

Explorer Post 1010
Rockville Maryland



Engineering Exploring Program

Bob Ekman, Advisor
September 2024

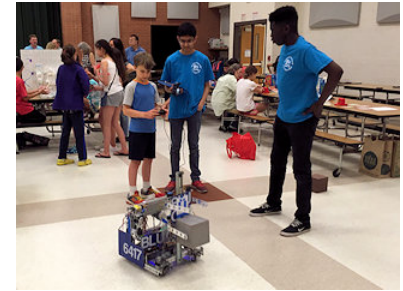
Who We Are

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



What We Do (Help Discover Your Future)

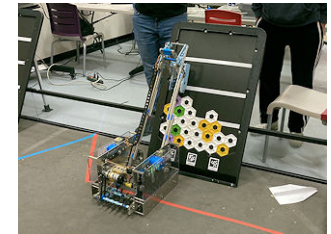
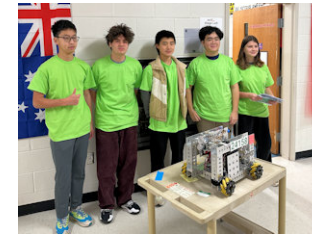
- Compete in international robotics, rocketry and drone programs
- Everyone on a team
- Teen leadership responsibilities
- Local field trips and presentations
- Community service opportunities
- Adult support
- And we have a lot of fun!



We Kick Bots!

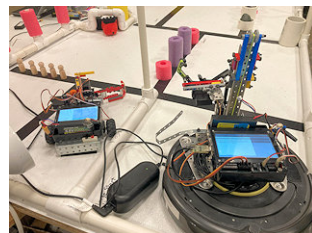
- *FIRST Tech Challenge Robotics*

- Twelve years participation
- Awards in local, regional, world events
- New challenge for 2024/25



- *Botball Educational Robotics*

- Twenty-Three 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
- High Power Rocket Project
- Launch in MD and VA
- Top 100 team in 2024



- *Uncrewed Aircraft Systems (UAS₄STEM)*

- Build and fly a quadcopter to complete a detailed mission
- Regional leader
- 1st Place Nationally in 2024



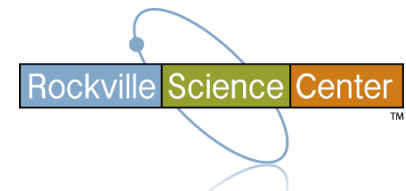
Operations

- Membership 2024
 - 40 high school girls and boys
 - From many different schools
 - 90% graduate to science/engineering higher education degree programs
- Meetings
 - Weekday, 7pm – 9pm
 - 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 28th 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 Makerspace
 - *Facility use, safe and secure location*
- Funding
 - *Dues (\$300 annual)*
 - *Grants, contributions*
 - *Fund raising*



Exploring USA

■ National Organization

- Strives to be the foremost co-educational youth program for character and career development
- <https://www.exploring.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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