Kansas
Minnesota
Iowa
Wisconsin
Illinois
Michigan
Indiana
Ohio
Missouri

South

Arizona
New Mexico
Oklahoma
Texas
Arkansas
Louisiana
Puerto Rico

South East

West Virginia
Virginia
Kentucky
Tennessee
Mississippi
Alabama
Georgia
Florida
North Carolina
South Carolina

East

Maine
New Hampshire
Vermont
Pennsylvania
New York
Rhode Island
Connecticut
New Jersey
Delaware
Maryland
District of Columbia
Massachusetts



DRIVERS OF OPINION

The following sections provide a rank ordered list of non-overlapping statistical predictors of the target attitude in quotation marks. That means that if the conditions in the list are present, it is very likely the target attitude will be present also. Many consider these lists to be prioritized action items for improving the target.

Overall, post-program opinion average may be partially driven by knowledge of the content test score. Those that cannot perform as well on the assessment and may not know the content as well as others are more likely to have less positive attitudes. This is based on the significant relationship between the post-program opinion average and the post-program knowledge score.

Drivers of “At STARBASE, I learned a lot of things that I can use.”

Post responses, n=2475

STARBASE Instructors are kind and helpful.
I like to think of new ways to use things.
STARBASE is boring.
I am enjoying coming to a military base.
You can have fun working in a group.
I like science.
I do not think STARBASE will help me do better in school.
STARBASE Instructors are kind and helpful.
I like to think of new ways to use things.
STARBASE is boring.

Drivers of “I would tell my friends to come to STARBASE.”

Post responses, n=2474

STARBASE Instructors are kind and helpful.
STARBASE is boring.
I like to think of new ways to use things.
I am enjoying coming to a military base.
You can have fun working in a group.
Learning is easy for me.
The military is a good place to work.

Drivers of “I can make my dreams come true.”

Post responses, n=2474

I set goals for myself.
I think I can graduate from High School.
You can accomplish a lot in a group.
STARBASE Instructors are kind and helpful.
I think about what I want to be when I grow up.
Learning is easy for me.
I make good decisions.
I like math.
I am good at math.

Drivers of “Military bases are fun.”

Post responses, n=2435

I am enjoying coming to a military base.
The military is a good place to work.
You can have fun working in a group.
STARBASE is boring.
I make good decisions.

Drivers of “Military people do lots of different things.”

Post responses, n=2475

The military is a good place to work.
You can learn a lot by trying things.
I think I can graduate from High School.
I like to make new things.
STARBASE Instructors are kind and helpful.
I set goals for myself.

Drivers of “Learning can be fun.”

Post responses, n=2460

You can learn a lot by trying things.
Learning is easy for me.
You can have fun working in a group.
I like math.
I like science.
STARBASE Instructors are kind and helpful.
I like to think of new ways to use things.
I am good at following directions.
I am good at math.



Teachers rated the STARBASE experience positively for themselves, their students, and their students' families. The teachers find the STARBASE experience useful beyond the STARBASE program and use the materials in their curriculum. They also notice improvements in their students' attitudes about school and themselves. The difference between the ratings for interest in science and interest in math suggests that the STARBASE programs may not focus on math as much as they do science. The average teacher rating across the items is 6.08 (standard deviation = .81).

Rank Ordered Attitudes		
N=222	Mean	Std. Deviation
The children enjoy sharing their STARBASE experiences with others	6.70	0.80
The STARBASE experience will be a positive influence on students in coming years	6.68	0.79
STARBASE reinforces many positive behaviors I try to teach my students	6.64	0.80
The STARBASE experience has been a positive influence on me personally	6.64	0.93
The STARBASE curriculum supports our state standards	6.64	0.86
The STARBASE instructors are good role models for the students	6.61	0.98
The students talk about STARBASE long after the program has ended	6.47	0.97
The students admire their STARBASE instructors	6.45	1.02
Parents are delighted that their children are participating in STARBASE	6.43	1.05
STARBASE has helped improve the students understanding of science	6.38	0.94
The students enjoyed being on a military base	6.38	1.15
More interested in learning about science	6.37	0.91
My principal is a strong advocate of STARBASE	6.30	1.16
More willing to try new things	6.05	0.98
I would like more STARBASE resources to take back to my classroom	6.02	1.44
More confident about what they can accomplish	6.00	1.04
More comfortable with military personnel	5.98	1.27
I use the resources STARBASE provides to teachers	5.98	1.43
More excited about learning	5.97	1.08
STARBASE has helped to improve appreciation of how math can be applied to a variety of situations	5.93	1.18
STARBASE has helped improve the climate for participative learning in the classroom	5.91	1.12
More excited about their futures	5.90	1.17
More willing to cooperate with each other	5.86	1.09
Better at working in groups	5.85	1.17
Because of my participation in STARBASE, I am more comfortable with military personnel	5.85	1.39
More likely to encourage each other	5.83	1.12
More goal oriented	5.66	1.16
More comfortable making decisions	5.66	1.11
The students ask more questions about technology	5.60	1.35
I have included many STARBASE resources in my curriculum	5.59	1.57
My school board is very involved in supporting STARBASE	5.59	1.58
More interested in learning about math	5.43	1.31
Better at following directions	5.41	1.30

Pre-Flight and Post-Flight Questionnaire

ASSIGNED STUDENT NUMBER							
0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9

My school grade is: 1
 2
 3
 4
 5
 6
 7
 8
 9

My age is: 0 0
 1 1
 2 2
 3 3
 4 4
 5 5
 6 6
 7 7
 8 8
 9 9

I am a: Boy
 Girl

- I have met military people before coming to STARBASE. No Yes
- I heard about STARBASE before I knew I was coming here. No Yes
- I know someone that went through STARBASE before me. No Yes

For each statement, fill in True if you agree or fill in False if you disagree.

- | True | False | |
|-----------------------|-----------------------|---|
| <input type="radio"/> | <input type="radio"/> | 1. Drinking alcohol may decrease our bodies' ability to do easy things. |
| <input type="radio"/> | <input type="radio"/> | 2. Matter does not take up space. |
| <input type="radio"/> | <input type="radio"/> | 3. Earth is the closest planet to the sun. |
| <input type="radio"/> | <input type="radio"/> | 4. Negative actions may make it hard for you to reach your goals. |
| <input type="radio"/> | <input type="radio"/> | 5. Technology usually decreases in cost after many units are sold. |

6. What is the smallest particle of water?

- A a water molecule
 B a water atom
 C a water nucleus
 D a water drop

7. What force causes a rocket to launch?

- A lift
 B gravity
 C thrust
 D drag

8. Which of the following is NOT a team?

- A Fire Department
 B Police Force
 C Military Squad/Platoon
 D Walmart customers

Wait for your instructor to read the directions and questions.

PLEASE DO NOT WRITE IN THIS AREA



[SERIAL]

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9. How thick is Earth's atmosphere?

- A About 10 miles
- B About 25 miles
- C About 40 miles
- D More than 50 miles

10. Air presses down 14.7 pounds on every inch of our bodies. Why don't we feel this pressure?

- A The atmosphere cushions the weight of the air.
- B Our bodies push out 14.7 pounds on every inch to equalize the pressure.
- C We are inside a building, so we don't feel it.
- D The air is thinner closer to the ground than up in space.

11. The air is composed mostly of what element?

- A hydrogen
- B helium
- C chlorine
- D nitrogen

Match each airplane component with the letters from the diagram below.

A. Where the pilot sits

B. Moves the airplane's nose left or right

C. Allows an airplane to climb or descend

D. Produces lift for the airplane

A	B	C	D	
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	12. Cockpit
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	13. Wing
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	14. Elevator
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	15. Rudder

17. To move an airplane's nose to the left, you would move the...

- A rudder right
- B rudder left
- C left flap
- D right flap

18. One reason an airplane is able to gain lift is because the air moving across the top of the wing...

- A exerts less pressure than the air moving along the bottom.
- B exerts more pressure than the air moving along the bottom.
- C exerts the same amount of pressure as air moving along the bottom.
- D does not exert any pressure on the wing.

Match each force of flight with the letters from the picture below.

A. Lift

B. Thrust

C. Gravity

D. Drag

A	B	C	D	
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	19. Produced by air flow over the wings and the angle of the wing into the wind.
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	20. Force that pulls an aircraft down.
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	21. Forward movement produced by a propeller, jet, or rocket engine.
<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	22. Slows the forward movement of an aircraft.

Select the best answer by filling in the appropriate circle.

16. If you are landing an airplane in a city that is 5,000 feet above sea level and your altimeter reads 5,500 feet, how many feet are you above the ground?

- A 500 feet
- B 1,000 feet
- C 5,000 feet
- D 5,500 feet

Wait for your instructor to read the directions and questions.

23. If you launched two rockets, one with a mass of 50 grams and one with a mass of 100 grams, using the same amount of force, which rocket would go highest?
- A the heavier rocket would go the highest.
 - B the lighter rocket would go the highest.
 - C the two rockets would go the same height.
 - D the heavier rocket would go twice as high as the lighter rocket.
24. Which of the following planets has more than 30 moons and thousands of rings?
- A Mercury
 - B Pluto
 - C Saturn
 - D Earth
25. Which planet do humans believe they could inhabit in the future?
- A Mercury
 - B Mars
 - C Saturn
 - D Neptune
26. The development of something new or improvement of something already existing is....
- A gravity.
 - B inertia.
 - C technology.
 - D law.
27. If you have something you want to do, or something you want to be in life, you should....
- A wish for it really hard in order to make it come true.
 - B watch other people on TV to see how they do it.
 - C do something every day that will help you reach your goal.
 - D wait for someone to give you what you want.
28. Which of the following can damage an individual's dreams?
- A setting goals
 - B using illegal drugs
 - C obtaining an education
 - D practicing a skill
29. What scientific law is operating, that makes it important to wear a seat belt?
- A Newton's Law of Inertia which explains that the greater the mass of an object, the greater the force needed to accelerate it.
 - B Newton's Law of Inertia which explains that an object in motion will stay in motion unless acted upon by an outside force.
 - C Bernoulli's Principle which states that pressure decreases when air moves faster.
 - D Bernoulli's Principle which states that air moves faster when an object is curved.
30. In what state of matter do molecules have the least amount of energy or motion?
- A solid
 - B liquid
 - C gas
 - D plasma

Wait for your instructor to read the directions and questions.

What is your opinion?



Strongly Disagree
(1)

Disagree
(2)

Slightly Disagree
(3)



(?)
Uncertain
(4)

Slightly Agree
(5)

Agree
(6)



Strongly Agree
(7)

53	1. I like math.	1	2	3	4	5	6	7
52	2. I am good at math.	1	2	3	4	5	6	7
51	3. I like science.	1	2	3	4	5	6	7
50	4. I am good at science.	1	2	3	4	5	6	7
49	5. I am good at following directions.	1	2	3	4	5	6	7
48	6. Learning is easy for me.	1	2	3	4	5	6	7
47	7. Learning can be fun.	1	2	3	4	5	6	7
46	8. You can learn a lot by trying things.	1	2	3	4	5	6	7
45	9. I think I can graduate from High School.	1	2	3	4	5	6	7
44	10. Military people do lots of different things.	1	2	3	4	5	6	7
43	11. I set goals for myself.	1	2	3	4	5	6	7
42	12. I make good decisions.	1	2	3	4	5	6	7
41	13. STARBASE instructors are kind and helpful.	1	2	3	4	5	6	7
40	14. I can make my dreams come true.	1	2	3	4	5	6	7
39	15. You can accomplish a lot in a group.	1	2	3	4	5	6	7
38	16. You can have fun working in a group.	1	2	3	4	5	6	7
37	17. I like to make new things.	1	2	3	4	5	6	7
36	18. I think about what I want to be when I grow up.	1	2	3	4	5	6	7
35	19. The military is a good place to work.	1	2	3	4	5	6	7
34	20. I am enjoying coming to a military base.	1	2	3	4	5	6	7
33	21. Military bases are fun.	1	2	3	4	5	6	7
32	22. I do not think STARBASE will help me do better in school.	1	2	3	4	5	6	7
31	23. I like to think of new ways to use things.	1	2	3	4	5	6	7
30	Post STARBASE							
29	24. At STARBASE, I learned a lot of things that I can use.	1	2	3	4	5	6	7
28	25. STARBASE is boring.	1	2	3	4	5	6	7
27	26. I would tell my friends to come to STARBASE.	1	2	3	4	5	6	7

Thank You!

PLEASE DO NOT WRITE IN THIS AREA



[SERIAL]

DOD STARBASE Teacher Questionnaire

All information gathered by this questionnaire is for development purposes. The information you provide will help us to continue to improve the STARBASE program. Please provide honest feedback about various issues presented in this questionnaire. Completed questionnaires will be tallied by an agency outside of your school and outside of STARBASE. Individual responses will be strictly confidential and will not be released to your school or to any STARBASE representative. We are collecting information from all of the STARBASE programs. This questionnaire contains a total of 33 questions and should take less than 10 minutes to complete. Please do not fold.

Thank you.

What STARBASE location do you work with? _____ What grade do you teach? _____

Did you ever visit a military base prior to your current STARBASE involvement?

- 1 Never; this is my first STARBASE program
- 2 Yes, for prior STARBASE programs only
- 3 Yes, for activities not related to STARBASE
- 4 Yes, for STARBASE and non STARBASE activities
- 5 Other: _____

How many years have you brought students to STARBASE? _____ yrs.

How many years have you been a teacher? _____

Respond to the following statements by completely darkening the appropriate numbered circle next to each item.

After attending STARBASE, the students appear....

