

## **Manasquan High School Wins Engineering STEAM TANK State Championship**

Manasquan High School is proud to announce that two teams of our students won first and third place, out of over 193 entries, in a rigorous statewide invention competition.

Over a span of two school years, MHS Academy of Engineering's Outdoor Eco-Track & Exo-Controller teams worked to create prototypes for the STEAM TANK Challenge. On Nov. 9, 2017, these teams learned they had won the competition. "We're so proud of these students, their hard work, and their accomplishments," said Rick Coppola, principal of MHS.

First place winners, seniors Marc Gargiulo, John Heeseman, and Kevin Lin, invented an "Outdoor Eco-Track". MHS does not have a full 400-meter oval track available for runners to use due to limited space and possible infringement on other playing fields. The team's solution was to create the "Modular Eco-Track Solution", a modular 3D printed, customizable running track system that is designed to connect to existing track surfaces. It lays directly over grass, or other surfaces, and creates a continuous running surface for teams and gym classes to use.

Third place winners, William Bielicki (gr.12), Michael Lurch (class of 2017), Joe Maimone (gr.12), Christopher Palangio (gr.11), and Matthew Palangio (gr.11), proposed the "Exo-Controller". This invention applies a known technology, thermoelectric generators, to a new market, video game controllers. The Exo-Controller will create a renewable source of power for wireless video-game controllers using one's own body heat.

The Outdoor Eco-Track team's first place win earned MHS a \$2,500 STEAM grant. Mentors, potential investors, and patent lawyers approached team members to help them develop the prototype as well as explore scholarship and internship opportunities. The Exo-Controller team tied for third place and earned MHS an additional \$500 STEAM grant.

The New Jersey School Board Association, NJSBA, and the U. S. Army, co-sponsored the STEAM TANK Challenge, a multi-stage engineering invention competition. It is modeled after the popular "Shark Tank" TV series and helps promote innovative iSTEAM [integrated Science, Technology, Engineering, Arts, and Mathematics] education initiatives in NJ schools.

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