

Scouting 101



What is scouting?

- 4 Types
 - Pre-scouting: before an event
 - Pit Scouting: Asking teams questions
 - Match Scouting: observation and data collection
 - Analytical Methods: Analysis of information
- Not necessary to do all 4



Why is scouting important?

- To help pick teams during alliance selection (if in top 4)
- Tell top teams why they should choose you
- Create strategy for your opponents in matches
- Learn more about how other robots score
- Helps see what other teams are looking for
- Gives parents and students something to do





What is Alliance Selection?

- Top 4 seeds pick alliance partners to compete in elimination matches
- If a team gets picked they can accept or decline
 - Always accept unless you are a top 4 seed or robot is broken
 - If decline, can still make your own alliance
- If #2 seed joins #1 then, 5th ranked team becomes a captain
 - Rank 7 or above needs to know who to pick



Alliance Selection

#1 Seed

1st Pick

2nd pick

#2 Seed

1st Pick

2nd pick

#3 Seed

1st Pick

2nd pick

#4 Seed

1st Pick

2nd pick



Pre-Scouting

- Done before tournament
- Gives an idea of teams to look for
- Check team websites for photos and capabilities
- Team history of performance
 - theorangealliance.org
 - ftcstats.org

Qual Rank #23 with a record of 4-5-0

Match	Result	Red Alliance		Blue Alliance		Scores	
Qualification Matches							
Quals 2	L	12528	7048	8808	8133	497	207
Quals 15	W	7023	7693	8808	9978	359	361
Quals 25	W	8813	8749	8808	3507	163	347
Quals 36	L	8711	8808	9968	9956	350	421
Quals 44	W	11872	8808	10309	9890	293	200
Quals 52	L	7190	8808	13178	12231	222	231
Quals 59	W	12682	12549	8620	8808	203	379
Quals 67	L	8808	3763	11872	11190	277	300
Quals 75	L	8817	6287	5040	8808	425	390

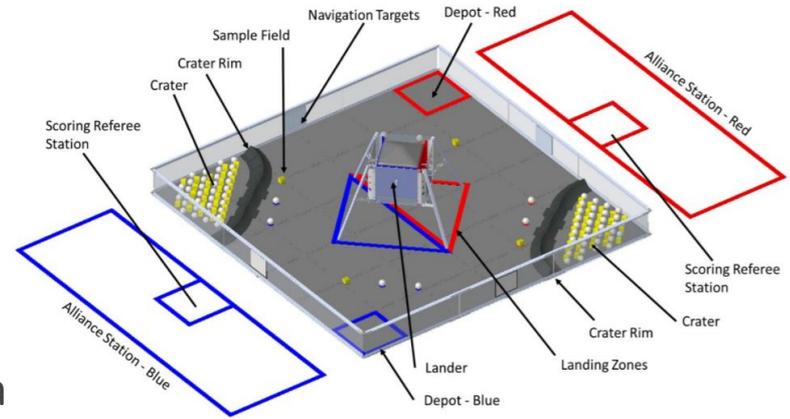
Pit Scouting

- Many other teams do this
- Will get asked a lot of questions
- Not really helpful in my opinion
 - Their predicted scores can be way off
- Good to see different designs and who to look out for
 - Ask to take photos
 - Ask them how a subsystem works if it's interesting!



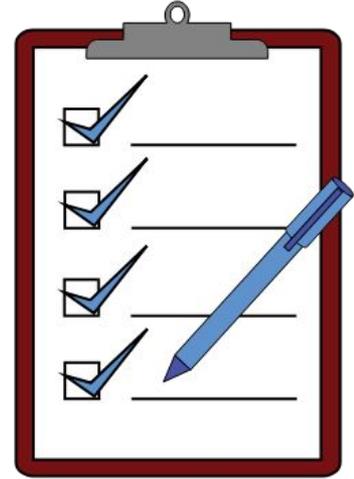
Match Scouting

- Multiple different forms
 - Could be on paper, through an a spreadsheet, or app.
- Record info about each team during matches
 - Cubes the deposit in lander, latching, consistency, etc.
 - Defensive?
 - Which alliance won the match & with what score



Alliance Selection

- Review your data
- Make sure teams compliment your own
 - They won't get in your way for autonomous
 - Any pair combination could be successful
- Make sure robots still work
- Make a list of who you would pick
- Talk to top picks making sure they will be okay with it and compare
 - Could always decline later to create their own alliance





Example Scouting Plan

- Create a paper form for each team and store in file organizer
- 4 people watching each match
- 1 person input information into spreadsheet/score program
- Re-evaluate placing/plan at lunch

What do you need to know?

- Familiarize yourself with game terms and how points are scored
 - Watch [FTC Game Reveal](#) for Rover Rockus
 - Read [Game Manual Part 1](#) (pg 16-19)
 - Skim [Game Manual Part 2](#) (know next slide)
- Try watching a [Youtube](#) video of a match and see if can record all points scored
- If your back isn't in the best shape, invest in a stadium seat/cushion



Scoring Achievement	Autonomous Points	Driver-Controlled Points	End Game Points**	Reference
<i>Robot</i>				
- <i>Landing</i>	30	-	-	1.5.2 - 1
- <i>Claiming</i>	15	-	-	1.5.2 - 2
- <i>Parking</i>	10	-	-	1.5.2 - 3
- <i>Sampling</i>	25	-	-	1.5.2 - 4
- <i>Latching</i>	-	-	50	1.5.4 - 1
- <i>Robot In Crater</i>	-	-	15	1.5.4 - 2
- <i>Robot Completely In Crater</i>	-	-	25	1.5.4 - 3
<i>Mineral</i>				
- <i>Any Mineral in Depot</i>	2	2	2	1.5.3 - 1
- <i>Gold in Gold Cargo Hold</i>	5	5	5	1.5.3 - 2
- <i>Silver in Silver Cargo Hold</i>	5	5	5	1.5.3 - 3
- <i>Gold in Silver Cargo Hold</i>	0	0	0	1.5.3 - 4
- <i>Silver in Gold Cargo Hold</i>	0	0	0	1.5.3 - 4

Should know what all of these terms mean and how to spot them



Any Questions?