Disagree

Agree

1. ... more interested in learning about math.....	1	2	3	4	5	6	7	8
2. ... more interested in learning about science.....	1	2	3	4	5	6	7	8
3. ... more willing to try new things.....	1	2	3	4	5	6	7	8
4. ... better at following directions.....	1	2	3	4	5	6	7	8
5. ... better at working in groups.....	1	2	3	4	5	6	7	8
6. ... more confident about what they can accomplish.....	1	2	3	4	5	6	7	8
7. ... more goal oriented.....	1	2	3	4	5	6	7	8
8. ... more comfortable with military personnel.....	1	2	3	4	5	6	7	8
9. ... more comfortable making decisions.....	1	2	3	4	5	6	7	8
10. ... more excited about their futures.....	1	2	3	4	5	6	7	8
11. ... more excited about learning.....	1	2	3	4	5	6	7	8
12. ... more likely to encourage each other.....	1	2	3	4	5	6	7	8
13. ... more willing to cooperate with each other.....	1	2	3	4	5	6	7	8

Please go on to the next section.

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Please indicate your level of agreement with these statements.

Disagree Agree

1. After STARBASE, the students ask more questions about technology.	<input type="radio"/>						
2. STARBASE has helped to improve the students' understanding of science.	<input type="radio"/>						
3. STARBASE has helped to improve appreciation of how math can be applied to a variety of situations.	<input type="radio"/>						
4. STARBASE has helped to improve the climate for participative learning in the classroom.	<input type="radio"/>						
5. Because of my participation in STARBASE, I am more comfortable with military personnel.	<input type="radio"/>						
6. The students talk about STARBASE long after the program has ended.	<input type="radio"/>						
7. STARBASE reinforces many positive behaviors I try to teach my students.	<input type="radio"/>						
8. I use the resources STARBASE provides to teachers.	<input type="radio"/>						
9. I would like more STARBASE resources to take back to my classroom.	<input type="radio"/>						
10. My principal is a strong advocate of STARBASE.	<input type="radio"/>						
11. My School Board is very involved in supporting STARBASE.	<input type="radio"/>						
12. The STARBASE Instructors are good role models for the students.	<input type="radio"/>						
13. I have included many STARBASE resources in my curriculum.	<input type="radio"/>						
14. The students admire their STARBASE Instructors.	<input type="radio"/>						
15. The STARBASE curriculum supports our state standards.	<input type="radio"/>						
16. The children enjoy sharing their STARBASE experiences with others.	<input type="radio"/>						
17. Parents are delighted that their children are participating in STARBASE.	<input type="radio"/>						
18. The students enjoyed being on a military base.	<input type="radio"/>						
19. The STARBASE experience will be a positive influence on students in coming years.	<input type="radio"/>						
20. The STARBASE experience has been a positive influence on me personally.	<input type="radio"/>						

Thank you!

Please mail to: Pearson Performance Solutions
1 North Dearborn Street
Suite 1600
Chicago, IL 60602
Attn: Frank Mazzocco

If you have any questions, please call 1-312-242-4386

2007 CIVILIAN VOLUNTEER SURVEY

Thank you for your time, energy, and commitment to the DOD STARBASE program. The following questionnaire will take only a few minutes and will help in improving program operations.

1) Academy Location:

2) Activity in support of the program:

- Teacher Aide
- Classroom Presenter
- Administrative assistant
- Board Member
- Technology Expert
- Tour Guide
- Other

3) Estimated volunteer hours this past year:

4) Occupation:

5) Number of years as a DOD STARBASE volunteer:

6) Have you ever had a child or relative attend the STARBASE program? If yes, what was the relationship e.g. daughter, son, niece, nephew, etc.

Additional comments:

7) Please estimate the program's effectiveness in improving the knowledge/skills of students in math and science:

8) Estimate the program's effectiveness in improving student attitudes about themselves and their ability to improve their school performance:

9) My personal experience as a volunteer: (check all that apply)

- was personally rewarding.
- developed my awareness of the military's involvement in community affairs.
- developed an awareness of the skills it takes to be a military staff member.
- led to a better understanding of the skill levels that transfer from the educational process to real world situations.
- reinforced the value of the program to student performance.
- had little impact on me.
- other

10) If asked, would you recommend that others volunteer their time to the program?

11) Are you planning on being a DOD STARBASE volunteer next year?

12) What recommendations would you make to DOD STARBASE staff to improve the volunteer program?

13) What recommendations would you make to DOD STARBASE staff to improve the academic program?

14) Do you have any further comments, observations, and/or recommendations about the program?

15) Name: (optional)

Thank you for your time and candid responses.

2007 MILITARY VOLUNTEER QUESTIONNAIRE

Thank you for agreeing to participate in our survey. This brief questionnaire is part of a general assessment on the effectiveness of the DOD STARBASE program that will be presented in an Annual Report to Congress. Your experiences and observations are an important part of the assessment.

1) Rank:

2) Branch of Service:

3) STARBASE site:

4) Activity in support of the program (check all that apply):

- Tour Guide
- Teacher Aide
- Presenter
- Facilitator of Experiments/display, e.g. rockets, computer simulator, etc.
- Administrative services
- Board Member
- Other

5) Estimated hours you have committed to the DOD STARBASE program this past year:

6) Has your volunteer experience affected you?

- yes
- no

7) If yes, please elaborate.

8) Has the military made a difference in the community by sponsoring DOD STARBASE?

- yes
- no
- not sure

9) If yes, please describe how the military has made a difference in the community and share any feedback that you have received.



10) Please make suggestions or recommendations to improve the program or the volunteer experience.



11) Do you plan to volunteer for DOD STARBASE in the future?

- yes
- no
- I will not be available.

12) Name: (optional)



Thank you for your time and cooperation.



DOD STARBASE 2007 DIRECTOR'S QUESTIONNAIRE

I. INTRODUCTION

It is time to compile the information for the 2007 DoD STARBASE Annual Report to Congress. The data not only documents your Academy's operational activities, but it also identifies key issues, challenges, and concerns that potentially effect future program development. All information requested is for Federal FY07 activities (October 1, 2006 - September 30, 2007) unless otherwise indicated. Your cooperation and timely response is essential to the successful completion of this report to Congress by the end of this calendar year. As required by 10 USC 2193b, OASD/RA shall submit an annual report to Congress on the program which shall contain a discussion of the design and conduct of the program and an evaluation of the effectiveness of the program. Paragraph 6.16.1 of DoDI 1025.7 states DoD support for a STARBASE Academy may be terminated because a STARBASE Academy fails to provide data necessary for the compilation of the annual Congressional report. Before returning the questionnaire, review each item for completeness and/or explain the data's unavailability. The due date is on or before October 15, 2007. Email the completed file to dovenden@spectrumgrp.com

INSTRUCTIONS

1. This questionnaire is divided into seven sections, each of which is contained on a separate worksheet.
 - I. Introduction
 - II. Academy Information
 - III. Academy Statistics
 - IV. Curriculum
 - V. Operations
 - VI. Financial Information
 - VII. Supporting Materials and Suggestions
2. Please enter your data in the light blue cells only.
3. Please do not attempt to make changes to the format of the worksheets.
4. Upon completion, submit the entire file with ALL worksheets to dovenden@spectrumgrp.com

II. ACADEMY INFORMATION

1. Please provide this information as you would like it to appear in the annual report and participant directories.	Name of Academy	
	Academy Director	
	Military Affiliation	
	Military Location	
	Address 1	
	Address 2	
	City	
	State	
	ZIP	
	Telephone Number	
	DSN	
	Fax Number	
	Fax DSN	
	Email Address	
	Website Address	
	Base Commander:	
	Name	
	Address 1	
	Address 2	
	City	
	State	
	ZIP	
	Telephone Number	

III. ACADEMY STATISTICS

2. FY07 Statistics	Type of Program	Number of Schools	Number of Classes	Number of Students
	5-Day			
	4-Day			
	Other			
	Total - 4 and 5-Day Programs	0	0	0

2a. Briefly describe the type of program(s) taught outside the 4 or 5-day program, if applicable.

2a. Briefly describe the type of program(s) taught outside the 4 or 5-day program, if applicable.	
---	--

QUESTIONS 3 THROUGH 9 REFER ONLY TO 4 OR 5-DAY CURRICULUM-BASED PROGRAMS.

3. FY07 Average class size

3. FY07 Average class size	
----------------------------	--

4. FY07 Grade Levels

Place an 'X' in the appropriate boxes

K	1	2	3	4	5	6	7	8	9	10	11	12

2. FY07 Demographics

Total numbers

Females	Males	TOTAL
		0

6. FY07 Ethnicity (Please enter a 0 for ethnic groups with no students)

Total numbers

Black/ African American	Asian Pacific Islander	Caucasian	Hispanic or Latino	Multi- Race	American Indian/ Alaska Native	Other	Total
							0

7. Total Number of Students who are Economically Disadvantaged

--

Note: If you do not collect this information please go to www.schoolmatters.com

8. Have you correlated your curriculum with your State's Standards?

--

9. FY07 Locally Administered Pre/Post Test Raw Data	Number of Test Questions	Average Number of Answers Correct		Change	
		Pretest	Post Test	Point Gain	% Increase
					0

IV. CURRICULUM

10. Indicate out of the 20-25 required hours, the estimated hours devoted to each topic.	Curriculum Topic	Embedded	Hours Experiential	Hours Lecture
	<i>Sample Topic</i>	0.25	1.25	1.25
	Newton's Laws of Motion			
	Four Forces of Flight			
	Bernoulli's Principle			
	Model Rocketry			
	Aircraft Control Surfaces			
	Properties of Air			
	Development, Innovation and Use of Technology			
	Properties and States of Matter			
	Flight Simulation			
	Space Exploration			
	Goal Setting			
	Teamwork			
	Avoiding Substance Abuse			
	Column Totals	0	0	0
	Other (Lunches, Breaks, etc.			
	Grand Total (Must equal 20 for 4-day academies and 25 for 5-day academies). Does not include embedded hours.			

10a. Out of the 20-25 required hours, how many are dedicated to PTC?

--

10b. Out of the 20-25 required hours, how many are spent on math? If it is imbedded, please explain in question 10c.

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10c. If a topic is embedded in other topical areas, please explain.

--

10d. If this coverage is different from last year, please identify and explain.

--

11. Out of the 20-25 required hours per class, indicate the number of hours spent at each location.

Military	Non-military

12. Do you have a staff training program?

--

12a. If yes, please describe.

--

13. Do you provide training to local teachers?			
13a. If yes, please estimate the number of hours contributed to each topic.	Topic	Estimated Hours	When Do You Provide This Training?
	<i>Sample Topic</i>	4	<i>Late spring</i>
	Continuing Education Workshops		
	Local, State, National Conference Workshops		
	Student-Teacher Workshops		
	Experiential Training for Student Teachers		
	Methods Courses through Local Universities		
	Other (Please describe below)		

14. Over this past year, how often did you share/obtain materials/ lessons-learned with other Academies?	Share	
	Obtain	

15. Do you provide additional curriculum materials to schools/teachers?	
15a. If yes, were they used?	
15b. If yes, what materials did you provide?	

16. What are your TOP 3 primary sources for materials, teaching aids, curriculum, and other program operations procedures?	

V. OPERATIONS

17. FY07 Staffing	Position	Number Full-Time	Number Part-Time	Status
	Program Instructor	1	1	State Employee
	Director			
	Deputy Director/Program Instructor			
	Program Instructor			
	Sec./Admin. Asst./Office Mgr.			
	Other Position (List below)			
17b. If your current staffing does not reflect the DODI manning model, do you have a waiver?				

18. FY07 Personnel Funded by Non-DOD Cash Donations (If none, please enter "N/A")	Position	Total Number

19. Staff Changes From Last Reporting Cycle (If none, please enter "N/A")	Position	Reason for Departure	On approximately what date did they leave?	Has the vacancy been filled?	Approximately how many weeks did it take to fill the vacancy?

20. Volunteer Activity (Please estimate the number of volunteers and volunteer hours committed in FY07)	Volunteer Group	Number of Volunteers	Number of Hours
	Military		
	Teachers		
	Parents		
	Other		

21. Current Program Service Area		
	If other, please explain.	

22. What support services, in whole or in part, did the participating schools provide? (Mark all that apply with an "X")	Transportation	
	Duplication/printing	
	Audiovisual Equipment	
	Teachers as monitors	
	Educational supplies	
	Communications	
	Lunches	
	Graphics	
	Computers	
	Other (Please specify below)	

23. In what year was your last property audit conducted?	
Who was the auditing agent?	

Please submit a copy of the results of your latest audit(s) to The SPECTRUM Group, 11 Canal Center Plaza Suite 103, Alexandria, VA 22314 or email to: dovenden@spectrumgrp.com.

24. Do you have a real property listing on file?	
24a. Does it include all non-expendable property or just property at a certain dollar amount?	

25. In what year was your last property audit conducted?	
Who was the auditing agent?	

Please submit a copy of the results of your latest audit(s) to The SPECTRUM Group, 11 Canal Center Plaza Suite 103, Alexandria, VA 22314 or email to: dovenden@spectrumgrp.com.

