



EWCTC
From Thought to Bot.
Index

Preliminaries Competition-
March 23rd and 24th 2012
Finals- April 13th and 14th

South Western Pa. Bots I.Q. web site- <http://www.botsiqpa.org/>

Rio Botz tutorial web site-<http://www.scribd.com/doc/44721477/Riobotz-Combot-Tutorial-2-0>

- Step 1: Pick Team
- Fill out application
 - Read: "A judges guide to winning" handout and discuss
 - Draw your Bot. design on the back of application
 - Complete Bot. type worksheet- Rio Botz Combat Tutorial- pages 15 thru 30
 - Elect team leaders (one from each shop)
 - Read and understand all rules from Bots I.Q. website
 - Start documentation
- Step 2: Brainstorm design using the Rio Botz Combat Tutorial within the five budgets
1. Cost – We need sponsors to get to nationals
 - Rio Botz Combat Tutorial- fund raising- pages 30 and 31
 2. Time line- make realistic schedule
 3. 15 pound weight limit- complete materials worksheet
 - Rio Botz Combat Tutorial- materials- chapter 3 and 4
 4. Knowledge base- complete motor/ transmission and weapon worksheets
 - Rio Botz Combat Tutorial- chapters 5 and 6
 5. Power- dead batteries are not much fun- Complete electronic worksheet
Rio Botz Combat Tutorial- chapters 7 and 8
- Step3: Design Bot.:
- Create an argumentative/ compare contrast best works paper
 - Democratically decide design
 - Make sketches of design and decide bot. size
 - Create CAD/CAM computer mock ups in Solid Works and Master CAM
 - Test design by making test parts and mock ups
- Step4: Build Bot.
- Safety First!
 - Only the revision current drawings will be accessible.
(All old revision drawing will be locked up by the instructor and removed from computers)
 - All Drawings will be drawn and toleranced on the computer before manufacturing
- Step5: Test and Retest
- The goal is to destroy our opponents, not ourselves
 - This step is almost never done!!!!
- Step6: Prepare for competition
- Train drivers
 - Toolkits
 - Spare parts