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April 19, 2019

M E M O R A N D U M

TO: Frank Abbate, County Manager

RE: Item IV., Letter of Support to Patrick Air Force Base for STARBASE Program

The Board of County Commissioners, in special session on April 18, 2019, executed and approved sending a Letter of Support to the Patrick Air Force Base for the STARBASE Program, for the potential impact it will have on fifth grade students through STEM education and programs. Enclosed is copy of the original that was provided to you in special session.

Your continued cooperation is greatly appreciated.

Sincerely yours,

BOARD OF COUNTY COMMISSIONERS
SCOTT ELLIS, CLERK

Tammy Rowe

Tammy Rowe, Deputy Clerk

/ds

Encl. (1)

cc: Each Commissioner



BOARD OF COUNTY COMMISSIONERS

County Manager's Office

2725 Judge Fran Jamieson Way
Building C, Room 301
Viera, Florida 32940

Brigadier General Schiess
Commander, 45th Space Wing
1201 Edward H. White II Street
Patrick AFB, FL 32925-3242

April 18, 2019

Dear Brigadier General Schiess:

On behalf of the residents of Brevard County Florida, the Board of County Commissioners are proud to endorse and lend our support for the Patrick AFB STARBASE program. We appreciate the potential impact it will have on our 5th grade students through STEM education and programs.

Brevard County seems to be a natural fit for this type of program. We have many leaders in the aerospace industry located here and their workforce is primarily comprised of engineers. Our community has keen interest in STEM education and our School Board members are always looking for opportunities to partner with other community resources to provide a quality educational experience for our youth.


We would be happy to welcome the STARBASE program to our county and look forward to our 5th graders taking advantage of this valuable opportunity.

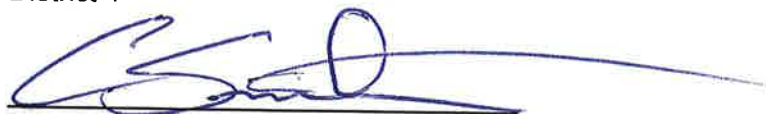
Sincerely,



Kristine Isnardi, Chair
District 5

Bryan Lober, Vice Chair
District 2

Rita Pritchett
District 1

John Tobia
District 3

Curt Smith
District 4



THE WORLD'S PREMIER GATEWAY TO SPACE



STARBASE Update

Science and Technology Academies Reinforcing Basic Aviation And Space Education

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Vision and Mission

■ Vision Statement

To raise the interest and improve the knowledge and skills of at-risk youth in science, technology, engineering and mathematics, which will provide for a highly educated and skilled American workforce that can meet the advanced technological requirements of the Department of Defense.

■ Mission Statement

By exposing youth to the technological environments and positive role models found on military bases and installations, we will provide 20-25 hours of exemplary instruction, using a common core curriculum that meets or exceeds the national standards. We will nurture a winning network of collaborators and build mutual loyalty.

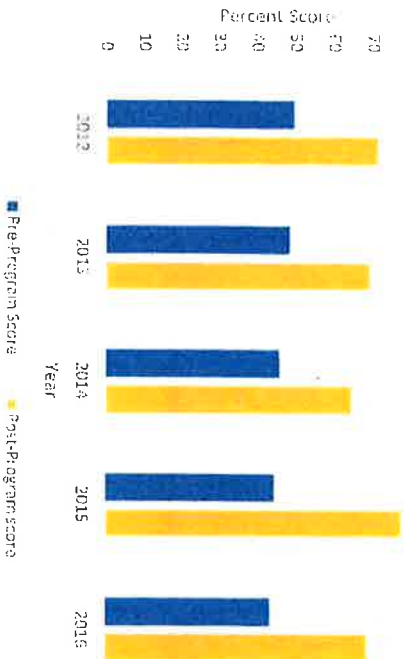
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Program At A Glance

STUDENT ASSESSMENT HIGHLIGHTS

STARBASE participants showed significant improvements in knowledge assessment scores of STEM curriculum areas:



In particular, STARBASE participants showed the most significant improvements in the following subjects between 2012 and 2016:



1,110,590 student participants since 1993

Total Cost of program per year = ~\$27M
Median Cost per Academy = ~\$350K

66 STARBASE locations in 33 states and one territory

PROGRAM OUTCOMES



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Background/History

- STARBASE originated in 1991 from a W.K. Kellogg Foundation grant and became a permanent program under Section 2193b Title 10, USC, in FY00
- STARBASE Academies are located at 66 DoD locations to include AF, ANG, AFR, Navy and Marine Corps installations across the U.S.
 - 1st AD installation in Florida for STARBASE
- Office of the Assistant Secretary of Defense for Reserve Affairs (OASD/RA) provides funding – Average funding \$350K per year for personnel and program requirements

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Background/History Cont'd

- Public School centered targeting 5th Grade students
- Public school system will provide transportation to and from the academic site as well as lunch for students
- Five-day week with 20–25 students attending every day for one week or one day per week for a month