26. Do you give STARBASE presentations to community groups?															
26a. Please list which groups and how often.	<table border="1"> <thead> <tr> <th>Group</th> <th>How Often</th> </tr> </thead> <tbody> <tr> <td>Superintendent of Schools</td> <td></td> </tr> <tr> <td>Principal</td> <td></td> </tr> <tr> <td>Base Commander</td> <td></td> </tr> <tr> <td>Community Leaders</td> <td></td> </tr> <tr> <td>Other</td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>	Group	How Often	Superintendent of Schools		Principal		Base Commander		Community Leaders		Other			
	Group	How Often													
	Superintendent of Schools														
	Principal														
	Base Commander														
	Community Leaders														
	Other														

27. Do you have a non-profit organization?		X	please identify the top 3 functions with numbers (1,2 and 3)	
27a. If yes, what is the function of the board of directors? (Mark all that apply with an "X.") <i>Please note that the DoDI, para 5.3.6 states that "At no time will such a local non-profit organization assume any fiduciary or legal decision-making responsibility in place of either the DOD Component or the local commander."</i>	Selection of schools			
	Review of potential staff personnel			
	Budget planning and review			
	Review of recommendation of subcontractor relationships			
	Grant writing/submissions			
	Program planning/annual review			
	Fundraising/marketing of program			
	Compliant to DoDI policies and review			
	Other (Please specify below)			

	Document	Status
28. Please indicate which of these core documents you have on file.	Staff/Students Schedules	
	Curriculum Outline	
	Program Operations Manual	
	Program Director's Guide	
	Local/State Testing Data	
	FY08 Strategic Plan/Program Goals	
	Memorandums of Understanding (MOU)	
	Minutes of Board Meetings	
	Bylaws and Articles of Incorporation	
	Voluntary Participation Form	
	Hold Harmless Agreement	
	Emergency Health Form	
	Public Affairs Release	
	Incident Report Form	
	Parent/Guardian Acknowledgement of Responsibility for Property Damage	
A written waiver from OASD/RA for academies located at non-military facilities.		

29. Over this past program year, have there been any events that have had an effect on your program's operation (e.g. Homeland Security, Iraq information, staff turnover, weather, etc.)?

30a. If yes, please briefly explain the event(s) and its effect on the program.

30b. If yes, what residual consequences, if any, will the event have into the FY07 program year?

New Sites Only: Did you receive a Program Director's Guide?

New Sites Only: Do you have a program operations manual?

VI. FINANCIAL INFORMATION

31. FY07 Academy Income	DOD Income (\$)	Additional Income (\$)	Total Income (\$)
		\$	\$

32. FY07 DOD Cash Expenditures: (October 1, 2006 - September 30, 2007)	Category of Expenditure	Amount Expended (\$)	Percentage of Total
	Staff		
	Facilities/Furnishings		
	Transportation/Travel		
	Supplies		
	Equipment		
	Contract Services		
	Communications/Outreach		
	Total:	\$	0.0%
	Staff Detail (include benefits)		
	Program Director		
	Deputy Director/ Program Instructor		
	Program Instructor		
	Office Manager		
	Other		
Total:	\$	0.0%	

33. FY07 Additional Income Expenditures (non-DOD funds expenditures)	Category of Expenditure	Amount Expended (\$)	Percentage of Total
	Staff Salaries		
	Staff Development		
	Facilities/Furnishings		
	Transportation/Travel		
	Supplies		
	Equipment		
	Services		
	Program/Curriculum Development		
	Communications/Outreach		
	Other		
	Total:	\$	

34. FY07 Source of Additional Income	Source of Funding	Amount (\$)	Percentage of Total
	Grants		
	Donations		
	State		
	Other (Please Specify Below)		
	Total:	\$	

35. FY07 In-Kind Donations (non-cash gifts, e.g. classroom space, copiers, printing, etc.)	Donation	Source of Donation	Estimated Dollar Value
	Facilities		
	Furnishings		
	Supplies		
	Transportation/Travel		
	Services		
	Equipment		
	Communications/Outreach		
	Other		
	Total:		\$

36. FY08 Projected Other Income (Provide best estimate)	Source of Funding	Amount (\$)	Percentage of Total
	Grants		
	Donations		
	State		
	Other (Please Specify Below)		
	Total:	\$	



DIRECTORY OF
DOD STARBASE
Academies

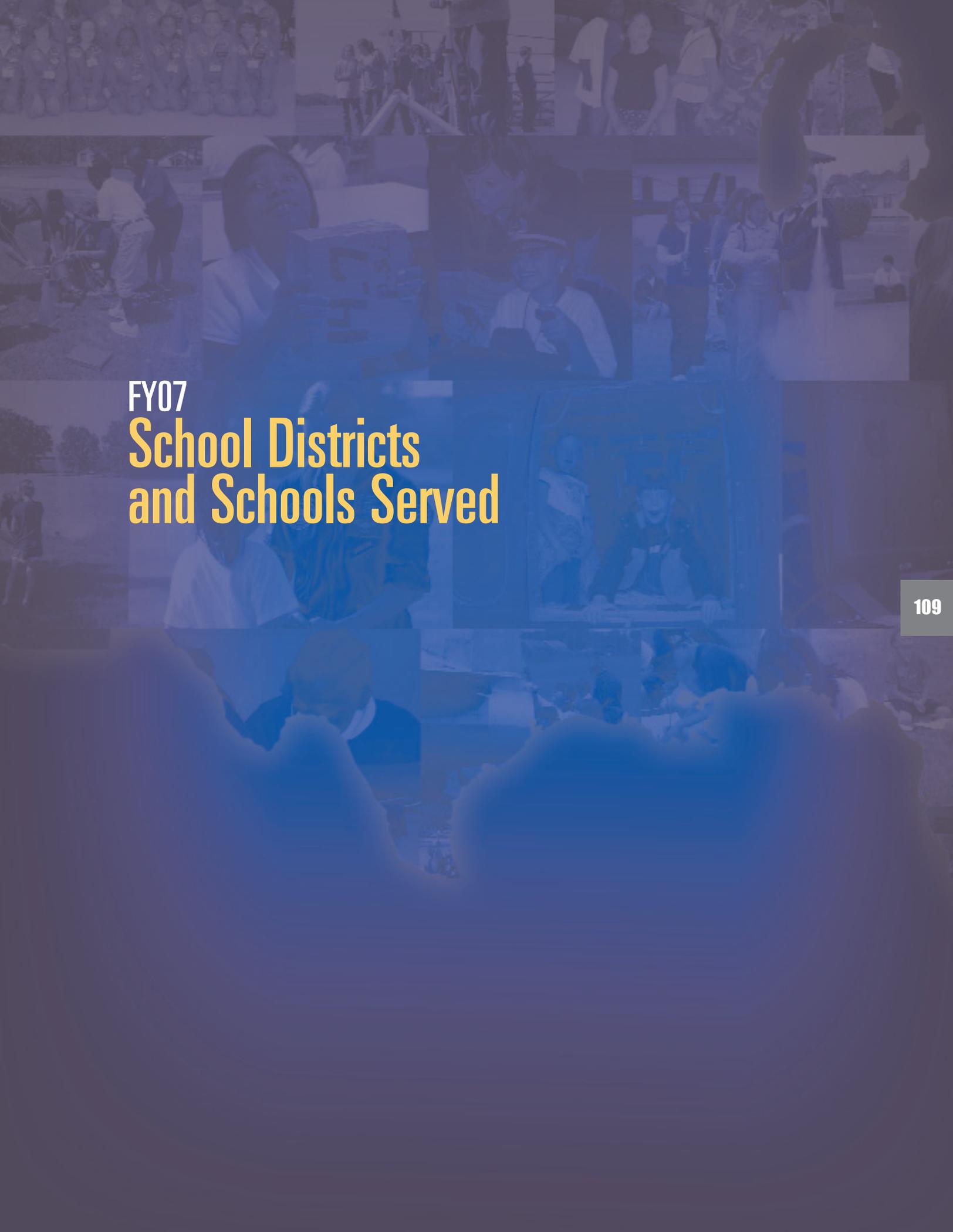
Directory of DOD STARBASE® Academies

STATE/CITY	SERVICE COMPONENT	MILITARY COMMAND & LOCATION	DIRECTOR	EMAIL / WEBSITE	PHONE	MAILING ADDRESS
Alabama – Montgomery	Air Force	Maxwell Air Force Base	Marvin (Chip) Haughton, Jr.	marvin.haughton@maxwell.af.mil	Phone: 334.953.4821 Fax: 334.953.4626 DSN: 493.4821	STARBASE Maxwell 60 West Maxwell Blvd Bldg. 835 Basement East Montgomery, AL 36112
Alaska – Anchorage	National Guard	Alaska National Guard, Fort Richardson	Shanna McPheters	shanna.mcpheters@alaska.gov www.starbasealaska.org	Phone: 907.384.6351 Fax: 907.384.6350	STARBASE Alaska P.O. Box 5185 Fort Richardson, AK 99505
Arizona – Tucson	Air Force	355th Fighter Wing, Air Combat Command, Davis-Monthan Air Force Base	Margaret Cole	Margaret.cole@starbaseaz.com	Phone: 520.288.7827 Fax: 520.228.0491	STARBASE Arizona Air Combat Command 355th Fighter Wing 5260 E Granite Street Davis-Monthan AFB, AZ 85707
California – Sacramento	Air National Guard	California National Guard Sacramento Armory	John Lamb	castarbase@sbcglobal.net	Phone: 916.387.7405 Fax: 916.387.8309	California STARBASE 8400 Okinawa St., Suite 1 Sacramento, CA 95828
California – San Diego	Navy	Commanding Officer, Naval Base San Diego	Nicholas Jordan	nicholas.jordan@navy.mil	Phone: 619.556.7589 Fax: 619.556.9310	STARBASE Atlantis San Diego 3975 Norman Scott Road San Diego, CA 92136
Connecticut – Hartford	National Guard	Bradley Air National Guard Base Bradley Airport	Bob Gillanders	bobcms86@sbcglobal.net	Phone: 860.728.0090 Fax: 860.728.3293	STARBASE Hartford 251 Maxim Road Hartford, CT 06114
Connecticut – Waterbury	Air National Guard	Naugatuck Community College	Bob Gillanders	bobcms86@sbcglobal.net	Phone: 203.575.8271 Fax: 203.575.8018	STARBASE Waterbury 750 Chase Parkway Waterbury, CT 06708
District of Columbia – Washington	Navy	Commanding Officer, Washington Navy Yard	Dr. Judy Kalish	judy.kalish@navy.mil www.ndw.navy.mil/headquarters/ communityservices/starbase/ /index.htm	Phone: 202.433.0531 Fax: 202.433.0534	STARBASE Atlantis Washington Navy Yard 645 Rickover Street, SE Bldg. 21, Suite 102 Washington, DC 20374
Florida – Jacksonville	Air National Guard	125th Fighter Wing Florida Air National Guard Jacksonville International Airport	Greg Stritch	gregory.stritch@fljack.ang.af.mil	Phone: 904.741.7320 Fax: 904.741.7324	STARBASE Florida 14300 Fang Drive Jacksonville, FL 32218
Florida – Pensacola	Navy	Commanding Officer, Naval Air Station Pensacola & Naval Air Station Whiting Field	Donna Eichling	deichling@aol.com www.cnet.navy.mil/ community/starbase/sa.html	Phone: 850.452.8287 Fax: 850.452.8288	STARBASE Atlantis NAS Pensacola/ Whiting Field 6490 Saufley Field Road Pensacola, FL 32509
Georgia – Marietta	Air National Guard	Georgia National Guard Dobbins Air Reserve Base	Bill Wells	bill.wells@ga.ngb.army.mil	Phone: 678.655.4667 Fax: 678.655.4667	Peach State STARBASE 1484 Patrol Road Bldg. 935 Dobbins ARB, GA 30069
Georgia – Warner Robins	Air Force Reserve	Commander, Air Force Reserve Command, Robins Air Force Base	Wesley Fondal	wesley@starbaserobins.org www.starbaserobins.org	Phone: 478.926.1769 Fax: 478.926.1770	STARBASE Robins 1941 Heritage Blvd. P.O. Box 2469 Warner Robins, GA 31099
Hawaii – Pearl Harbor	Navy	Commanding Officer, Navy Submarine Training Center Pacific	Joseph Barrett	joseph.p.barrett@navy.mil	Phone: 808.472.7389 Fax: 808.472.9923	STARBASE Atlantis-Hawaii Naval Submarine Training Center Pacific 1130 Bole Loop Bldg 39, Ford Island Pearl Harbor, HI 96860

