



Department of Defense INSTRUCTION

NUMBER 1025.7

September 14, 2000

ASD(RA)

SUBJECT: Department of Defense STARBASE Program

References: (a) Section 2193b of title 10, United States Code
(b) Under Secretary of Defense for Personnel and Readiness
Memorandum, "Delegation of Authorities and Assignment of Duties
Under the National Defense Authorization Act (NDAA) for Fiscal
Year 2000," March 24, 2000

1. PURPOSE

This Instruction:

1.1. Implements policies, responsibilities, and procedures for executing a math, science, and technology education improvement program under the authority of reference (a) to be known as the Department of Defense (DoD) STARBASE Program.

1.2. Describes the program goals, the responsibilities of implementing officials, and the relationships between Government and non-profit organizations in support of the DoD STARBASE Program.

2. APPLICABILITY

This Instruction applies to the Office of the Secretary of Defense, the Military Departments, the Chairman of the Joint Chiefs of Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the Department of Defense (hereby referred to collectively as "the DoD Components").

3. DEFINITIONS

Terms used in this Instruction are defined in enclosure 1.

4. POLICY

It is DoD policy that:

4.1. The goal of the DoD STARBASE Program 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.

4.2. Any school district (public or private), alternative educational provider, or individual or group of home schooling families may apply to participate in STARBASE Academies.

4.3. The Secretary of Defense and the Secretaries of the Military Departments may accept financial and other support for the DoD STARBASE Program from other Departments and Agencies of the Federal Government, State governments, local governments, non-profit organizations, and/or corporations or individuals in the private sector. The Secretaries of the Military Departments may delegate this authority in writing as they deem appropriate, but not below the level of the director of each STARBASE Academy. The Military Departments shall report all non-DoD financial or other support provided to a STARBASE Academy to the Office of the Assistant Secretary of Defense for Reserve Affairs in an annual report.

5. RESPONSIBILITIES

Under the authority of reference (b) above:

5.1. The Assistant Secretary of Defense for Reserve Affairs, under the Under Secretary of Defense for Personnel and Readiness, shall:

5.1.1. Monitor compliance with this Instruction and ensure that information on STARBASE issues, research, and Academies are exchanged among relevant offices within the DoD Components.

5.1.2. Prepare an annual report for the Congress on the DoD STARBASE Program as required by reference (a). This report shall contain a discussion of the design and conduct of the program and an evaluation of the effectiveness of the program. The report may additionally provide information regarding STARBASE Program goals and their measurable achievements; STARBASE Program expenditures; and number of students and classes served.

5.1.3. Review and approve DoD Component annual plans for implementing the STARBASE Program.

5.2. The DoD Components shall:

5.2.1. Establish necessary implementing regulations and procedures in accordance with this Instruction.

5.2.2. Report information regarding STARBASE Academy goals and their measurable achievements, Academy expenditures, and number of students and classes served no later than 30 days after the end of the fiscal year.

5.2.3. Audit each STARBASE Academy for fiscal and real property accountability once every 3 years.

5.2.4. Provide facilities and personnel support to STARBASE Academies, as resources permit. Ensure that opportunities to provide voluntary support to the Academies are known by the DoD Component personnel.

5.2.5. Forward the approved annual plans for each STARBASE Academy to the Office of the Assistant Secretary of Defense for Reserve Affairs (OASD(RA)) no later than 90 days before the start of the new fiscal year. Once approved by the OASD(RA) the plan shall serve as a Memorandum of Agreement between the STARBASE Academy, the DoD Component, and the OASD(RA).

5.3. The STARBASE Academies:

5.3.1. Shall, in coordination with local school administrators or other alternative education providers, actively encourage participation of youth at-risk and those that are historically underrepresented in science, math, and technology fields. Other factors may include selecting classes on the basis of:

5.3.1.1. Inner city and/or rural location.

5.3.1.2. Disability.

5.3.1.3. Socio-economic disadvantage.

5.3.1.4. Low academic performance.

5.3.2. Shall neither approve nor disapprove individual student nominations for participation in the STARBASE Program. A roster of individuals nominated to participate in each STARBASE Academy class should be obtained from the supported school district, alternative education provider, or individual or group of home schooling families that have applied for a STARBASE class.

5.3.3. May cooperate with and, if delegated by the DoD Component, receive tangible support from both profit and non-profit organizations.

5.3.4. May not exceed a one-time \$50,000 expenditure on real property maintenance or upgrade, unless granted an exception to policy by the Assistant Secretary of Defense for Reserve Affairs (ASD(RA)).

5.3.5. May not be administered by a for-profit organization.

5.3.6. May seek guidance, advice and opinion, and community input from local non-profit organizations. 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.

5.3.7. Shall cooperate with the OASD(RA) and its contractor in gathering data for the annual fiscal year Congressional report.

5.3.8. Shall forward through the DoD Component an annual plan that outlines the goals and objectives of the STARBASE Academy and contains a by-line budget request.

