



PENNSYLVANIA WING CADET TRAINING SCHOOLS
UNITED STATES AIR FORCE AUXILIARY, CIVIL AIR PATROL
Bldg 3-108, Fort Indiantown Gap, Annville, PA 17003



24 November 2015

MEMORANDUM FOR CAP MEMBERS INTERESTED IN RUNNING STEM ACADEMY

FROM: Cadet Training Schools Commander

SUBJECT: Intention to Establish the Pennsylvania Wing STEM Academy

1. It is my pleasure to announce that the Cadet Training Schools (CTS) plans to develop our first annual Science, Technology, Engineering and Mathematics (STEM) Academy. The academy would be held at Fort Indiantown Gap in conjunction with our other summer schools during the week of June 19-26, 2016. It is my intention that this school gains accreditation as a National Cadet Special Activity (NCSA) after one to two years of successful implementation.

2. CTS is looking for motivated Senior and Cadet members who have some level of background in STEM fields of study. Candidates to run the school would be responsible for building the 7 day curriculum and running the school during Summer CTS at Fort Indiantown Gap during the week of June 19-26, 2016.

3. Pennsylvania Wing has several leading edge organizations nearby which will serve as great resources that can be incorporated into a field trip during the 2016 Pennsylvania Wing STEM Academy. They include:

a. **National Security Agency (NSA) / US Cyber Command (CYBERCOM) Headquarters** – Two hours away, a field trip to NSA / CYBERCOM will serve as the focal point for computer engineering, emerging technology and cyber security topics. Two of the Pennsylvania Wing staff members are employees and would facilitate student/staff access to this facility.

b. **US Army Research Labs (ARL)** – Housed on-site at Fort Indiantown Gap, ARL has a robotics research facility which will serve as the focal point for robotics and technology discussions.

c. **National Aeronautics and Space Administration (NASA) Goddard Space Flight Center** – Two hours away, a trip to the nearby NASA facility in Laurel Maryland will serve as the focal point for space, astronomy and rocketry discussions. This facility was the headquarters for the recent New Horizons mission to explore Pluto and would provide great insight into current events of NASA.

d. **Higher Education Centers** – Penn State University, Lehigh University and Drexel University are all centers of academic excellence who offer first-rate STEM programs to their students. All are within a two hour drive from Fort Indiantown Gap and would be great to host any STEM topic.

4. In addition to the four potential field trip locations above, candidates who are selected to run STEM Academy would work to develop a 7-day curriculum that covers all of the topics identified by CAP: Aerospace Education, Rocketry, Space & Astronomy, Cyberspace, and Robotics. The goal is to hit each of these areas and spread out the topics evenly across the entire week. In addition to introducing cadets to each subject material, we would also focus on opportunities where cadets can eventually enter these career fields and other avenues where cadets can pursue specialized education in these fields. Emphasis will be placed on ensuring as much “hands-on” learning is incorporated into the curriculum.

5. In order to fund the hands-on learning, we would need to focus on multiple funding sources to keep tuition costs as low as possible (I am working to keep tuition at \$150 - \$175 per student for the week). Therefore, we should look to request assistance from Region and National Headquarters. Additionally we should consider reaching out to Industry leaders for financial assistance. One such leader is the Air Products and Chemicals is located in Trexlertown Pennsylvania. They are a major support of youth programs in the Lehigh Valley for STEM initiatives. Candidates who are selected to run the STEM Academy would also be heavily involved in coordinating these type of donation requests.

6. If you have any questions at all or would like to apply to be a candidate to run this school, please contact me via email at scroskey@pawgcts.org.



SCOTT R. CROSKEY, Lt Col, CAP
Commander