STATE/CITY	SERVICE COMPONENT	MILITARY COMMAND & LOCATION	DIRECTOR	EMAIL/WEBSITE	PHONE	MAILING ADDRESS
Illinois – Great Lakes	Navy	Commanding Officer, Naval Station Great Lakes	Steven Surbrook	steven.surbrook@navy.mil	Phone: 847.688.2509 Fax: 847.688.3136	STARBASE Atlantis-Great Lakes 2221 Mac Donough Drive Bldg. 617, Room 122 Great Lakes, IL 60088
Kansas - Topeka	Air National Guard	Kansas National Guard, Forbes Field Air National	Jeff Gabriel	jeff.gabriel@kstope.ang.af.mil www.kansasstarbase.org	Phone: 785.861.4709 Fax: 785.861.4127	STARBASE Topeka and Kansas City 5920 SE Coyote Drive Topeka, KS 66619
Kansas - Wichita	Air National Guard	Kansas National Guard, McConnell Air Force Base	Jeff Gabriel	jeff.gabriel@kstope.ang.af.mil www.kansasstarbase.org	Phone: 316.759.7096 Fax: 316.759.7094	STARBASE Topeka and Salina 52870 Jayhawk Drive McConnell AFB, KS 67221
Louisiana - Pineville	Air National Guard	Louisiana National Guard, Camp Beauregard	Cheryl Arbour	cheryl.arbour1@us.army.mil www.la.ngb.army.mil/education.htm	Phone: 318.290.5252 Fax: 318.290.5937	Pelican State STARBASE Camp Beauregard 609 F Street Pineville, LA 71360
Louisiana - Barksdale	Air Force Reserve	Commander, 917th Wing, Barksdale Air Force Base	Kathy Brandon	kathy.brandon@barksdale.af.mil www.917wg.afrc.af.mil/units/starbaselouisiana/	Phone: 318.456.1315 Fax: 318.456.1151	STARBASE Louisiana 1000 Davis Ave East Barksdale AFB, LA 71110
Maine - Bangor	Air National Guard	Maine National Guard, Air National Guard Base Bangor	Michele Barnes	michele.barnes@mebngr.ang.af.mil	Phone: 207.990.7505 Fax: 207.990.7150	STARBASE Maine 105 Maineiac Avenue Building 510 Bangor, ME 04401
Maryland - Patuxent River	Navy	Commanding Officer, Naval Air Station Patuxent River	Shannon Ricles	shannon.ricles@navy.mil	Phone: 301.342.2789 Fax: 301.342.5457	STARBASE Atlantis-Pax River 47253 Whalen Road Bldg 588, Room 102 Patuxent River, MD 20670
Michigan - Battle Creek	Air National Guard	Michigan National Guard, Battle Creek Air National Guard Base	Barbara Koscak	MISTARBASE@aol.com www.STARBASEOne.org	Phone: 586.307.4884 Fax: 586.307.5751	STARBASE Battle Creek 3595 Mustang Avenue Bldg 6909 Battle Creek ANG Base, MI 49037
Michigan - Selfridge	Air National Guard	Michigan National Guard, Selfridge Air National Guard Base	Barbara Koscak	MISTARBASE@aol.com www.STARBASEOne.org	Phone: 586.307.4884 Fax: 586.307.5751	STARBASE One P.O. Box 450082 27310 D Street, Bldg 1051 Selfridge ANG Base, MI 48045
Minnesota - St. Paul	Air National Guard	133rd Airlift Wing, Guard Base Minnesota Air National Guard Base	Kim Van Wie	kvanwie@starbasemn.org www.starbasemn.org	Phone: 612.713.2530 Fax: 612.713.2540	STARBASE Minnesota 133rd Airlift Wing 659 Mustang Avenue St. Paul, MN 55111
Mississippi - Gulfport	Navy	Commanding Officer, Naval Construction Training Command	Shelley Bard	shelley.bard@navy.mil	Phone: 228.871.3735 Fax: 228.871.3468	STARBASE Atlantis-Gulfport 5510 CBC 8th Street Bldg 386 Gulfport, MS 39501
Mississippi - Meridian	Navy	Commanding Officer, Naval Air Station Meridian & Choctaw Indian Reservation	Pam Litton	pam.litton@navy.mil	Phone: 601.679.3809 Fax: 601.679.3812	STARBASE Atlantis-Meridian 266 Rosenbaum Avenue Meridian, MS 39309
Montana - Helena	Air National Guard	Montana National Guard, Fort Harrison	Michael Stone	mstone@bresnan.net or mstone@mt.gov	Phone: 406.324.3727 Fax: 406.324.3735	STARBASE Montana PO Box 4789 Fort Harrison, MT 59636
Nebraska - Lincoln	Air National Guard	Nebraska National Guard, Air National Guard Base Lincoln	Sherry Pawelko	spawelko@starbasene.org www.starbasene.org	Phone: 402.309.1044 Fax: 402.309.1045	STARBASE Nebraska Penterman Armory Rm 201 2400 NW 24th St. Lincoln, NE 68524

STATE/CITY	SERVICE COMPONENT	MILITARY COMMAND & LOCATION	DIRECTOR	EMAIL/WEBSITE	PHONE	MAILING ADDRESS
New Mexico - Albuquerque	Air Force	Commander, Air Force Reseach Laboratory, Kirtland Air Force Base	Ronda Cole	ronda.cole@kirtland.af.mil	Phone: 505.846.8042 Fax: 505.846.8932	AF STARBASE La Luz P.O. Box 9556 Albuquerque, NM 87119
North Carolina - Charlotte	Air National Guard	145th Airlift Wing, North Carolina Air National Guard	Barbara Miller	barbara.miller.ctr@ncchar.ang.af.mil	Phone: 704.398.4819 Fax: 704.398.4822	STARBASE North Carolina-Charlotte 4930 Minuteman Way Charlotte, NC 28208
North Carolina - Kure Beach	Air National Guard	North Carolina National Guard, North Carolina National Guard Training Center	Barbara Miller	barbara.miller.ctr@ncchar.	Phone: 910.251.7332 Fax: 910.252.7335	STARBASE North Carolina-Kure Beach 116 Air Force Way Kure Beach, NC 28449
Ohio - Wright-Patterson	Air Force	Commander, Air Force Research Laboratory Wright Patterson Air Force Base	Kathleen Schweinfurth	kathleen.schweinfurth@wpafb.af.mil http://edoutreach.wpafb.af.mil/starbase.htm	Phone: 937.255.0692 Fax: 937.904.8033	STARBASE Wright-Patt DET1 AFRL/WSC 2130th 8th Street WPAFB, OH 45433
Oklahoma - Oklahoma City	Air National Guard	137th Fighter Wing, Oklahoma Air National Guard, Will Rogers Air National Guard Base	Bill Scott	bill.scott@oktuls.ang.af.mil www.starbaseok.org	Phone: 918.833.7757 Fax: 918.833.7769	STARBASE Oklahoma-Oklahoma City 9131 E Viper Street Tulsa, OK 74115 Physical Location: 137th Fighter Wing, Will Rogers ANG Base
Oklahoma - Tulsa	Air National Guard	138th Fighter Wing, Oklahoma Air National Guard Base Tulsa	Bill Scott	bill.scott@oktuls.ang.af.mil www.starbaseok.org	Phone: 918.833.7757 Fax: 918.833.7769	STARBASE Oklahoma Tulsa & NIA 138th Fighter Wing Tulsa ANG Base 9131 E Viper Street Tulsa, OK 74115
Oregon - Klamath Falls	Air National Guard	Oregon National Guard, Kingsley Field	Marsha Beardslee	starbase2@earthlink.net www.starbasekingsley.org	Phone: 541.885.6472 Fax: 541.885.6196	STARBASE Kingsley 173rd FW/ Kingsley Field 302 Bong Street, Suite 19 Klamath Falls, OR 97603
Oregon - Portland	Air National Guard	Oregon National Guard, Portland Air National Guard Base	Marilyn Sholian	msholian@pps.k12.or.us www.mil.state.or.us/starbaseor/ starbasepdx/starbase.html	Phone: 503.916.5404 ext. 1061 Fax: 503.916.2795	STARBASE Portland 6433 NE Tillamook Portland, OR 97213
Pennsylvania - Pittsburgh	Navy Reserve	Commanding Officer, Naval Operational Support Center - Pittsburgh	Ken C. Mechling, Jr.	starbase.ken.mechlingjr@comcast.net www.starbase-atlantis-pittsburgh.org	Phone: 412.672.4890 Fax: 412.672.4894	STARBASE Atlantis-Pittsburgh 625 East Pittsburgh/ McKeesport Boulevard North Versailles, PA 15137
Puerto Rico - Carolina	Air National Guard	Puerto Rico National Guard, Muñiz AFB	Idabells Matos	idabells.matos@prsanj.ang.af.mil	Phone: 787.253.7502 Fax: 787.253.2513	STARBASE Puerto Rico 200 Jose A. Santana Ave. Muñiz AFB Carolina, PR 00979
Rhode Island - Newport	Navy	Commanding Officer, Naval Station Newport	Patrick Rossoni	patrick.rossoni@navy.mil	Phone: 401.841.4072 Fax: 401.841.4075	STARBASE Atlantis-Newport 440 Meyerkord Avenue Perry Hall, Room 012 Newport, RI 02841
South Carolina - Beaufort	Marine Corps	Commanding Officer, Marine Corps Air Station Beaufort	Wendell Roberson, Sr.	starbasemcas1@embarqmail.com www.homestead.com/starbase inc/homeindex.html	Phone: 843.524.1320/ 1322/1328 Fax: 843.524.1326	STARBASE MCAS Beaufort P.O. Box 55013 Bldg 660 Beaufort, SC 29904
South Carolina - Columbia	Air National Guard	South Carolina National Guard, McEntire Joint National Guard Base	James Hiott	James.Hiott.1@scmcen.ang.af.mil www.scstarbase.com	Phone: 803.647.8127 Fax: 803.647.8195	STARBASE Swamp Fox McEntire Joint National Guard Base 1325 South Carolina Road Eastover, SC 29044
South Dakota - Rapid City	Air National Guard	South Dakota National Guard, Camp Rapid	Judy Gorman	starbase@sd.ngb.army.mil	Phone: 605.737.6083 Fax: 605.737.6082	STARBASE Rapid City 2823 West Main Street Bldg. 123 Rapid City, SD 57702

STATE/CITY	SERVICE COMPONENT	MILITARY COMMAND & LOCATION	DIRECTOR	EMAIL/WEBSITE	PHONE	MAILING ADDRESS
South Dakota - Sioux Falls/ Project NOVA	Air National Guard	Commander ANGB, 114th FW South Dakota National Guard	Susan Garrett	sdstarbase@hotmail.com	Phone: 605.367.4930 Fax: 605.367.4926	STARBASE Sioux Falls/NOVA 801 W. National Guard Drive Sioux Falls, SD 57104
Texas - Corpus Christi	Navy	Commanding Officer, Naval Air Station Corpus Christi	Crystal Trujillo	crystal.trujillo@navy.mil	Phone: 361.961.5318 Fax: 361.961.3566	STARBASE Atlantis - Corpus Christi 11001 D Street Building 60 Corpus Christi, TX 78419
Texas - Houston	Air National Guard	Texas National Guard, Ellington Field	Gail Whittemore-Smith	gail.whittemore@txelli.ang.af.mil	Phone: 281.929.2034 Fax: 281.929.2036	Texas STARBASE 14657 Sneider Street Bldg 1055 Houston, TX 77034
Texas - San Antonio	Air Force Reserve	Commander, 433 Airlift Wing, Lackland Air Force Base	Ron Jackson	starbase@stic.net	Phone: 210.925.3708 Fax: 210.925.3702	STARBASE Kelly 203 Galaxy Road Suite 112 Lackland AFB, TX 78236
Vermont - Rutland	Air National Guard	Vermont National Guard - Rutland Armory	Doug Gilman	douglas.gilman@vtburl.ang.af.mil www.starbasevt.org	Phone: 802.786.3820 Fax: 802.728.3822	STARBASE Vermont-Rutland 15 West Street Rutland, VT 05701
Vermont - Burlington	Air National Guard	Vermont National Guard - Air National Guard Base	Doug Gilman	douglas.gilman@vtburl.ang.af.mil www.starbasevt.org	Phone: 802.660.5201 Fax: 802.660.5940	STARBASE Vermont-South Burlington 100 NCO Drive Bldg 90 South Burlington, VT 0540
Virginia - Norfolk	Navy	Commanding Officer, Naval Station Norfolk	Scott Weltzin	scott.weltzin@navy.mil www.npdc.navy.mil/starbase.norfolk/index.html	Phone: 757.445.5905 Fax: 757.445.2624	STARBASE Atlantis-Norfolk Building N25 Room 102 1474 Gilbert Street Norfolk, VA 23511
Washington - Silverdale	Navy	Commanding Officer, Naval Base Kitsap (Bangor Submarine Base)	Morrell Yates	morrell.yates@navy.mil www.cfs.cnet.navy.mil/tfbangor/pers_dev/starbase/starbase.htm	Phone: 360.315.2671 Fax: 360.315.2747	STARBASE Atlantis-Bangor Trident Training Facility 2000 Thresher Avenue Room D222 Silverdale, WA 98315
West Virginia - Charleston	Air National Guard	130th Airlift Wing, West Virginia West Virginia Air National Guard	Chris Treadway	starbase@wvchar.ang.af.mil www.wvstarbase.org	Phone: 304.341.6441	West Virginia STARBASE Academy 1679 Coonskin Drive Charleston, WV 25311
West Virginia - Martinsburg	Air National Guard	167th Airlift Wing, West Virginia Air National Guard	Sherra Triggs	STARBASE@wvmart.ang.af.mil www.wvstarbase.org	Phone: 304.616.5501 Fax: 304.616.5478	STARBASE Martinsburg 167th Airlift Wing 222 Sabre Jet Boulevard Martinsburg, WV 25405
Wyoming - Cheyenne	Air National Guard	153rd Airlift Wing, Wyoming Air National Guard	David Orr	davido@starbasewy.org www.starbasewy.org	Phone: 307.772.6161 Fax: 307.772.6017	Wyoming STARBASE 217 Dell Range Boulevard Cheyenne, WY 82009



FY07
**School Districts
and Schools Served**

ALABAMA

District: Autauga County Public School District

Autaugaville Elementary School
Prattville Intermediate School
Billingsley Elementary School
Pine Level Elementary School

District: Elmore County Public School District

Eclectic Middle School
Holtville Middle School
Wetumpka Intermediate School

District: Montgomery County Public School District

Blount Elementary School
Carver Elementary School
Catoma Elementary School
Dalraida Elementary School
Dannelly Elementary School
Floyd Elementary School
Garrett Elementary School
Harrison Elementary School
Head Elementary School
McKee Elementary School
McMillan International Academy
Morningview Elementary School
Morris Elementary School
Nixon Elementary School
Paterson Elementary School
Pintlala Elementary School