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Curriculum Sample

Day 1	Day 2	Day 3	Day 4	Day 5
Management 0:00-0:15	Management 0:00-0:10	Management 0:00-0:10	Management 0:00-0:10	Management 0:00-0:10
Engineering A: Process Parent & Egbert 0:15-10:15	Engineering B: CAD DOD Mentorship LP Life Support & Submersible 0:10-10:10	Engineering B: CAD DOD Mentorship LP Life Support & Submersible 0:10-10:10	Engineering B: CAD DOD Mentorship LP Life Support & Submersible 0:10-10:10	Math C: Geometry Circuit Board Geometry 0:10-0:55
Math A: Numbers & Number Lines Math History 10:15-10:25	Chemistry Science C: Fluid Investigations 10:10-11:25	Technology A: Robotics Parent & Robotics Challenge 10:10-11:25	Chemistry Science B: Physical & Chemical Change Parent & Warm Ups & Cool Downs 10:10-11:25	Technology B: Navigation and Mapping Parent & Beach & Rescue 0:55-10:55
Physics A: 2nd Law Parent & Trebuchet 10:25-11:30	Math B: Motion Newton's 3 Laws of Motion 11:30-12:15	Math D: Data Analysis Pop Goes the Pitz 11:45-12:30	Physics B: Fluid Mechanics & Aerodynamics & Bernoulli's Principle 11:30-12:15	Math B: Measurement Basic Measurement Masks 10:55-11:25
Lunch 11:30-11:45	Lunch 11:30-11:45	Lunch 11:30-11:45	Lunch 11:30-11:45	Lunch 11:30-11:45
Math B: Measurement Basic Measurement Length & Liquid Volume 11:45-12:45	Chemistry Science C: Building Blocks of Matter 12:45-1:45	Physics A: Newton's 3 Laws of Motion 12:45-1:45	STEM A: CSTADSON Military Facilities Tour 12:45-1:45	Technology B: GPS Parent & GPSing 11:45-12:45
Chemistry Science A: Building Blocks of Matter CSTADSON Molecular Models 12:45-1:45	Physics A: Newton's 3 Laws of Motion 12:45-1:45	Physics A: Newton's 3 Laws of Motion 12:45-1:45	STEM B: Personal Investigations Circuits 12:45-1:45	
Management 1:45-2:00	Management 1:45-2:00	Management 1:45-2:00	Management 1:45-2:00	Management 1:45-2:00

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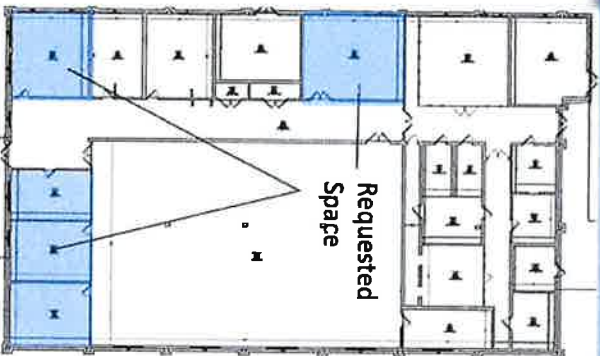


Questions/Comments?

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Shark Center Utilization



User : 45 FSS

Request : Secure space in building 3655,
Shark Center for STARBASE.

Requested SF :

Authorized SF :

(per AFMAN 32-1084)

Other Considerations :

2100 SF

Contingent upon student
population footprint offer.

Recommendation : Approve initial

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School Board of Brevard County

2700 Judge Fran Jamieson Way • Viera, FL 32940-6601
Mark W. Mullins, Ed.D., Superintendent



April 4, 2019

Brigadier General Schiess
Commander, 45th Space Wing
1201 Edward H. White II Street
Patrick AFB, FL 32925-3242

Dear Brigadier General Schiess:

On behalf of Brevard Public Schools, I am writing to acknowledge our support for and intent to participate in the Patrick AFB STARBASE program. I have reviewed the program and understand the potential positive impact it will have on our 5th grade students through STEM education and programs.

I understand there are logistics to be worked out regarding approval of our school budget and scheduling of students to participate in the STARBASE program. While awaiting final approval, our BPS team will be working on this task.

We look forward to having the STARBASE program and community partnership with the 45th Space Wing as an additional resource for our teachers to enhance the STEM curriculum for our Brevard County students.

Sincerely,

A handwritten signature in blue ink that reads "Mark W. Mullins". The signature is written in a cursive style with a large, stylized "M" and "W".

Mark W. Mullins, Ed.D.
Superintendent





April 5, 2019

Brigadier General Schiess
Commander, 45th Space Wing
1201 Edward H. White II Street
Patrick Air Force Base, FL 32925-3242

Dear General Schiess:

On behalf of the Economic Development Commission of Florida's Space Coast (EDC) I am pleased to offer full support of the Patrick AFB STARBASE program. The EDC realizes the critical need to raise the interest and improve the knowledge and skills of at-risk youth in science, technology, engineering and mathematics (STEM) which will provide for a highly educated and skilled American workforce that can meet the advanced technological requirements of the Department of Defense and Florida's Space Coast.

The EDC is a private, not-for-profit economic development organization that supports all of Brevard County in economic development efforts. The EDC has worked closely with our military installations to support programs that directly impact both military personnel and their families. This is yet another program in which our partnership can make a difference in developing future workforce and STEM talent. We have reviewed the STARBASE program and realize the positive impact it will have on 5th Grade students.

We look forward to having the STARBASE program located at Patrick Air Force Base and continuing our long partnership with the 45th Space Wing.

Sincerely,

A handwritten signature in black ink, appearing to read "Lynda Weatherman".

Lynda Weatherman
President & CEO