

“Art and Science of Flying” coming to Boise Airport

Fun Workshop Addresses STEM Education Through the Lens of Aviation

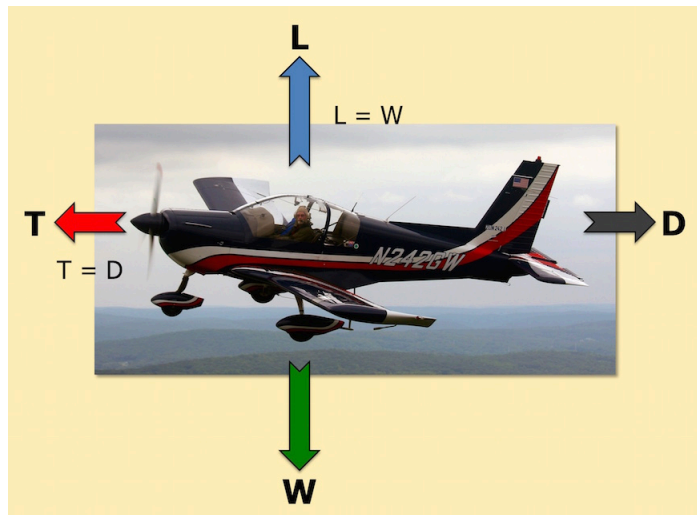
by Rich Stowell, Master Flight Instructor
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It's no secret the U.S. is facing a crisis in science, technology, engineering, and math (STEM). Simply stated, we need to produce more STEM teachers and graduates in STEM majors, as well as generate greater interest in STEM among women, minorities, and underserved students. The U.S. has committed significant resources to arrest the nation's freefalling STEM education system and respond to future workforce needs.

Aviation offers a readymade solution to the STEM problem: it's an engaging topic, and has always offered a unique gateway into STEM fields. The path to general aviation's heyday, for example, started when the influx of WWII pilots returning home to civil pursuits spawned unprecedented growth. Communities soon realized the economic value of local airports. Incentives for building these airports were shared by public and private sectors, and many were designated as part of the National Plan of Integrated Airport Systems. Genuine public-private partnerships resulted where individuals across the country became responsible for thousands of nodes in our national transportation system.

Young people migrated to these community airports as well. There they were exposed to the myriad STEM disciplines associated with building and flying airplanes, and operating and maintaining airports. Passions were kindled that led to innovations in aerospace and other fields, including the current race to commercialize space.

Somewhere along the way, however, the linkages between aviation and STEM education, between airports and their communities, began to break down. Many airports increasingly became closed off, while communities began to view them less like assets, and in many cases, more like liabilities. Most of the 5,000+ public-use airports across the U.S. are now underutilized, especially as educational resources. Yet they remain STEM-rich environments! Reestablishing the connection between airports and their communities—positioning airports as assets that can help communities solve our STEM problem—is an obvious win-win proposition.



The difference between flying and falling: four forces instead of two

“The Art and Science of Flying Ground School” is one such program that could rekindle an appreciation for airports as valued resources for STEM education. Developed by pilots and Master Instructors Linda Castner and Rich Stowell, the workshop weaves history, biology, and technology into a dynamic exploration of the wonder of flight. The Ponderosa Aero Club will host “Art and Sci BOI” on Saturday, April 23, 2016 from 8:00 a.m. to 5:00 p.m. at Jackson Jet Center in Boise, Idaho.



Discover the simple elegance of SpaceShipOne's design

According to Castner, "This is much more than a run-of-the-mill ground school for pilots. It's also an outreach program to bring teachers and their students to the airport." To that end, organizers have been reaching out to educators within a two-hour drive of Boise Airport. Additionally, the Idaho STEM Action Center has pledged funding that will allow twenty female, minority, or underserved students to participate.

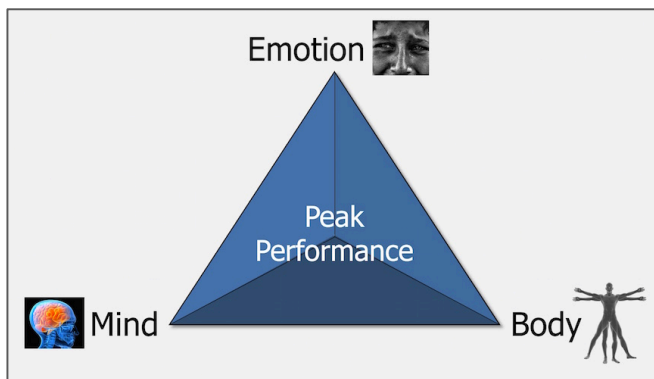
The interactive content will be delivered in five parts:

1. Clearing Your Imagination for Take Off
2. The Aerodynamics of Flight Revealed
3. The Airport "Living Lab" Experiential Demonstration
4. Airplane Performance—What Planes Do and Why
5. Human Performance—What We Do and Why

Among other objectives, the workshop intends to:

- Foster personal growth and empowerment
- Offer new ways to overcome obstacles and approach problem solving
- Provide insights into achieving peak performance in any endeavor
- Facilitate fun interaction between pilots and non-pilots
- Give pilots new ways to view their flying experience and relate it to others

Pilot and Treasure Valley businessman Joe Corlett will emcee. Special guests scheduled to attend include the Administrator of the Idaho Division of Aeronautics, the Executive Director of the Idaho STEM Action Center, the Dean of the College of Engineering at Boise State University, the Community Relations Officer from the Idaho State Department of Education, the Safety Team Program Manager at the Boise FSDO, and the Director of Community Engagement at The Peregrine Fund.



Learn how mind, body, and emotion shape your experiences

Representatives from the FAA and major universities will be in attendance to evaluate this workshop as well. If successful, Art and Sci BOI could become the model for similar outreach programs hosted at airports across the country.

Get Involved!

This is a unique opportunity for teachers and students to wrap themselves in curiosity and experience new learning. Here's how you can get involved:

1. Register today. For the early bird fee of \$50, you'll get to participate in a fun, STEM-centric event. And lunch is included! If you are also a pilot, you can earn WINGS credit, too.
2. Spread the word. Take every opportunity you can to encourage educators and students to attend. The material is suitable for ages 13–Adult.
3. Connect organizers with potential sponsors. Know any businesses or organizations interested in visibly promoting STEM education and community outreach? Connect event organizers with them. The current list of event partners includes Ponderosa Aero Club; Jackson Jet Center; Idaho STEM Action Center; Idaho Division of Aeronautics; Coca-Cola; FAA Boise FSDO; The Peregrine Fund; Rich Stowell's Aviation Learning Center; Up, Up, and Away in Hunterdon; Virtual Bookkeeping Services; Fresh Betty Spaghetti; and Mountain States Appraisal and Consulting.
4. Sponsor a teacher or student yourself. Know another great teacher, or a student who is interested in a STEM discipline? Give him or her the gift of registration to The Art and Science of Flying.

Early bird registration is \$50/person (\$59/person after March 25th). The fee includes lunch, a certificate of completion, and a chance to win one of several door prizes. Qualified pilots can also earn WINGS credit, and school teachers may be eligible for professional development credit. Suitable for ages 13–Adult.

For more information and to register, visit www.ArtandScienceofFlying.com or contact Sheri “Sharki” Kontra: Info@ArtandScienceofFlying.com, (mobile) 208-410-8550.

To view a 01:42 promo video created with Adobe Voice, see <https://voice.adobe.com/a/r/BoA/>.