District: Department of Defense Elementary School System (DODESS)

Maxwell Elementary School

ALASKA

Anchorage

District: Anchorage School District

Bayshore Elementary School
Chinook Elementary School
Kasuun Elementary School
Lake Otis Elementary School
Mount Spurr Elementary School
Muldoon Elementary School
Orion Elementary School
Ptarmigan Elementary School
Rabbit Creek Elementary School
Rogers Park Elementary School
Russian Jack Elementary School
Sand Lake Elementary School
Taku Elementary School
Tyson, William Elementary School
Ursa Minor Elementary School
Willow Crest Elementary School

Wonder Park Elementary School
Woods, Gladys Elementary School

District: Matanuska Susitna School District

Academy Charter Elementary School
Wasilla Middle School

Kenai

District: Kenai Peninsula Borough School District

Cook Inlet Academy
K-Beach Elementary School
Moose Pass Elementary School
Nikiski North Star Elementary School
Redoubt Elementary School
Soldotna Montessori Charter School
Tustumena Elementary School
West Homer Elementary School

ARIZONA

District: Amphitheater School District

Copper Creek Elementary School
Coronado K-8 School
Donaldson Elementary School
Holaway Elementary School
Mesa Verde Elementary School
Nash Elementary School
Prince Elementary School
Rio Vista Elementary School
Wilson K-8 School

District: Tucson Unified School District

Lawrence Elementary School

District: Vail School District

Cottonwood Elementary School
Old Vail Middle School
Sycamore Elementary School

District: Other

Cornerstone Christian Academy
Tucson Country Day School

CALIFORNIA

Sacramento

District: Auburn Union School District

Alta Vista Elementary School
District: Elk Grove Unified School District
Arthur C. Butler Elementary School
Charles E. Mack Elementary School
Elk Grove Elementary School
Florence Markofer Elementary School
Joseph Sims Elementary School
Mary Tsukamoto Elementary School

Prairie Oaks Elementary School
Roy Herburger Elementary School
Union House Elementary School

District: Elverta Joint School District

Elverta Elementary School

District: Folsom Cordova Unified School District

Blanche Sprentz Elementary School
Carl H. Sundahl Elementary School
Cordova Gardens Elementary School
Cordova Lane Elementary School
Cordova Meadows Elementary School
Cordova Villa Elementary School
Empire Oaks Elementary School
Folsom Hills Elementary School
Gold Ridge Elementary School
Mather Heights Elementary School
Natoma Station Elementary School
Navigator Elementary School
Oak Chan Elementary School
Peter J. Shields Elementary School
Rancho Cordova Elementary School
Riverview Elementary School
Sandra J. Gallardo Elementary School
Theodore Judah Elementary School
White Rock Elementary School
Williamson Elementary School

District: Loomis Union School District

Franklin Elementary School
H. Clark Powers Elementary School
Loomis Elementary School
Penryn Elementary School
Placer Elementary School

District: Newcastle Elementary School District

Newcastle Elementary School

District: Ophir Elementary School District

Ophir Elementary School

District: Rio Linda Union School District

Aero Haven Elementary School
Allison Elementary School
Dry Creek Elementary School
Foothill Oaks Elementary School
Frontier Elementary School
Hillsdale Elementary School
Holmes Elementary School
Larchmont Elementary School
Madison Elementary School
Oakdale Elementary School
Orchard Elementary School
Regency Park Elementary School
Ridgepoint Elementary School
Rio Linda Elementary School
Sierra View Elementary School

Village Elementary School
Westside Elementary School
Woodbridge Elementary School

District: Robla Elementary School District

Bell Avenue Elementary School
Main Avenue Elementary School
Robla Elementary School
Taylor Street Elementary School

District: Sacramento City Unified School District

Cesar Chavez Elementary School
Martin Luther King, Jr. Elementary School

Other:

St. John Vianney Elementary School

San Diego

District: Chula Vista Elementary School District

Feaster-Edison Charter School
Harborside Elementary School
John J. Montgomery Elementary School
Lillian J. Rice Elementary School
Vista Square Elementary School

District: National City School District

Central Elementary School
El Toyon Elementary School
John A. Otis Elementary School
Olivewood Elementary School
Rancho De La Nacion Elementary School

District: San Diego Unified School District

Darnall Charter Elementary School
Jefferson Elementary School
Porter Elementary School

CONNECTICUT

Hartford

District: Hartford School District

Anne Fisher Elementary School
Barnard Brown Elementary School
Breakthrough Elementary School
Burns Elementary School
Burr Elementary School
Dwight Elementary School
Jumoke Elementary School
Kennelly Elementary School
Mark Twain Elementary School
Martin Luther King Elementary School
McDonough Elementary School

Michael D Fox Elementary School
Milner Elementary School
Moylan Elementary School
Naylor Elementary School
Noah Webster Elementary School
Parkville Elementary School
Rawson Elementary School
Sand Elementary School
Simpson Waverly Elementary School
West Middle School

Waterbury

District: Seymour School District
Our Lady of Mount Carmel Elementary School

District: Waterbury School District

Barnard Elementary School
Brooklyn Elementary School
Bunker Hill Elementary School
Carrington Elementary School
Chase Elementary School
Driggs Elementary School
Generali Elementary School
Kingsbury Elementary School
Maloney Magnet Elementary School
Regan Elementary School
Rotella Elementary School
Sprague Elementary School
State Street Elementary School
Tinker Elementary School
Walsh Elementary School
Washington Elementary School
Wendell Cross Elementary School
Woodrow Wilson Elementary School

DISTRICT OF COLUMBIA

District: District of Columbia Public School District

Aiton Elementary School
Bruce Monroe Elementary School
Bunker Hill Elementary School
Emery Elementary School
Garfield Elementary School
LaSalle Elementary School
Leckie Elementary School
Payne Elementary School
Raymond Elementary School
Shepherd Elementary School
Simon Elementary School
Trusdell Elementary School
West Elementary School
Whittier Elementary School

FLORIDA

Jacksonville

District: Duval County School District

Arlington Heights Elementary School
Biltmore Elementary School
Brentwood Elementary School
Cedar Hills Elementary School
Highlands Elementary School
Hyde Grove Elementary School
Hyde Park Elementary School
Livingston Elementary School
Long Branch Elementary School
Martin Luther King Elementary School
Matthew Gilbert Middle School
North Shore Elementary School
Norwood Elementary School
Rutledge Pearson Elementary School
St. Clair Evans Elementary School

Other:

Center Academy Middle School
Emma Love Hardee Elementary School
Sunshine Academy

Pensacola

District: Escambia County Public School District

Allie Yniestra Elementary School
Brentwood Elementary School
C.A. Weis Elementary School
Edgewater Elementary School
Ensley Elementary School
George S. Hallmark Elementary School
Lincoln Park Elementary School
O.J. Semmes Elementary School
Oakcrest Elementary School
Sherwood Elementary School
Warrington Elementary School

Other:

East Hill Christian Elementary School
St Paul Catholic Elementary School
Whiting Field (Outreach)

District: Santa Rosa County School District

Bagdad Elementary School
Berryhill Elementary School
Chumuckla Elementary School
Dixon Intermediate School
East Milton Elementary School
Holly-Navarre Intermediate School
Jay Elementary School
Munson Elementary School
Oriole Beach Elementary School
Pea Ridge Elementary School
Rhodes Elementary School

Other:
Escambia Westgate Academy

GEORGIA

Marietta

District: Marietta City School District
Hickory Hill Elementary School
Lockheed Elementary School

District: Cobb County School District
Brown Elementary School
Green Acres Elementary School
Harmony Leland Elementary School
Milford Elementary School
Powder Springs Elementary School
Russell Elementary School

Warner Robins

District: Bibb County School District
Bernd Elementary School
Burdell Hunt Elementary School
Hartley Elementary School
Morgan Elementary School
Ingram-Pye Elementary School
Jones Elementary School
Skyview Elementary School
Tucker Elementary School
Union Elementary School
Vineville Academy
Williams Elementary School

District: Houston County School District
Lindsey Elementary School
Linwood Elementary School
Miller Elementary School
Morningside Elementary School
Parkwood Elementary School
Pearl Stephens Elementary School
Westside Elementary School

District: Twiggs County School District
Jeffersonville Intermediate School

Other:
Covenant Academy
St. Joseph's Elementary School

HAWAII

District: Oahu Central School District, Aiea-Moanalua-Radford Complex Area
Admiral Chester W. Nimitz Elementary School
Aliamanu Elementary School
Lt. Col Horrace Meek Hickam Elementary School

Major General William R. Shafter Elementary School
Makalapa Elementary School
Mokulele Elementary School
Pearl Harbor Elementary School
Pearl Harbor Kai Elementary School

District: Oahu Leeward School District, Campbell-Kapolei-Waianae Complex Area
Ewa Elementary School
Iroquois Point Elementary School

Other:
Christian Academy
Holy Family Catholic Academy
Our Savior Lutheran Elementary School
Pearl Harbor Christian Academy
St. Elizabeth Elementary School

ILLINOIS

District: North Chicago School District #187
A. J. Katzenmaier Elementary School
Forrestal Elementary School
Greenbay Elementary School
Hart Elementary School
North Elementary School
South Elementary School

District: Zion Elementary School District #6
Beulah Park Elementary School
East Elementary School
Elmwood Elementary School
Shiloh Park Elementary School
West Elementary School

KANSAS

Topeka

District: Auburn Washburn Unified School District 437
Auburn Elementary School
Pauline South Intermediate School

District: Baldwin City Unified School District 348
Vinland Elementary School

District: Emporia Unified School District 253
Turning Point Learning Center

District: Kansas City Unified School District 500
Bethel Elementary School
Emerson Elementary School
Eugene Ware Elementary School
Stoney Point South Elementary School

Thomas A Edison Elementary School

District: Kaw Valley Unified School District 321
Delia Charter School
Rossville Elementary School
St. Mary's Elementary School

District: Lawrence Unified School District 497
Cordley Elementary School
Pinckney Elementary School

District: Mill Creek Valley Unified School District 329
Alma Elementary School
Maple Hill Elementary School

District: Mission Valley Unified School District 330
Mission Valley Elementary School

District: Oskaloosa Unified School District 341
Oskaloosa Junior-Senior High School

District: Rock Creek Unified School District 323
St. George Elementary School

District: Royal Valley Unified School District 337
Royal Valley Elementary School

District: Santa Fe Trail Unified School District 434
Carbondale Attendance Center
Overbrook Attendance Center

District: Seaman Unified School District 345
East Indianola Elementary School

District: Shawnee Mission Public Schools Unified School District 512
Neiman Elementary School

District: Topeka Public Schools Unified School District 501
Linn Elementary School
McEachron Elementary School
Shaner Elementary School
Whitson Elementary School
Williams Science and Fine Arts School

Other:
St. Agnes Catholic Elementary School
St. Matthew Catholic Elementary School
St. Patrick's Elementary School
Topeka Catholic Home School

Wichita

District: Augusta Unified School District 402
Garfield Elementary School
Robinson Elementary School

District: Bluestem Unified School District 205
Bluestem-Leon Elementary School

District: Caldwell Unified School District 360
Caldwell Secondary School

District: Concordia Unified School District 333
Concordia Elementary School

District: Ell-Saline Unified School District 307
Ell-Saline Elementary School

District: Hutchinson Public Schools Unified School District 308
Wiley Elementary School

District: Lincoln Unified School District 298
Lincoln Elementary School

District: Mulvane Unified School District 263
Mulvane Elementary School

District: North Ottawa County Unified School District 239
Minneapolis Elementary School

District: Remington-Whitewater Unified School District 206
Remington Middle School

District: Rural Vista Unified School District 481
Hope Elementary School
White City Elementary School

District: Salina Unified School District 305
Coronado Elementary School
Meadowlark Ridge Elementary School
Stewart Elementary School
Sunset Elementary School

District: Sylvan Grove Unified School District 299
Sylvan Unified Elementary School

District: Sterling Unified School District 376
Sterling Elementary School

District: Twin Valley Unified School District 240
Bennington Elementary School
Tescott Elementary School

District: Wichita Unified School District 259
Allen Elementary School
Beech Elementary School
L'Ouverture Computer Tech Magnet School
Pleasant Valley Elementary School

Other:
Stoney Brook Academy
St. Mary's Catholic Elementary School-Salina
St. Mary's Catholic Elementary School-Wichita

LOUISIANA

Pineville

District: Rapides Parish School District
Acadian Elementary School
Ball Elementary School
D.F. Huddle Elementary School
Glenmora Elementary School
Horseshoe Drive Elementary School
L.S. Rugg Elementary School
Martin Park Elementary School
North Bayou Rapides Elementary School
Paradise Elementary School
Reed Avenue Elementary School
Rosenthal Montessori Elementary School
Tioga Elementary School
W.O. Hall Math/Science Elementary School

District: Archdiocese of Alexandria Parochial School District
Our Lady of Prompt Succor Elementary School
St. Rita Catholic Elementary School

Other:
The Montessori Educational Center

Barksdale

District: Bossier Parish Public School District
Benton Middle School
Bossier Elementary School
Carrie Martin Elementary School
Central Park Elementary School
Curtis Elementary School
Kerr Elementary School
Meadowview Elementary School
Plantation Park Elementary School
Stockwell Place Elementary School
Waller Elementary School

District: Caddo Parish Public School District
Caddo Heights Elementary School
Oil City Elementary School
Shreve Island Elementary School

