



Indian Creek High School

December 3rd, 2011

Lock Tight Night

With the help and support of a great number of student, coach, and industry volunteers, Indian Creek High School presented the second annual overnight robotics event over the weekend. Teams began filtering into the Columbus Signature Academy on Friday at around 7:00pm. By 8:00, all of the teams had arrived on the scene to learn what kind of task would be presented to them. Students from Indian Creek's robotics team presented the animation explaining the game rules they had spent several weeks developing. As the documentation for the game was distributed to the teams, students were already examining the playing fields. The task this year involved the robots capturing their opponents flags from castles equipped with latched draw bridges. The students returned to their rooms while the staff delivered the robotics kits graciously donated by the Visual Edge company. Several of the teams immediately set off on the task of building a robot that could generate enough traction to make it up the inclined ramp leading to three flags worth four points. Around 10:00pm, a representative from the Loctite corporation presented a seminar on a variety of products that the students were allowed to incorporate in their designs. Among the products provided by Loctite were thread locker, insulating tape, and super glue. Within the next hour nearly all of the student teams showed evidence of finding innovative ways of improving their robots with the free samples.

After six hours, the Lock Tight Night staff came around with a Christmas gift to help relieve some of the frustration that a few of the teams were experiencing. While not all teams found a use for the gift of sand paper and clothes pins, a few schools would end their final match with the products integrated into their designs. With the assistance of the Loctite insulating tape and sand paper, many of the teams had scored one point flags and found their way up to the four point flags by 3:00am. Most teams found their robot able to score by the time the Engineers from Cummins arrived on site to get a look at this year's game. By 7:30am, Overton Carbide and Visual Edge had arrived and began examining what the students were already designing. The Engineers wasted no time in walking around the pit areas and closely looking at the playing fields to get an idea of which concepts worked.

At 8:00am, the animation was presented to the Engineer teams and the kits were distributed to them after allowing some time for the teams to introduce themselves. By 8:15, the Engineer teams were already underway working through the building process while student teams began the practice rounds. As the students teams entered the practice rounds, some of the students who had refrained from sleeping found their second wind. Excitement began to build as many of the teams made alterations to their designs to improve consistency. Qualifying matches began around 10:00am, and some of the students who had opted for sleep early in the morning began to arise from underneath the tables they were inhabiting. Crowds gathered around the qualifying matches as teams started taking notice of which robots were working. When lunch time rolled around, many teams had gathered enough confidence in their work that they were willing to break and eat in the cafeteria. In contrast, the company teams showed little interest in eating and opted to continue working on their designs. The Engineer teams were confident enough in their designs that some took time to begin analyzing who they might want to court for an alliance partner in the semi-finals. By 2:00pm, the Engineer teams had decided which of the student teams they would choose. As the Engineer teams did not take away any trophies last year, they were determined to make a better showing this year. The final matches were dominated by a combination of company and student teams. After three tied matches in the finals and an extremely long night, this year's Lock Tight Night trophies would go to the following teams:

Lock Tight Night 2011

'Storm the Castle'

Trophies

Lock Tight Night Trophy

First Place Alliance

First Place Alliance

Second Place Alliance

Second Place Alliance

Engineer's Choice Award

Community Service Award

Company/School

Visual Edge, Inc.

Brown County High School

Cummins, Inc.

Columbus Signature Academy

Union County High School

Southport High School



School Involvement

School Participant

Indian Creek High School

Columbus Signature Academy

Responsibilities

Game Design, Fields, Animation

Hosting, Concessions, Organization



Corporate/Community Support

Sponsor

Visual Edge, Inc.

Cummins, Inc.

Loctite Corporation

Overton Carbide & Engineering

Conexus Indiana

Quality Mill & Supply

CSA/Indian Creek Parents

Ivy Tech Community College

Donation

All Robotics Kits for the Competition

Engineer Mentors and Engineer Team

Representative, Trophies, and Products

Engineer Team and Robot Onboard Video

Shirts, Banners, Posters

Allen Wrenches, Spray Paint

Supplies, Drinks, Food

Playing Fields



Storm the Castle features a classic "capture the flag" playing style.

In this version of the game, the robot must attempt to capture their opponent's flags from the side of their castle for 1 point.

Inside the opponent's castle are three flags worth four points. However, robots first must open a latch keeping the door to the castle closed and then make it up an inclined ramp.

Upon bringing the flags back to their castle, they must deposit the flag safely into their corresponding goals to score the points.