6. PROCEDURES

6.1. STARBASE Academies shall submit annual budget requests through their DoD Components to the OASD(RA) that identify STARBASE Academies expenditures by:

6.1.1. Staff.

6.1.2. Facility maintenance and utilities.

6.1.3. Facility furnishings.

6.1.4. Transportation and travel (e.g., TDY, training, special events).

6.1.5. Supplies.

6.1.6. Equipment.

6.1.7. Contract services.

6.1.8. Communications.

6.2. STARBASE Academy funding, budget, and report cycles will be aligned with Federal fiscal years.

6.3. A STARBASE Academy manning model is at enclosure 2.

6.4. Full-time military personnel in support of a STARBASE Academy must be assigned to transient or holding accounts, and may be used only to provide command or training for the program.

6.5. The services of civilian personnel in a STARBASE Academy may be procured as necessary to carry out the STARBASE Program purpose of providing command, administrative, training, or supporting services for the program.

6.6. STARBASE Academies shall offer a minimum of 700 hours of classroom contact per year. Academies shall choose to follow either subparagraph 6.6.1. or 6.6.2., below:

6.6.1. Give 20 classroom contact hours of instruction spread over 4 days. Under this option the program must complete 35 classes of instruction per year.

6.6.2. Give 25 classroom contact hours of instruction spread over 5 days. Under this option the program must complete 28 classes of instruction per year.

6.7. All STARBASE classroom contact hours shall take place on a military installation. Exceptions to this policy may be approved on a case-by-case basis by the ASD(RA).

6.8. STARBASE Academies may offer additional periods of special instruction, summer school (non-academic year) sessions, one-day workshops, community outreach, or teacher training periods. These programs shall not count toward the 700 hours minimum per year of classroom contact.

6.9. STARBASE class size may range from 20 to 35 pupils. Exceptions to this policy may be approved on a case-by-case basis by the ASD(RA).

6.10. For the purposes of the DoD STARBASE Program, Academy instruction shall cover these areas:

6.10.1. Math. See enclosure 3 for a curriculum menu.

6.10.2. Science. See enclosure 3 for a curriculum menu.

6.10.3. Technology. See enclosure 3 for a curriculum menu.

6.11. STARBASE Academies will be evaluated on the following criteria:

6.11.1. Gain in student knowledge in math and science.

6.11.2. Positive change in attitude of students toward math, science, and technology.

6.11.3. Compliance with DoD STARBASE Program guidelines.

6.11.4. Budget execution.

6.12. Standardized instruments for measurement of the STARBASE Academy evaluation criteria contained in subparagraphs 6.11.1. and 6.11.2., above, will be established by the OASD(RA) (enclosure 4 is reserved for this purpose).

6.13. The DoD Components may apply to the OASD(RA) to establish new STARBASE Academies under the following guidelines:

6.13.1. An identifiable source of funding is available, whether through Government or non-Government sources.

6.13.2. There is evidence of local community support for establishing a STARBASE Academy.

6.13.3. The proposed host-military installation can adequately support a STARBASE Academy.

6.13.4. An estimate of the yearly operating budget must be submitted, to include any first-year start-up costs.

6.14. The criteria for the ASD(RA) to name and/or federally fund new STARBASE Academies are:

6.14.1. That Civil Military Program funds are available to support the new Academy, or that the sponsoring DoD Component certifies that it can fund the new Academy, or that the new Academy can operate to DoD STARBASE Program standards without any DoD funding.

6.14.2. In the case of competing applications, the ASD(RA) will select the proposed Academy to support based on availability and amount of requested funding, likelihood for long-term success and financial support, evidence of community support, and other criteria as deemed appropriate by the OASD(RA).

6.15. Once selected to receive a STARBASE Academy, the host organization will be notified by the OASD(RA) and will be provided with training to prepare for opening and maintaining a STARBASE Academy. New Academies will be provided by the OASD(RA) with a core curriculum module, a module of additional curriculum activities, sample student materials, and an outline for developing an Academy director's guide. Substitutions to the core curriculum may be submitted for approval to the OASD(RA).

6.16. At the discretion of the ASD(RA), DoD support for a STARBASE Academy may be terminated because:

6.16.1. A STARBASE Academy fails to provide data necessary for compilation of the annual Congressional report.

6.16.2. A STARBASE Academy does not show measurable achievement of program goals.

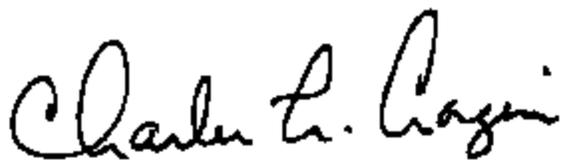
6.16.3. A military installation fails to support or becomes unable to adequately support a STARBASE Academy.

6.16.4. ADoD Component recommends that the STARBASE Academy be terminated.

6.16.5. Other reasons as deemed appropriate by the OASD(RA).

7. EFFECTIVE DATE

This Instruction is effective immediately.