West Shreveport Elementary School

MAINE

District: Brewer School Department
State Street Elementary School

District: Bucksport School Department
Miles Lane Middle School

District: Dedham School Department
Dedham Elementary School

District: Glenburn School Department
Glenburn Elementary School

District: Greenville School Department
Greenville Middle School
Nickerson Elementary School

District: Hermon School Department
Hermon Middle School

District: MSAD 22
George B. Weatherbee Elementary School
Newburgh Elementary School

District: MSAD 23
Carmel Elementary School

District: MSAD 56
Frankfort Elementary School

District: MSAD 63
Holbrook Middle School

District: Orland School Department
Orland Consolidated Elementary School

District: Orono School Department
Asa C. Adams Elementary School

District: Orrington School Department
Center Drive Middle School

District: Otis School Department
Beech Hill Elementary School

District: Surry School Department
Surry Elementary School

District: Trenton School Department
Trenton Elementary School

Other:
All Saints Catholic Elementary School

MICHIGAN

Selfridge

District: Anchor Bay Public School District
Ashley Elementary School
Dean A. Naldrett Elementary School

District: Detroit Public School District
Bates Academy
Dixon Elementary School
Cleveland Middle School
Clippert Academy
Courville Elementary School
Golightly Educational Center
John R. King Elementary School
Malcolm X Academy
Marquette Elementary School
O.W. Holmes Elementary School
Plymouth Education Center
Stark Elementary School
Von Stueben Elementary School

District: Lamphere Public School District
Hiller Elementary School

District: L'Anse Creuse Public School District
South River Elementary School
Carkenord Elementary School

District: Mt. Clemens Community School District
King Academy Elementary School

District: New Haven Public School District
New Haven Elementary School

District: Taylor Public School District
Eureka Heights Elementary School
Fischer Elementary School
Holland Elementary School
Moody Elementary School
Myers Elementary School
Rancho Elementary School
Wareing Elementary School

Other:
Academy of Arts and Sciences
Academy of Southfield

Battle Creek

District: Battle Creek Public School District
Coburn Elementary School
Springfield Middle School
21st Century Community Learning Center
Urbandale Elementary School

District: Bellevue Community School District
Bellevue Middle School

District: Delton Kellogg Public School District
Delton Kellogg Middle School

District: Hastings Area School District 3
Pleasantview Elementary School

District: Kalamazoo Public School District
Milwood Magnet School

District: Lakewood Public School District
Sunfield Elementary School
Woodland Elementary School

District: Three Rivers Community School District
Andrews Elementary School
Park Elementary School

District: Thornapple Kellogg School District
Page Elementary School

MINNESOTA

District: Minneapolis Public Schools
Andersen Elementary School
Richard R. Green Central Elementary School

Jefferson Community Elementary School
Keewaydin Community Elementary School
Nellie Stone Johnson Elementary School

District: St. Paul Public Schools District
American Indian Magnet School
Ames Elementary School
Como Park Elementary School
Farnsworth Aerospace Magnet School
Four Seasons Elementary School
Franklin Music Magnet School
Hayden Heights Elementary School
Homecroft Elementary School
John Johnson Elementary School
Phalen Lake Elementary School
Sheridan Elementary School
World Cultures Magnet School

Other:
Achieve Language Academy
Community of Peace School
Harvest Preparatory Academy
New Spirit Elementary School
Risen Christ Elementary School
St. Bernard's Elementary School
St. Jerome's Elementary School
Trinity Catholic Elementary School
Urban Academy School

MISSISSIPPI

Gulfport

District: Gulfport School District
Anniston Elementary School
Bayou View Elementary School
Central Elementary School
Gaston Point Elementary School
Pass Road Elementary School
Twenty-Eighth Street Elementary School
West Elementary School

District: Harrison County School District
Bel Aire Elementary School
D'Iberville Middle School
Lizana Elementary School
Lyman Elementary School
North Woolmarket Elementary School
Orange Grove Elementary School
Pineville Elementary School
Saucier Elementary School
Three Rivers Elementary School
West Wortham Elementary and Middle School
Woolmarket Elementary School

District: Long Beach School District
Harper-McCaughn Elementary School
Reeves Elementary School
W. J. Quarles Elementary School

Other:
St. Vincent de Paul Elementary School

Meridian

District: Lauderdale County Schools District
Clarkdale Middle School
West Lauderdale Middle School

District: Meridian Public School District
Crestwood Elementary School
Oakland Heights Elementary School
Parkview Elementary School
West Hills Elementary School
Witherspoon Elementary School

Other:
Lamar Middle School
Russell Christian School
St. Patrick Catholic School

Choctaw (Outreach)

District: Choctaw Tribal Schools
Bogue Chitto Elementary School
Conehatta Elementary School
Pearl River Elementary School

Red Water Elementary School
Standing Pine Elementary School
Tucker Elementary School

MONTANA

District: Helena Public School District
Smith Elementary School
Warren Elementary School

District: Lincoln Elementary School District
Lincoln Elementary School

NEBRASKA

District: Lincoln Public School District
Arnold Elementary School
Clinton Elementary School
Elliott Elementary School
Everett Elementary School
Fredstrom Elementary School
Hartley Elementary School
Hawthorne Elementary School
Holmes Elementary School
Norwood Park Elementary School
Prescott Elementary School
Saratoga Elementary School

Other:

Blessed Sacrament Elementary School
F.A.I.T.H Elementary School
Good Shepard Elementary School
Helen Hyatt Elementary School
King Home School
Lincoln Christian Elementary School
Messiah Lutheran Elementary School
Parkview Christian Elementary School
Pinkman Home School
Porath Home School
Prairie Hill Learning Center
St. John's Elementary School
St. Patrick's Elementary School
St. Theresa's Elementary School

NEW MEXICO

District: Albuquerque Public School District
Ernie Pyle Middle School
Sandia Base Elementary School
Van Buren Middle School

District: Belen Consolidated School District
Belen Middle School

District: Bernalillo Public School District
Bernalillo Middle School
Santo Domingo Elementary School

District: Jemez Valley Public School District
San Diego Riverside Charter School

District: Los Lunas Public School District
Raymond Gabaldon Intermediate School

District: Moriarty Municipal School District
Edgewood Middle School
South Mountain Elementary School

District: Santa Fe Public School District
Kaune Elementary School

District: Socorro Consolidated School District
Cottonwood Valley Charter School

District: Southern Pueblos Agency
San Felipe Pueblo Elementary School
T'siya Middle School

Other:

Our Lady of Fatima Elementary School
Prince of Peace Lutheran Elementary School
St. Therese Elementary School

NORTH CAROLINA

Charlotte

District: Ashe County School District
Westwood Elementary School

District: Burke School District
Salem Elementary School

District: Caswell School District
South Elementary School

District: Catawba School District
Lyle Creek Elementary School

District: Charlotte-Mecklenburg School System
Allenbrook Elementary School
Ashley Park Elementary School
Cotswold Elementary School
Devonshire Elementary School
Joseph W. Grier Elementary School
Merry Oaks Elementary School
Pawtucket Elementary School
Rama Road Elementary School
Reedy Creek Elementary School
Selwyn Elementary School
Smith Language Academy
Statesville Road Elementary School
Torrence Creek Elementary School
Tuckaseegee Elementary School

District: Chatham School District
Bonlee Elementary School

District: Thomasville City School District
Liberty Drive Elementary School

District: Rutherford School District
Forest City-Dunbar Elementary School

District: Stokes County School District
Germanton Elementary School

Kure Beach

District: Bladen School District
East Arcadia Elementary School

District: Brunswick County School District
Belville Elementary School
Bolivia Elementary School
Jessie Mae Monroe Elementary School
Lincoln Elementary School
Southport Elementary School
Supply Elementary School
Union Elementary School
Virginia Williamson Elementary School

District: Carteret County School District

Atlantic Elementary School
Bogue Sound Elementary School
Harker's Island Elementary School
Smyrna Elementary School

District: Dare County School District
Kitty Hawk Elementary School
Manteo Elementary School

District: Martin County School District
E.J. Hayes Elementary School

District: New Hanover School District
Annie H. Snipes Elementary School
Carolina Beach Elementary School
College Park Elementary School
Dorothy B. Johnson Elementary School
Gregory Elementary School
Hubert Eaton Elementary School
John Codrington Elementary School
John J. Blair Elementary School
Mary C. Williams Elementary School
Rachel Freeman Elementary School
Winter Park Model Elementary School
Wrightsboro Elementary School
Wrightsville Beach Elementary School

District: Onslow County School District
Parkwood Elementary School

District: Pamlico County School District
Fred J. Anderson Elementary School

District: Pender County School District
Cape Fear Elementary School

District: Washington County School District
Creswell Elementary School

OHIO

Beavercreek City Schools
Parkwood Elementary School
Main Elementary School

Fairborn City Schools
Fairborn Intermediate School

Mad River Township Schools
Spinning Hills Middle School

Miamisburg City Schools
Bauer Elementary School
Medlar View Elementary School

Northeastern Local Schools
South Vienna Elementary School

Springfield City Schools
Simon Kenton Elementary School
Kenwood Elementary School
Warder Park Wayne Elementary School
Snyder Park Elementary School

OKLAHOMA

Oklahoma City

District: Arapaho Public School District
Arapaho Elementary School

District: Burns Flat-Dill City Public School District
Butler Elementary School
Will Rogers Elementary School

District: Canute Public School District
Canute Elementary School

District: Cheyenne Public School District
Cheyenne Public School

District: Cordell Public School District
Cordell Elementary School

District: Elk City Public School District
Grandview 5th & 6th Center

District: Erick Public School District
Erick Elementary School

District: Hennessey Public School District
Hennessey Elementary School

District: Merritt Public School District
Merritt Elementary School

District: Millwood Public School District
Millwood Arts Academy
Millwood Elementary School

District: Oklahoma City Public School District
Coolidge Elementary School
Gateway Elementary School
Horace Mann Elementary School
Marcus Garvey Elementary School
Parmelee Elementary School
Shidler Elementary School
Stonewall Elementary School
Westwood Elementary School
Van Buren Elementary School

District: Sentinel Public School District
McMurray Elementary School

District: Sweetwater Public School District
Sweetwater Elementary School

Other:
Bishop John Carroll Elementary School
St. Philip Neri Elementary School

Tulsa

District: Barnsdall Public School District
Barnsdall Elementary School

District: Osage Public School District
Anderson Elementary School

District: Sand Springs Public School District
Pratt Elementary School

District: Sapulpa Public School District
Jefferson Elementary School

District: Tulsa Public School District
Berry Hill Elementary School
McKinley Elementary School
Monroe Middle School
Robertson Elementary School

Other:
Heartland Home School Group
Rejoice Christina Elementary School
St. Catherine's Catholic Elementary School

Sts. Peter & Paul Catholic Elementary School
Tulsa Bible Church Home School Group
Undercroft Montessori School

Native American Initiative (Outreach)

District: Anadarko Public School District
Anadarko East Elementary School

District: Boone Apache Public School District
Apache Elementary School

District: Carnegie Public School District
Carnegie Elementary School

District: Cyril Public School District
Cyril Elementary School

District: Gore Public School District
Gore Elementary School

District: Lost City Public School District
Lost City Elementary School

District: Muskogee Public School District
Ben Franklin Science Academy
Cherokee Elementary School
Creek Elementary School
Grant Foreman Elementary School
Pershing Elementary School
Sadler Arts Academy

District: Norwood Public School District
Norwood Elementary School

District: Oktaha Public School District
Oktaha Elementary School

District: Osage Public School District
Osage Elementary School

District: Pioneer Public School District
Pioneer Elementary School

District: Porum Public School District
Porum Elementary School

District: Pryor Public School District
Jefferson Elementary School
Lincoln Elementary School
Washington Elementary School

District: Shady Grove Public School District
Shady Grove Elementary School

District: Tenkiller Public School District
Tenkiller Elementary School

District: Vinita Public School District
Vinita Elementary School

District: Warner Public School District
Warner Elementary School

District: Webbers Falls Public School District
Webbers Falls Elementary School

District: Woodall Public School District
Woodall Elementary School

Other:
Boys Ranch
St. Joseph's Catholic Elementary School

OREGON

Klamath Falls

District: Klamath County School District
Altamont Elementary School
Chiloquin Elementary School
Fairhaven Elementary School
Ferguson Elementary School
Gilchrist Elementary/High School
Henley Elementary School
Keno Elementary School
Malin Elementary School
Merrill Elementary School
Peterson Elementary School
Shasta Elementary School
Stearns Elementary School

District: Klamath Falls City School District
Conger Elementary School
Fairview Elementary School
Mills Elementary School
Pelican Elementary School
Roosevelt Elementary School

Other:
Hosanna Christian School
Southern Oregon Home School Association

Portland

District: Canby School District
Howard Eccles Elementary School
Lee Elementary School

District: David Douglas School District
Mill Park Elementary School

District: North Clackamas School District
Concord Elementary School

District: Portland Public School District
Arleta Elementary School

Atkinson Elementary School
Buckman Elementary School
Clarendon Elementary School
Faubion Elementary School
Forest Park Elementary School
Grout Elementary School
Laurelhurst Elementary School
Peninsula Elementary School
Rigler Elementary School
Rosa Parks Elementary School
Scott Elementary School
Winterhaven Elementary School

Other:
Cascade Heights Public Charter
North Clackamas Christian

PENNSYLVANIA

District: California Area School District
California Elementary School

District: East Allegheny School District
Westinghouse Elementary School

District: McKeesport Area School District
Cornell Intermediate School

District: Monessen City School District
Monessen Elementary Center

District: Penn Hills School District
Penn Hebron Elementary Academy
William Penn Elementary School

