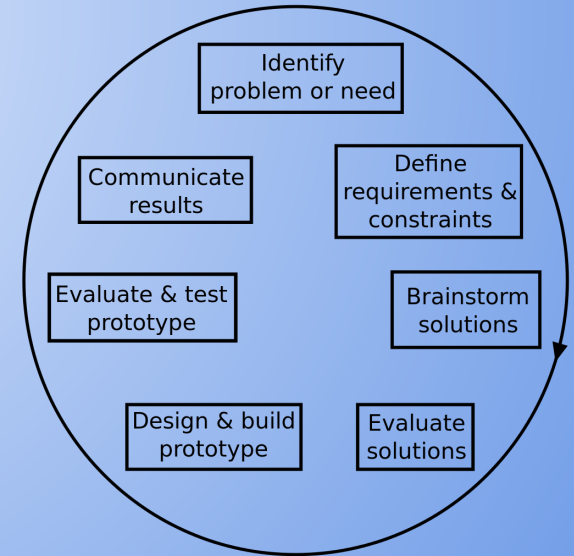
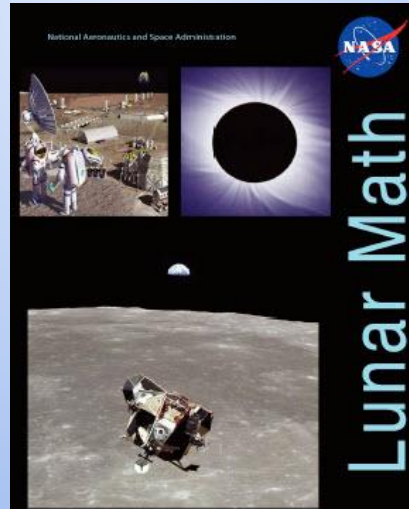
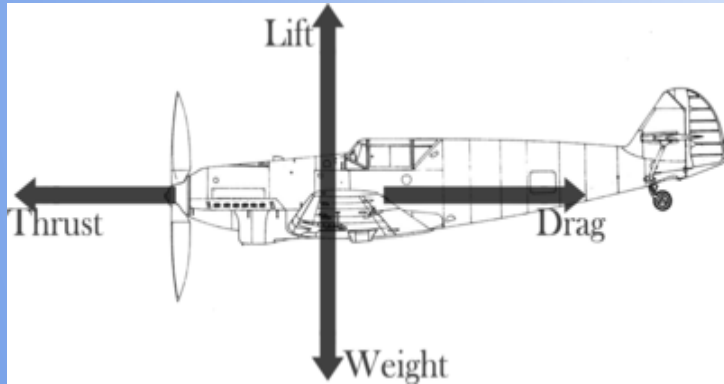


Teaching STEM through Aviation

Presented by Mike Miller

Why would/should we do this?

- Engaging/Familiar to Students - how can an object that weighs 90,000 lbs fly?
- Interdisciplinary - math, science, engineering and technology



Science, Technology, Engineering & Mathematics

“All young people should be prepared to think deeply and to think well so that they have the chance to become the innovators, educators, researchers and leaders who can solve the pressing challenges facing our nation and our world, both today and tomorrow. But, right now, too few students see these disciplines as springboards for their careers.”

- Civil Air Patrol, 2022

Why would/should we do this?

- “To maintain our country’s global leadership in aviation as well as other disciplines, students must advance their skills in science, technology, engineering and mathematics.” (Federal Aviation Administration 3/17/22)
- Aviation is a growing field - by 2041, 602,000 new pilots & 610,000 technicians will be needed worldwide (Boeing Pilot & Technician Outlook)
- WIN - WIN for students!



AOPA Aviation & Aerospace Courses

- Developed by Aircraft Owners & Pilots Association (Free)
- Aligned to NGSS/NJSLS
- 5 E lesson plan format
- Inquiry based learning
- General Science courses
- Professional Development
- Startup: \$1,500 for course supplies









Career Pathways

- Pilot - FAA Private Pilot (Written Test)
- UAS (Drones) - FAA Part 107 Remote Pilot Certification (Written Test)



12 Days/Month

	First Officer (Year 1)	Captain (Year 6)	Captain (Year 12)
	\$93,820	\$282,400	\$295,660
	\$100,840	\$285,460	\$298,720
	\$98,800	\$289,540	\$305,860
	\$86,560	\$270,160	\$284,440
	\$55,960	\$317,080	\$331,360
	\$92,680	\$268,120	\$286,480

Resources

- AOPA - [High School Aviation STEM Curriculum](#)
- Civil Air Patrol - [Aerospace Education](#)
 - 40+ free lessons, STEM Kits and other resources for teachers
- New Jersey Aviation Education Council - <https://aviationec.org/>

Questions & Contact Information

Mike Miller: email: mmiller@hazlet.org Twitter: @HazletSciSup

Beth Cameron (AOPA): email: mailto:cameron.beth@gmail.com

