The NASTA
The National AeroSpace Training and Research (NASTAR) Center (est. 2007) is the premier commercial aerospace training and research center in the world. Using fun, engaging, and inspiring activities, the education programs at the NASTAR Center are designed to meet the needs of both educators and students by providing a unique understanding of the world of flight and incorporate STEM (science, technology, engineering, and math) education.

**THE NASTAR CENTER OFFERS:**

- Hands-on learning and NASA resource materials target STEM education
- Teacher’s earn Act 48 continuing education hours in a thrilling, new way
- K-12 students discover the ‘science behind technology’ in rewarding fieldtrips
- NASTAR Camp launches 4th–8th graders into the fascinating world of flight
- NASTAR branded K’Nex education *Energy, Motion & Aeronautics* sets
- Affiliate member of the NASA Pennsylvania Space Grant Consortium
STUDENTS

The NASTAR Center student programs provide rewarding experiences and opportunities for K-12, University, and Graduate students. The student programs offer access to the same cutting-edge technology, equipment, and expertise used by the NASTAR Center to conduct fighter pilot training, spaceflight training, and advanced testing and research studies.

NASTAR CAMP

The NASTAR Center opens its doors each summer to students in grades 4–8 with exciting day camp programs that include hands-on experiences such as piloting a flight simulator, performing experiments, and learning about the fascinating world of flight. Students also enjoy learning about the types of training the NASTAR Center conducts, including the space training for Commercial Flight Astronauts and Suborbital Scientists.

Some of the many camp activities include making your own parachutes and stomp rockets.

K-12
• Field Trips*
• Scout Programs
• NASTAR Camp

University
(Undergraduate & Graduate)
• Design Challenges
• Internships
• Dissertation & Thesis Support
• Research Testing & Data Collection
• Internal IRB Support

*If you prefer to see what the NASTAR Center has to offer before you schedule your field trip, individual teacher orientation tours are available.

Attend Camp Where Astronauts Train!
The NASTAR Foundation is a non-profit organization that fosters opportunities for people of all ages to promote to experience the excitement of aerospace exploration.

The mission of the NASTAR Foundation is to promote aerospace education as a lifelong process; support applied and theoretical scientific research related to aviation, human perception and cognition and general man-machine interaction; and to support the health and safety of the aerospace industry.
The NASTAR Center educator programs offer a unique ‘spin’ on engaging students in math, science, and technology. Program curricula, content knowledge, and activities include NASA and FAA materials as well as feature actual flight experiences in our world-class aviation and space training facility. As a bonus, our Teacher Resource Center (TRC) is available on site to support your teaching needs.

“Certainly The Most Amazing Teaching Experience I’ve Ever Had!”
- Caren Carroll / Our Lady of Good Counsel

EDUCATOR PROGRAMS
ONE-DAY PROGRAMS

Acceleration*  
Explore Newton’s Laws of Motion first-hand while you embark on a thrilling space launch and reentry experience in the PHOENIX centrifuge!

The Physiology of Flight*  
What better way to learn Boyle’s Law and Charles’ Law of Gases than to experience it yourself? Witness and describe the physiological effects of flight while ascending to 10,000 feet in an altitude chamber.

The Science of Flight
In this course you will learn about aviation and space fundamentals, atmosphere and weather, forces and motion, sensory illusions, and aircraft dynamics using the General Aviation Trainer (GAT II).

500 Years of Flight  
Experience the histories of aviation and space flight from Leonardo da Vinci to the International Space Station and beyond, through hands-on activities and craft projects. Construct a variety of models that represent significant aeronautical accomplishments and plot historical events on a timeline.

Rocket Science
Explore Newton’s Laws of Motion by demonstrating the fundamentals of rocketry! Construct air and water powered rockets (ideal for limited space areas) and launch outdoors. Using trigonometry, calculate the altitudes reached and see who’s went the highest! Learn the latest news on NASA and commercial space activities that will inspire your students.

TWO-DAY PROGRAMS

Experiencing Newton’s Laws of Motion*  
In this amazing two-day workshop, encounter Newton’s Laws of Motion and understand how they affect the human body in flight. You will be able to tell (and show) your students what it feels like to be launched into space after your own simulated space flight experience in the PHOENIX centrifuge! Topics include motion physiology, Newton’s First and Third Laws of Motion, the impact of technology on society, and spatial disorientation.