

Explorer Post 1010
Rockville Maryland



Engineering Exploring Program

Bob Ekman, Advisor
September 2022

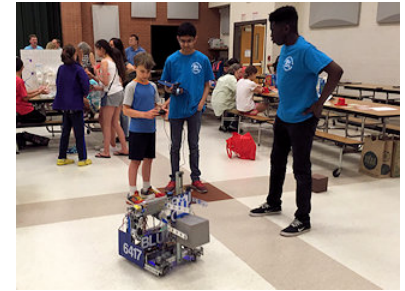
Who We Are

- Enthusiastic students from local high schools, interested in engineering
- Sponsored by the Rockville Science Center
- Organized under national Exploring Program, Learning for Life, Boy Scouts of America Affiliate



What We Do (Help Discover Your Future)

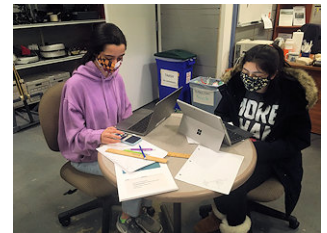
- Compete in international robotics, rocketry and drone programs
- Everyone on a team
- Teen leadership responsibilities
- Local field trips and presentations
- Community service opportunities
- Adult support
- And we have a lot of fun!



We Kick Bots!

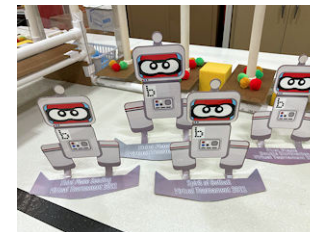
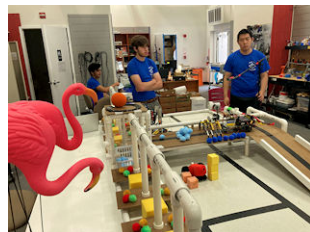
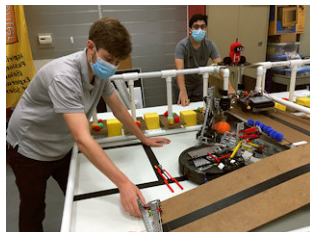
- *FIRST Tech Challenge (Blu Cru)*

- Eleven years participation
- Awards in local, regional, world events
- New challenge for 2022/23



- *Botball Educational Robotics*

- Twenty-One years participation
- Compete in DC region tournaments, participate in global conference
- Regional and global awards over many years



We Fly Them High!

■ *The American Rocketry Challenge*

- Design/build model rockets to meet a specific altitude, duration, design, and recovery
- Carry eggs and altimeter
- Launch in MD and VA
- 2nd Place Nationally in 2021



■ *Unmanned Aircraft Systems (UAS₄STEM)*

- Build and fly a quadcopter to complete a detailed mission
- Regional leader
- 1st Place Nationally in 2021



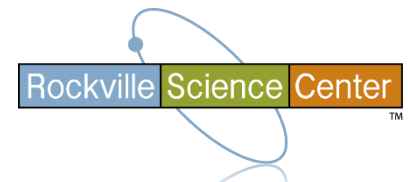
Operations

- Membership 2022
 - 24 high school girls and boys
 - From many different schools
 - 90% graduate to science/engineering higher education degree programs
- Meetings
 - Wednesday, 7pm – 9pm, everyone
 - Varied in-person work sessions
 - Saturday/Sunday launches, competitions
 - Annual picnic, teamwork events
 - Exhibits, school visits, SSL opportunities
 - Local tours, summer overnight trips



Rockville Science Center Sponsorship

- Explorer Post 1010 in 25th year
 - *Seventeen years at Lockheed Martin*
 - *Five years at Johns Hopkins*
- Rockville Science Center Support
 - *Volunteers, mentors, resources, outreach*
 - *Storefront at Rockville Town Square*
- Rockville Memorial Library
 - *Facility use, safe and secure location*
- Funding
 - *Dues (\$250 annual)*
 - *Grants, contributions*
 - *Fund raising*



Exploring (Learning for Life)

- National organization

- Strives to be the foremost co-educational youth program for character and career development
- <http://www.learning-for-life.org/>



- Exploring is work site career program

- Provides high school teens with environment, resources, and relationships they need to learn and grow
- Aviation, Business, Communications, Engineering, Fire Service, Health, Law Enforcement, Law & Government, Science
- 20 Posts in DC area council, 600 students



Contact

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