



Central Nine Career Center

December 6, 2014

Students from schools across Indiana converged on Central Nine Career Center on December 5, 2014 for the fifth annual Lock Tight Night overnight robotics competition. Students began arriving shortly before 7:00pm on Friday with all teams arriving by the time of opening ceremonies. At roughly after 8:00pm, the Visual Edge team unveiled their new game called Salvage Operation. As with past games developed for Lock Tight Night, the theme for this year's competition featured a challenge that was already familiar to students. Luke Ward spent some time describing a brief overview of the game's rules and then opened the floor for questions. Students were not shy about using the offer of an open forum Q&A session to clarify and potentially exploit any loop holes in the game's rules.

The unveiling of the game was broadcast by Central Nine Career Center via a live webcast so that Dan Ward, President of Visual Edge, Inc. would be able to see the response from the students since he was unable to attend the event. Visual Edge not only designed the game used during this year's event, but also provided the robotics kits to each of the participating schools. Following the unveiling of the game during the opening ceremonies, event representatives took time to thank all of the sponsors that made the event possible, which included Visual Edge, Cummins, Midwest Purification, Henkel, McDonald's, Chick-fil-A, Gandolfo's, Geek in Pink, Longhorn Steakhouse, Stacked Pickle, O'Charley's, Fireside Brewhouse, and Conexus Indiana. In addition to corporate sponsors, Central Nine was able to integrate projects that support the competition into their curriculum. Food service was handled entirely by the C9 culinary students with security for the facility handled by their protective services students. Likewise, their graphic design students developed promotional materials and the advanced manufacturing students designed and manufactured the trophies for this year's contest. It was certainly not just the robotics club students that worked as a team throughout the competition.

Once teams were equipped with the rules to Salvage Operation, the robotics kits were distributed to each of the schools. Some of the team members on each team began organizing kit components while some continued to pick apart the rules for the game to share with the remainder of their teammates. Shortly following the distribution of the rules, event representatives began passing out free samples of Loctite products that was provided by Henkel, the company that owns the Loctite brand name. Traditionally, representatives from Loctite provide presentations about their products on-site in support of the event. Unfortunately, the schedule of the representatives kept them from providing on-site support, but many of the veteran students quickly brought their less experienced teammates up to speed with how to use the Loctite samples. By the time, the qualifications began, several of the robot designs made good use of both the Loctite samples and also Christmas gifts that were passed out to the teams at various times of the night that were provided by Central Nine Career Center, Cummins, and Visual Edge. Some teams had gathered enough confidence in their design by 4am to begin drifting off to sleep while other teams continued to work throughout the night to perfect their designs. By the time the Engineer teams from Cummins and Midwest Purification arrived at 7am, the student teams already had working robots ready to begin the qualification matches. Midwest Purification arrived on-site early to begin scoping out which of the student designs worked well and to gain a sense of how the scoring of the game would work. The two teams from Cummins arrived on-location with 10 minutes to spare until they would receive their robotics kit. Both teams closely examined the designs and had ideas of their own as they entered into the time to receive their kit. Qualifications began with all student robots functioning and able to participate in the competition. It became apparent very quickly that the Engineer teams would have their work cut out for them as all of the student designs had scoring capability coupled with plenty of time to practice the skills necessary for professional competition. All the Engineer teams developed solid designs capable of scoring, but it proved to be no match for the robots developed by the students. In the end, it would be the student teams that take away the competition's six available trophies. For the first time in the competition's five year history, a single school would walk away with three trophies - First Place, Engineer's Choice, and the Community Service Award. The remaining trophies for second, third, and fourth place would also not land on an Engineer's desk this year. At the conclusion of the contest, the students proved that in the face of a deadline with limited resources, they have what it takes to succeed at their goals.

Lock Tight Night

Lock Tight Night Robotics Competition 2014 Results

Trophies

Lock Tight Night Trophy

First Place
 Second Place
 Third Place
 Fourth Place
 Engineer's Choice Award
 Community Service Award

School

"Southport High School
 Seccina Memorial High School
 "Central Nine Career Center
 Martinsville High School
 Southport High School
 Southport High School



Company Rankings

Company Participant

Midwest Purification
 Cummins

Ranking Out of 8 Teams

7th place
 8th place



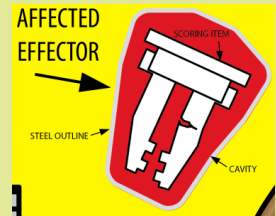
Corporate/Community Support

Primary Sponsors

Central Nine Career Center
 Visual Edge, Inc.
 Cummins, Inc.
 Midwest Purification
 Henkel Corporation
 Ivy Tech Community College
 Conexus Indiana
 Chick-fil-A
 Geek-in-Pink

Donation

Countless Hours of Work & Support
 Game Design & Building / Vex Robotic Kits/
 Engineer Team Volunteers
 Engineer Team Volunteers
 Loctite Product Samples
 Competition Robotics Kit Grants for teams
 Hospitality Room Donations
 Free Gift Certificates to all participants
 Free Synch Sacks to all participants



SALVAGE OPERATION

Salvage Operation is based upon the popular children's game Operation that was created in 1964 and is now distributed through Hasbro. The game requires participants to retrieve various types of scoring items from similarly shaped cavities throughout the playing fields. Once retrieved the robots must then deliver the item to the red & white scoring zone. To receive credit for the points, the human coach must deliver the scoring component into a scoring bin that is off of the playing field, requiring some human interaction to take place throughout the game. Each of the playing components are worth various amounts depending upon the level of difficulty of retrieving the scoring component from the cavity. While the playing fields did not buzz when players came in contact with the sides of the cavities at the event, Visual Edge intends to implement that functionality into the design.

