Talon Robotics Talking Points 2022-2023

FIRST stands for "For Inspiration and Recognition of Science and Technology." The
program was founded with the ultimate goal of inspiring young people to be the
science and technology leaders of the future.
FIRST accomplishes this goal by challenging students to create robots that compete in
fun, game-like challenges. Past challenges include games similar to Frisbee golf, soccer,
and basketball. With themes ranging from medieval to science-fiction.
The FIRST Robotics' program progression starts in kindergarten and continues
through high school. Younger students use EV3 kits, while older students build robots
from scratch.
I am on Eden Prairie High School's Talon Robotics Team 2502. Five students started our
robotics team in 2007. Since 2008 we have qualified for the World Championship 8
times and now have more than 50 members.
This year's challenge is Charged Up. During autonomous, teams will try to pick up
cones and cubes and then deliver them to their alliance GRID. At the end of the match
they will try to balance on the charge station. During tele-op, alliances continue to
score game elements onto their GRIDs, getting three in a row to score links. During the
endgame, teams will then attempt to balance as many robots as they can on their
alliance charge station.
Historically, we provided financial support for Jr. FLL, and FLL (FIRST Lego League).
This year, we ran 6 FTC (FIRST Tech Challenge) teams.
In a normal year, we demonstrate our robot annually at the Bots for Tots, Eden Prairie
4th of July Celebrations, Minnesota State Fair, and at many of our sponsors' locations.
Each summer we run summer camps through community education for elementary
schoolers. Students get to participate in STEM challenges and build their own robot
using Arduino.
In addition to corporate sponsors, we typically raise funds to help offset travel costs
through team fees and team fundraising events.
Our robot picks up cones and cubes from the ground regardless of orientation and it
scores them in all positions. It also uses a swerve drive and is able to balance on the
charge station.