District: Pittsburgh Public School District
Urban League of Pittsburgh Charter School

Other:
Good Shepherd School
St. Bernadette School
St. Irenaeus School
St. Joseph School
Word of God Catholic School

PUERTO RICO

District: Arecibo Educational Region
Escuela Elemental José Meléndez Ayala
Escuela Intermedia Frías Morales
Escuela Elemental Victor Rojas
Escuela Intermedia Antonio Reyes Reyes

District: Bayamón Educational Region
Escuela Elemental Los Alamos
Escuela Elemental Betty Rosado de Vega
Escuela Elemental Alejandro Cruz
Escuela Elemental Cristóbal Colón

Escuela Elemental Jose de Diego
Escuela Elemental Martín García
Escuela Elemental Violenta Jiménez
Escuela Intermedia S.U. Patrullas

District: Caguas Educational Region
Escuela Intermedia San Francisco De Asís
Escuela Elemental Bordonos
Escuela Elemental Comunidad Bunker
Escuela Intermedia S.U. Federico Degetau
Escuela Elemental Federico Degetau I
Escuela Intermedia Oscar Porrata
Escuela Elemental Daniel Díaz Santana
Escuela Intermedia S.U. Vidal Serrano

District: Fajardo Educational Region
Escuela Elemental Francisco Dávila
Escuela Intermedia José Calzada Ferrer
Escuela Intermedia Josefina Ferrero
Escuela Elemental Pedro Gutiérrez
Escuela Elemental Eugenio Maria de Hostos
Escuela Elemental Rafael De Jesús
Escuela Elemental Domingo Nieves Ortiz

District: Humacao Educational Region
Escuela Intermedia Antonio R. Barceló
Escuela Intermedia José De Chouden
Escuela Intermedia S.U. Quebrada Honda
Escuela Intermedia Ponce de Leon
Escuela Intermedia Guillermo Riefkohl
Escuela Intermedia Manuel Ortíz Suya
Escuela Intermedia Santiago Torres
Escuela Intermedia Carlos Rivera Ufret
Escuela Intermedia Rosa Costa Valdivieso
Escuela Elemental Asunción Vallejo

District: Morovis Educational Region
Escuela Elemental Sinforoso Aponte
Escuela Elemental Agapito Rosario
Escuela Elemental Petroamérica Pagán
Escuela Intermedia Ángel Sandín Martínez

District: Ponce Educational Region
Escuela Elemental Julio Alvarado
Escuela Intermedia Ernesto Ramos Antonini
Escuela Elemental Comunidad Capitanejo
Escuela Intermedia Eugenio La Compte
Escuela Intermedia Herminio Santaella
Escuela Intermedia Florencio Santiago
Escuela Intermedia Rafael Irizarry Rivera

District: San Juan Educational Region
Escuela Elemental Berwind
Escuela Elemental Emilio Castelar
Escuela Intermedia Manuel Febres
Escuela Intermedia Dr. José Gándara
Escuela Elemental Villa Granada
Escuela Elemental Francisco Matías Lugo
Escuela Intermedia Eduardo J. Saldaña

Escuela Intermedia Lola Rodriguez de Tió
Escuela Elemental Luis Llorens Torres

RHODE ISLAND

District: Bristol/Warren Regional School District

Byfield Elementary School
Guiteras Elementary School
Hugh Cole Elementary School
Reynolds Elementary School
Rockwell Elementary School

District: Middletown Public School District
Joseph H. Gaudet Middle School

District: Newport Public School District
Carey Elementary School
Coggeshall Elementary School
Cranston-Calvert Elementary School
Sullivan Elementary School
Underwood Elementary School

District: North Kingstown School Department
Hamilton Elementary School
Quidnesset Elementary School

District: Portsmouth School Department
Portsmouth Middle School

SOUTH CAROLINA

Beaufort

District: Beaufort County School District
Beaufort Elementary School
Bluffton Elementary School
Broad River Elementary School
Coosa Elementary School
James J. Davis Elementary School
Joseph F. Shanklin Elementary School
Lady's Island Elementary School
M.C. Riley Elementary School
Mossy Oaks Elementary School
Okatie Elementary School
Port Royal Elementary School
Shell Point Elementary School
St. Helena Elementary School
Whale Branch Elementary School

District: Colleton County School District
Bells Elementary School
Black Street Elementary School
Cottageville Elementary School
Forest Hills Elementary School
Hendersonville Elementary School
Northside Elementary School

District: Hampton County School District
Brunson Elementary School
Estill Elementary School
Fennell Elementary School
Hampton Elementary School
Varnville Elementary School

District: Jasper County School District
Ridgeland Elementary School

Other:
Agape Christian Academy
Beaufort Academy
Beaufort Marine Institute
Bolden Elementary School
Community Bible Christian Academy
Home School Group of the Lowcountry
St Peter's Catholic School

Columbia

District: Fairfield County School District
Gieger Elementary School

District: Richland County School District
Annie Burnside Elementary School
Arden Elementary School
EE Taylor Elementary School
Forrest Heights Elementary School
Gadsden Elementary School
Hopkins Elementary School
Hyatt Park Elementary School
Southeast Middle School
Summit Parkway Elementary School

Other:
Timmerman Elementary School

SOUTH DAKOTA

Rapid City

District: Douglas School District
Vandenberg Elementary School

District: Rapid City Area School District
Black Hawk Elementary School
Canyon Lake Elementary School
General Beadle Elementary School
Horace Mann Elementary School
Knollwood Heights Elementary School
Rapid Valley Elementary School
Robbinsdale Elementary School
South Park Elementary School
Valley View Elementary School
Woodrow Wilson Elementary School

Other:
Zion Lutheran Elementary School
Home School Association

Sioux Falls

District: Sioux Falls School District
Anne Sullivan Elementary School
Axtell Park Middle School
Eugene Field Elementary School
Garfield Elementary School
Hawthorne Elementary School
Jefferson Elementary School
Longfellow Elementary School
Lowell Elementary School
Renberg Elementary School
Terry Redlin Elementary School

District: Garretson School District
Garretson Elementary School

Project NOVA (Outreach)

District: American Horse School District
American Horse Elementary School

District: Cheyenne River BIA Schools
Cheyenne Eagle Butte Upper Elementary School

District: Crazy Horse School District
Crazy Horse Elementary School

District: Crow Creek Sioux Tribal Schools
Crow Creek Elementary School

District: Dupree School District
Dupree Elementary School

District: Little Wound School District
Little Wound Elementary School

District: Loneman School Corporation
Loneman Elementary School

District: Lower Brule School System
Lower Brule Elementary School

District: Todd County School District
Mission South Elementary School
Rosebud Elementary School

District: Red Cloud Indian School District
Our Lady of Lourdes Elementary
Red Cloud Elementary School

District: St. Joseph's Indian Schools
St. Joseph's Elementary School

District: Timber Lake School District
Timber Lake Elementary School

District: Tiospaye Topa School System
Tiospaye Topa Elementary School

TEXAS

Corpus Christi

District: Calallen Independent School District
Magee Intermediate School

District: Corpus Christi Independent School District
Faye Webb Elementary School
Meadowbrook Elementary School
Weldon Smith Elementary School

District: Flour Bluff Independent School District
Flour Bluff Intermediate School

Houston

District: Cleveland Independent School District
Eastside Intermediate School

District: Dickinson Independent School District
Barber Middle School

District: Galena Park Independent School District
Mac Arthur Elementary School

District: Hitchcock Independent School District
Crosby Middle School

District: Houston Independent School District
Berry Elementary School
Betsy Ross Elementary School
Bruce Elementary School
De Zavala Elementary School
Gordon Elementary School
Helms Community Learning Center
Law Elementary School
Park Place Elementary School
Wainwright Elementary School

District: La Marque Independent School District
Highlands Elementary School
LaMarque Middle School

District: Pasadena Independent School District
Meador Elementary School
Morris 5th Grade Center
Pomeroy Elementary School

District: Shepherd Independent School District
Shepherd Intermediate School

Other:
Galveston Catholic School
Our Lady of Fatima Elementary School
Our Lady of Lourdes Elementary School
St. Mary's Catholic Elementary School

San Antonio

District: Edgewood Independent School District
Las Palmas Elementary School
Loma Park Elementary School

District: South San Antonio Independent School District
Frank Madla Elementary School
Neil Armstrong Elementary School
Price Elementary School

District: San Antonio Independent School District
Bowden Elementary School
Pfeiffer Academy
Riverside Academy
Tynan Elementary School

District: Southwest Independent School District
Kriewald Road Elementary School
Sky Harbour Elementary School

Other:
St. Paul's Catholic School

VERMONT

Rutland

District: Addison Central Supervisory Union
Salisbury Community School

District: Addison Rutland Supervisory Union
Bensen Village Elementary School
Orwell Village Elementary School

District: Rutland Central Supervisory Union
Proctor Elementary School
Rutland Town Elementary School
West Rutland Elementary School

District: Rutland City School District
Rutland City Intermediate School

District: Rutland Northeast Supervisory Union
Neshobe Elementary School

District: Rutland South Supervisory Union
Clarendon Elementary School
Shrewsbury Elementary School

Wallingford Elementary School
Wells Village Elementary School

District: Rutland Southwest Supervisory Union
Poultney Elementary School

District: Rutland Windsor Supervisory Union
Mt. Holly Elementary School

District: Southwest Vermont Supervisory Union
Bennington Elementary School
Shaftsbury Elementary School

District: Vermont Approved Independent Schools
Austine School for the Deaf
Christ the King Elementary School
Kurn Hattin Home Schools

District: Vermont Recognized Schools
Rutland Area Christian Elementary School

District: Windsor Central Supervisory Union
Sherburne Elementary School

District: Windsor Northeast Supervisory Union
Stockbridge Central Elementary School

District: Windsor Southeast Supervisory Union
Windsor State Street School

District: Windsor Southwest Supervisory Union
Cavendish Town Elementary School

Other:
Shaftsbury Home School Group

South Burlington

District: Addison Northeast Supervisory Union
Bristol Elementary School

District: Burlington Public School District
C.P. Smith Elementary School
Champlain Elementary School
H.O. Wheeler Elementary School
J.J. Flynn Elementary School
Lawrence Barnes Elementary School

District: Caledonia Central Supervisory Union
Danville Elementary School
Walden Elementary School

District: Chittenden East Supervisory Union
Underhill Central Elementary School

District: Franklin Central Supervisory Union
St. Albans Town School

District: Franklin Northwest Supervisory Union
Sheldon Elementary School

District: Franklin West Supervisory Union
BFA Fairfax Elementary School

District: Orleans Central Supervisory Union
Albany Community Elementary School

District: Orleans Southwest Supervisory Union
Craftsbury Elementary School

District: Vermont Approved Independent Schools
St. Monica Elementary School

District: Vermont Recognized Schools
Trinity Baptist Elementary School

Other:
Home School Group

VIRGINIA

District: Norfolk Public School District
Campostella Elementary School
Dreamkeepers Academy at J.J. Roberts Elementary School
Fairlawn Elementary School
Ingleside Elementary School
James Monroe Elementary School
Oakwood Elementary School
P.B. Young Sr. Elementary School
St. Helena Elementary School
Tidewater Park Elementary School
Willoughby Elementary School

WASHINGTON

District: Bremerton School District
Kitsap Lake Elementary School

District: Central Kitsap School District
Brownsville Elementary School
Cougar Valley Elementary School
Emerald Heights Elementary School
Seabeck Elementary School
Tracyton Elementary School

District: Chimacum School District
Chimacum Elementary School

District: North Kitsap School District
Breidablick Elementary School
Gordon Elementary School
Poulsbo Elementary School

Other:
Peace Lutheran School

WEST VIRGINIA

Charleston

District: Kanawha County School District
Alban Elementary School
Belle Elementary School
Bonham Elementary School
Bridgeview Elementary School
Central Elementary School
Chamberlain Elementary School
Clendenin Elementary School
Cross Lanes Elementary School
Elk Elementary School
Glenwood Elementary School
Holz Elementary School
J.E. Robins Elementary School
Kanawha City Elementary School
Kenna Elementary School
Lakewood Elementary School
Marmet Elementary School
Mary Ingles Elementary School
Midland Trail Elementary School
Montrose Elementary School
Nitro Elementary School
Overbrook Elementary School
Piedmont Year-Round Education
Pinch Elementary School
Pratt Elementary School
Richmond Elementary School
Ruffner Elementary School
Ruthlawn Elementary School
Shoals Elementary School
Watts Elementary School
Weberwood Elementary School
Weimer Elementary School

Martinsburg

District: Berkeley County Schools
Eagle Intermediate School
Mill Creek Intermediate School
Mountain Ridge Intermediate School
Orchard View Intermediate School
Potomack Intermediate School
Tomahawk Intermediate School

WYOMING

District: Laramie County School District No.1
Afflerbach Elementary School
Alta Vista Elementary School
Anderson Elementary School
Arp Elementary School
Baggs Elementary School
Bain Elementary School
Buffalo Ridge Elementary School
Clawson Elementary School
Cole Elementary School
Davis Elementary School
Dildine Elementary School
Fairview Elementary School
Freedom Elementary School
Gilchrist Elementary School
Goins Elementary School
Hebard Elementary School
Henderson Elementary School
Hobbs Elementary School
Jessup Elementary School
Miller Elementary School
Pioneer Park Elementary School
Willadson Elementary School

District: Laramie County School District No.2
Albin Elementary School
Carpenter Elementary School
Pine Bluffs Elementary School
Rossman Elementary School
West Elementary School

Other:
Noah Webster Christian School
St. Mary's Elementary School
Trinity Lutheran School

Glossary

GLOSSARY

ACC: Academic Competitiveness Council.