A handwritten signature in black ink, reading "Charles L. Craig". The signature is written in a cursive style with a large initial "C".

**Principal Deputy Assistant
Secretary of Defense (Reserve Affairs)**

Enclosures - 4

- E1. Definitions
- E2. Academy Manning Model
- E3. STARBASE Core Curriculum Menu
- E4. Evaluation Instruments (Reserved)

E1. ENCLOSURE 1

DEFINITIONS

E1.1.1. Alternative Education Provider. A public or private school that is 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.

E1.1.2. 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.

E1.1.3. Class. Within the context of a STARBASE Academy, a class is a grouping of students. This group may not necessarily have been a homogenous entity prior to STARBASE instruction; it may be a temporary grouping only for the purposes of assembling for the 20-hour minimum period of STARBASE instruction.

E1.1.4. Classroom Contact Hour. A period of 60 minutes, plus or minus 5 minutes, in which a STARBASE Academy instructor is actively involved with students or in which a military member is demonstrating, displaying or teaching students about an application of math, science, or technology.

E1.1.5. Disability. Physical, mental, or sensory impairments that render major life activities more difficult.

E1.1.6. DoD Components. Those Department of Defense entities that have established or are pursuing the establishment of a STARBASE Academy, including the Military Departments, Defense Agencies, and Defense Field Activities.

E1.1.7. Inner City Location. Central section of a city, which is usually older and more densely populated.

E1.1.8. Non-Profit Organization. A legal entity recognized or chartered by competent State authority and to which the Internal Revenue Service has given status as a 501c(3) tax-exempt educational organization.

E1.1.9. Rural Location. As defined by the U.S. Bureau of Census: The population and territory outside any urbanized area and the urban part of any place with a decennial census population of 2,500 or more.

E1.1.10. Socio-Economic Disadvantage. Used for economically deprived, poor, poverty stricken, or disadvantaged individuals or groups.

E1.1.11. STARBASE Academy. A STARBASE Academy is a DoD educational entity that seeks to improve the knowledge and skills of students in kindergarten through twelfth grade in mathematics, science, and technology; and follows the Academy model described in this Instruction. A STARBASE Academy is not defined in terms of a geographic location.

E1.1.12. STARBASE Program. The STARBASE Program is authorized by reference (a) 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. STARBASE is funded by the Congress as a Civil Military Program.

E1.1.13. State. The 50 States of the United States of America, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, and Guam.

E2. ENCLOSURE 2

ACADEMY MANNING MODEL

E2.1.1. STARBASE Academies are authorized four full-time paid staff equivalent positions. They are:

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 one 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.

E2.1.2. Exceptions to the Academy manning model must be approved by the ASD(RA).

E3. ENCLOSURE 3
STARBASE CORE CURRICULUM MENU

E3.1.1. STARBASE core curriculum includes the following mandatory areas of classroom contact instruction:

- E3.1.1.1. Newton's Laws of Motion.
- E3.1.1.2. Four Forces of Flight.
- E3.1.1.3. Bernoulli's Principle.
- E3.1.1.4. Model Rocketry.
- E3.1.1.5. Aircraft Control Surfaces and Components.
- E3.1.1.6. Properties of Air.
- E3.1.1.7. Development, Innovation and Use of Technology.
- E3.1.1.8. Properties and States of Matter.
- E3.1.1.9. Flight Simulation.
- E3.1.1.10. Space Exploration.
- E3.1.1.11. Goal Setting.
- E3.1.1.12. Teamwork.
- E3.1.1.13. Avoiding Substance Abuse.

E3.1.2. Additional STARBASE Academy areas of classroom instruction may include:

- E3.1.2.1. Math.
 - E3.1.2.1.1. Logic.
 - E3.1.2.1.2. Graphics.

E3.1.2.1.3. Computer science.

E3.1.2.1.4. Navigation.

E3.1.2.2. Earth Science.

E3.1.2.2.1. Archeology;

E3.1.2.2.2. Environmental studies; and/or

E3.1.2.2.3. Anthropology.

E3.1.2.3. Physical Sciences.

E3.1.2.3.1. Physics;

E3.1.2.3.2. Aeronautics; and/or

E3.1.2.3.3. Chemistry.

E3.1.2.4. Life Sciences.

E3.1.2.4.1. Biology;

E3.1.2.4.2. Nutrition;

E3.1.2.4.3. Hydroponics; and/or

E3.1.2.4.4. Substance abuse.

E3.1.2.5. Social Sciences.

E3.1.2.5.1. Team building;

E3.1.2.5.2. Goal setting;

E3.1.2.5.3. Self esteem; and/or

E3.1.2.5.4. Citizenship.

E3.1.2.6. Other Applications of Technology.

E3.1.2.6.1. Forensics;

E3.1.2.6.2. Robotics;

E3.1.2.6.3. Engineering; and/or

E3.1.2.6.4. Applications of technology, as approved by the OASD(RA).

E4. ENCLOSURE 4
EVALUATION INSTRUMENTS (Reserved)