



# STEM Educators Network E-Newsletter

Dedicated to connect K12 educators with aviation and space exploration STEM education resources and activities for all grade levels.

2023

SCIENCE TECHNOLOGY ENGINEERING MATHEMATICS

EDUCATOR  
STEM WORKSHOP

Join us for a **FULL day STEM Educator workshop!**  
**Receive a \$200 stipend for participation AND take home a class set of supplies and equipment from the day's activities.**

Workshop activities will be Project Based Learning STEM focused targeting middle school grade levels 6th to 8th. Activities can be modified by the educator for use with GT programs, upper elementary, and lower high school grades. STEM activities will likely include a mixture of Bernoulli's Principles of Air Movement, Tissue Paper Hot Air Balloons, Tetrahedral Kites, Straw Rockets, Density Challenges, Cyphers, Spy Among Us, and possible Egg-Drop.

REGISTER TODAY

<https://tinyurl.com/AFSF-STEM-Workshops2023>

SPONSORING AGENCIES AND PROGRAMS

Department of Defense  
**DoD STEM**  
Science • Technology • Engineering • Mathematics

Contact Dr. Yemothy with questions via email: [nicole.yemothy@afk12stem.org](mailto:nicole.yemothy@afk12stem.org)

## 2023 Workshop Locations & Dates

- Dalhgren, VA - Feb 1st
- Tinker AFB, OK - Feb 7th
- Indian Head, MD - Feb 21st
- AZ STEM Program - Feb 28th
- JB Andrews, MD - Mar 11th
- N. Charleston, SC - Feb 17th
- Upstate SC - Feb 21st
- Kirtland AFB, NM - April 29th
- Buckley SFB - May 11th
- Peterson SFB - May 13th
- Robins AFB - May 20th
- Davis Monthan AFB, AZ - June 13th
- Luke AFB, AZ - June 15th
- Ellsworth AFB, SD - June 21
- Ellsworth AFB, SD - June 22

[Register Today!](#)



## Ken Robinson, KHS CTE DoD STEM Ambassador 2022-23

**Ken's Duty Station:** DoDEA Schools - Germany

Ken Robinson is a veteran high school STEM educator working for the Department of Defense Education Activity (DoDEA) serving military students stationed in Germany. For the past 20 years, Ken has taught the full gamut of STEM ranging from engineering and information systems to biotechnology and digital electronics. Ken is responsible for establishing the first overseas SkillsUSA presence. Ken serves as the NY State SkillsUSA Area VII (Europe) lead overseeing career and technical education (CTE)/STEM competitions throughout central Germany. He also established the Air & Space Forces Association Europe Near Space Challenge, an extension of his Project Horizon High Altitude Balloon program. Ken's desire to promote greater subject matter (SME) expert support for project-based learning led to the development of the Community Partnership Program enabling teachers direct access to local SMEs in over 32 various CTE disciplines via his Adopt-a-Pro liaison portal.

"The need for STEM acceptance and infusion into our education system is paramount. Our resolve necessitates a collective effort to integrate STEM into all facets of education. I believe project-based learning together with industry partnerships will help pave the way for our journey ahead."

[DoD STEM Ambassador Website](#)

[Ken.Robinson@dodea.edu](mailto:Ken.Robinson@dodea.edu)



Junior Science and Humanities Symposium (JSHS) is a Department of Defense sponsored STEM program (U.S. Office of the Secretary of Defense and the U.S. Departments of the Army, Navy, and Air Force) that encourages high school students to conduct original research in the fields of STEM and publicly recognizes students for outstanding achievement.

[Click to visit the JSHS website and find out more information!](#)

## AE Fellow Visits Kirtland AFB

In October 2022, our Albert Einstein Fellow, Dr. Nicole Yemothy visited Kirtland AFB and 5th grade students at Mission Avenue Elementary to build Hot Air Balloons during the annual Albuquerque International Balloon Fiesta. The Balloon Fiesta has been held annually since in 1972. Find the activity below!



## STEM in Action!



Build hot air balloons out of tissue paper that are safe to fly indoors with hot air blowers. Affordable activity using only tissue paper, glue sticks, and construction paper. Everything easily found on Amazon. The Indoor Hot Air Balloon blowers used available from Pitsco Education.

[Click to download Dr. Y's Hot Air Balloon STEM Activity.](#)

[Click to download Dr. Y's Hot Air Balloon Timeline Project](#)

## Register for STEM Programming

These opportunities are offered through Pathful Connect (formerly Nepris), an online meeting platform designed to connect teachers and students to industry professionals.

**Participants will be required to create a free account prior to the Panel. To create your account and register for the session, please use the link below!**

**Audience:** Grades 7-12

**Duration:** 45 minutes

**Event Type:** Virtual

**Platform:** Pathful

### Virtual Opportunities This Winter

Air & Space Force K-12 STEM is bringing several virtual opportunities to you and your students this winter! Check out the lineup below. New events will be added to the schedule soon, so be sure to check back! We hope to see you there.

### Woman and Girls in Science Day - Feb 10

Join Dr. Kimberly Jacoby, STEM Program Outreach Coordinator - Air Force Office of Scientific Research, as she shares her scientific journey as a woman in STEM and explains the importance of fluorescent proteins and imaging technology.

### Career and Technical Education Month - February

Several Guardians from the US Space Force will share their personal experiences and discuss their role in Space Force. Topics include cyber security, the Global Positioning System (GPS) and more! Several dates and times available the week of Feb 27.

[asfstem.nepris.com/site](https://asfstem.nepris.com/site)

## Stay Connected to DoD STEM

Access a range of STEM-related websites and engage in networks, find opportunities for students, and resources for teachers:

- [Department of Education STEM](#)
- [DoD STEM](#)
- [STEM to Space](#)
- [American Association for the Advancement of Science \(AAAS\)](#)

- [NASA STEM](#)
- [National Center for Science Education \(NCSE\)](#)
- [Association of Science and Technology Centers \(ASTC\)](#)



**Share with Us!**  
**Where's Your STEM?**

Email [office@afk12stem.org](mailto:office@afk12stem.org)