Academy: See DOD STARBASE academy.

Adjusted data: Data derived from the same academies that were operating last year so that comparisons can be made on the internal growth of the program.

After-school programs: Center- or school-based programs regularly scheduled at least once each month during after school hours.

Alternative education provider: A public or private school designed for children who do not function well in the traditional school setting. This may include continuation high schools or schools that fall outside the categories of regular, special education or vocational education.

Appropriations: Budget authority provided through the Congressional appropriation process that permits federal agencies to incur obligations and to make payments.

At-risk: Being “at-risk means having one or more family backgrounds, or other factors, that have been found to predict a high rate of school failure at some time in the future. This “failure” generally refers to dropping out of high school before graduation but also can mean being retained within a grade from one year to the next. The risk factors include having a mother whose education is less than high school, living in a single-parent family, receiving welfare assistance and living in a household where the primary language spoken is other than English.

At-risk youth: Students at risk are those who have characteristics that increase their chances of dropping out or falling behind in school. These characteristics may include being from a single-parent household, having an older sibling who dropped out of high school, changing schools two or more times other than the normal progression (e.g., from elementary to middle school), having C’s or lower grades, being from a low socio-economic status family or repeating an earlier grade.

Class: Within the context of a DOD STARBASE Academy, a class is a grouping of students. This group may not necessarily have been a homogenous entity prior to DOD STARBASE instruction; it may be a temporary grouping only for the purposes of assembling for the 20-hour minimum period of DOD STARBASE instruction.

Classroom contact hour: A period of 60 minutes, plus or minus 5 minutes, in which a DOD STARBASE Academy instructor is actively involved with students or in which a military member is demonstrating, displaying or teaching an application of math, science or technology to the students.

Core curriculum: STARBASE core curriculum is comprised of the 13 following areas:

- 1) Teamwork;
- 2) Properties and States of Matter;
- 3) Properties of Air;
- 4) Bernoulli’s Principle;
- 5) Aircraft Control Surfaces and Components;
- 6) Four Forces of Flight;
- 7) Newton’s Laws of Motion;
- 8) Space Exploration;
- 9) Development, Innovation, and Uses of Technology;
- 10) Avoiding Substance Abuse;
- 11) Goal setting
- 12) Model Rocketry; and
- 13) Flight Simulation.

Current expenditures: Expenditures for operating DOD STARBASE Academies, excluding capital outlay. These expenditures include such items as salaries for school personnel, fixed charges, student transportation, books and materials, and energy costs.

Current expenditures per pupil: Current expenditures for the DOD STARBASE academies divided by the total number of participating students.

Disability: Physical, mental, or sensory impairments that render major life activities more difficult.

DOD: Department of Defense.

DOD components: Those Department of Defense entities that have established or are in pursuit of establishing a DOD STARBASE academy, including the military departments, defense agencies and defense field activities.

DOD instruction (DODI): Document that implements policies, responsibilities and procedures for executing the DOD STARBASE program.

DOD STARBASE Academy: A DOD educational program designed to improve the knowledge and skills of students in kindergarten through twelfth grade in mathematics, science and technology. It follows the academy model description in DODI 1025.7.

DOD STARBASE core curriculum: The fixed course of study referenced in the DODI taught by all DOD STARBASE academies. (See also core curriculum.)

DOD STARBASE program: The DOD STARBASE program is authorized by Title 10 United State Code Section 2193b as a DOD science, math and technology education improvement program. The Office of the Assistant Secretary of Defense for Reserve Affairs administers policy and oversight; the DOD components execute the program at DOD STARBASE academies. DOD STARBASE is funded by Congress as a Civil Military Program.

DOD STARBASE site: The location of a DOD STARBASE Academy where the program is taught.

DOED: Department of Education.

Driver: Drivers identify a set of related attitudinal clusters for the student population (i.e. when the driver is present, the set of attitudes will most likely be present, or in reverse, when the condition in the list of attitudes are present the target “driver” attitude will also be present).

Elementary school: An elementary/secondary school with one or more grades of K-8 that does not have any grade higher than grade 8.

Elementary/secondary school: Elementary/secondary schools include regular schools (i.e., schools that are part of state and local school systems and private elementary/secondary schools, both religiously affiliated and nonsectarian); alternative schools; vocational education schools; and special education schools. Subcollegiate departments of postsecondary institutions, residential schools for exceptional children, federal schools for American Indians or Alaska Natives and federal schools on military posts and other federal installations are not included in the definition of elementary/secondary school.

Enrollment: The total number of students registered at a DOD STARBASE Academy at a given time, generally in the fall of the year.

Expenditures: Charges incurred, whether paid or unpaid, that are presumed to benefit the current fiscal year.

Expenditures per pupil: Charges incurred for a particular period of time divided by a student unit of measure, such as enrollment, average daily attendance, or average daily membership.

Fiscal year: The yearly accounting period for the federal government, which begins on October 1 and ends on the following September 30. The fiscal year is designated by the calendar year in which it ends; for example, fiscal year 2007 begins on October 1, 2006 and ends on September 30, 2007.

Gap score: Difference between pre- and post-scores.

Graduate: An individual who has received formal recognition for the successful completion of a prescribed program of studies.

High school: A secondary school offering the final years of high school work necessary for graduation, usually including grades 10, 11 and 12 (in a 6-3-3 plan) or grades 9, 10, 11, and 2 (in a 6-2-4 plan).

Inner city location: Central section of a city, which is usually older and more densely populated.

Kindergarten: Includes transitional kindergarten, kindergarten, and pre-1st grade students.

Mathematics: A body of related courses concerned with knowledge of measurement, properties, and relations quantities, which can include theoretical or applied studies of arithmetic, algebra, geometry, trigonometry, statistics and calculus.

MSI: Mathematics and Science Initiative

Median: A number that half of the data is larger than it and half smaller. If the itemized data are listed in order of size, the median is the middle number in the list.

Middle school: A separately organized and administered school between the elementary and senior high schools. When called a “junior high school,” a middle school usually includes grades 7, 8, and 9 (in a 6-3-3 plan) or grades 7 and 8 (in a 6-2-4 plan.) In some districts, however, a middle school spans grades 5 to 8 or grades 6 to 8.

Minority: Any individual or racial/ethnic group that is not categorized as White, Hispanic or Latino.

National school lunch program: Established by President Truman in 1946, the program is a federally assisted meal program operated in public and private nonprofit schools and residential child care centers. To be eligible, a student must be from a household with an income at 185 percent of the poverty level for reduced-price lunch or 130 percent of the poverty level for free lunch.

Not-for-profit organization: A legal entity recognized or chartered by competent state authority and to which the Internal Revenue Service has given status as a 501(c)3 tax-exempt educational organization.

OASD/RA: Office of the Secretary of Defense/Reserve Affairs

Operational academies: An academy that is processing students.

Participant: A DOD STARBASE student. Participant also refers to military command support units, the local sponsoring base command, community leaders, local community sponsoring committees, school systems, schools, teachers, military service volunteers, DOD STARBASE Board members, staff, and parents.

Percentile (score): A value on a scale of zero to 100 that indicates the percent of a distribution that is equal to or below it.

Pre/Post application: Prior to the start of the program and at the completion of the program.

Program year: The DOD STARBASE program year is the same as the government fiscal year, October 1 – September 30.

Public school: An institution that provides educational services for at least one of grades 1-12 (or comparable upgraded levels), has one or more teachers to give instruction, is located in one or more buildings, receives public funds as primary support, and is operated by an education or chartering agency. Public schools include regular, special education, vocational/technical, alternative, and public charter schools. They also include schools in juvenile detention centers, schools located on military bases and operated by the Department of Defense, and Bureau of Indian Affairs-funded schools operated by local public school districts.

Rural location: The population and territory outside any urbanized area and the urban part of any place with a decennial census population of 2,500 or less.

Salary: The total amount regularly paid or stipulated to be paid to an individual, before deductions, for personal services rendered while on the payroll of a business or organization.

Sample population: A statistically significant representation of the total number of students tested each year.

School district: An education agency at the local level that exists primarily to operate public schools or to contract for public school services.

School year: The 12-month period of time denoting the beginning and ending dates for school accounting purposes, usually from July 1 through June 30.

Science: The body of related course concerned with knowledge of the physical and biological world and with the processes of discovering and validating this knowledge.

Secondary school: An elementary/secondary school with one or more of grades 7-12 that does not have any grade lower than grade 7.

Site: See DOD STARBASE site.

Socio-economic disadvantage: A term used to describe economically deprived, poor, poverty stricken, or disadvantaged individuals or groups. (See also Socio-economic status.)

Socio-economic status: A measure of an individual or family's relative economic and social ranking based on such factors as father's education level, mother's education level, father's occupation, mother's occupation and family income.

STEM: Science, Technology, Engineering and Math

Supplemental programs: These are programs that for one reason or another (e.g. below minimum hours, don't cover the 13 core curriculum areas, etc.) do not meet DODI standards. They are more diverse than traditional STARBASE programs, are often conducted during the summer months and are specially designed to reach students that do not fall under the targeted "participant" schools or are in response to requests by members of the community to serve "hard-to-reach" children. Supplemental programs are initiatives that go beyond the normal operation and obligations of the academy. In many cases, supplemental programs are established in response to the demand created by the popularity and success of the DOD STARBASE program within the community.

Teacher certification: License granted by states for teachers to teach a given subject. In 2002, all states required a bachelor's degree that included subject matter as well as pedagogical studies; all but 10 states required basic skills tests in reading, mathematics, or general knowledge; and 31 states required subject-matter examinations.

Tuition and fees: A payment or charge for instruction or compensation for services, privileges, or the use of equipment, books or other goods.

THE FOLLOWING SECTION PROVIDES A LIST OF THE STATISTICAL FORMULAS THAT WERE USED TO CALCULATE THE DATA PRESENTED IN THIS REPORT.

1. Mean – average value of a variable

$$\bar{X} = \sum X / N$$

$\sum X$ = the sum of all values of X

N = the sample size

2. Standard deviation – measure of the average deviation of each score from the mean

$$s = [\sum (x_i - \bar{x})^2 / (n-1)]^{1/2}$$

\bar{x} = the sample mean \bar{x} is generally represented by an x with a bar or line over the top

n = the sample size

3. t-test – tests the difference between two means

$$t = (\bar{X}_1 - \bar{X}_2) / s_{\bar{x}_1 - \bar{x}_2}$$

$s_{\bar{x}_1 - \bar{x}_2}$ = the standard deviation of the difference between the two variables

4. Pearson's Correlation – determines the relationship between two variables

$$r_{12} = [(\sum Y_1 * Y_2 - \sum Y_1 * \sum Y_2 / N) / (N-1)] / (s_{y1} * s_{y2})$$

Y = the values of the variables

s = the standard deviation of the variables

5. Regression Equation – determines what combination of variables can best predict the outcome for the dependent variable

$$Y = a + b_1 * X_1 + b_2 * X_2 + \dots + b_p * X_p$$

Y = the predicted value of the dependent variable

a = the intercept value of Y when X=0

b = the regression coefficients for the predictors

X = the value of the predictor variable

DOD STARBASE® Academy Time Line

1991	Michigan, Selfridge*		
1993	California, Sacramento Kansas, Topeka/Wichita** Minnesota, St. Paul	North Carolina, Charlotte Oklahoma, Tulsa Oregon, (Portland/Klamath Falls)**	
1994	Florida, Jacksonville Florida, Pensacola Iowa, Johnston***	South Dakota, Sioux Falls Texas, Houston Vermont, South Burlington	Wyoming, Cheyenne
1995	Puerto Rico, Carolina Texas, San Antonio Virginia, Norfolk		
1996	Georgia, Warner Robbins		
1998	California, San Diego		
1999	Louisiana, Barksdale Louisiana, New Orleans/Pineville**** South Carolina, Beaufort		
2000	Kansas, Wichita**** Michigan, Detroit Oregon, Klamath Falls****	Pennsylvania, Boswell*** Vermont, Rutland	
2001	Connecticut, Hartford DC, Washington Georgia, Marietta Hawaii, Pearl Harbor	Illinois, Great Lakes Maine, Bangor Mississippi, Gulfport Oklahoma, Oklahoma City	South Carolina, Columbia Washington, Silver Dale West Virginia, Charleston
2002	Alaska, Anchorage Mississippi, Meridian Nebraska, Lincoln	Pennsylvania, Pittsburgh Rhode Island, Newport South Dakota, Rapid City	West Virginia, Martinsburg
2003	New Mexico, Kirtland Connecticut, Waterbury		
2004	Alabama, Montgomery North Carolina, Kure Beach Ohio, Wright-Patterson		
2005	Arizona, Tucson		
2006	Alaska, Kenai***** Maryland, Patuxent River	Texas, Corpus Christi Michigan, Battle Creek*****	
2007	Montana, Helena		

* Initial pilot program site with grant from the Kellogg Foundation.

** Funding approved for one Academy program.

*** Iowa was officially terminated at the end of FY02 and Bosewell, PA was terminated at the end of FY06.

**** January 2000 OASD/RA identified sites in Kansas and Oregon as separate DOD STARBASE Academies.

***** Program transferred from New Orleans to Pineville because of Hurricane Katrina.

***** In 2006, STARBASE One at Selfridge and STARBASE Detroit were combined into program-STARBASE One. A second academy was started at Battle Creek, Michigan.

***** Site being relocated.



DOD
STARBASE
A Department of Defense Youth Program

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