BAE Systems Mini-Bot Challenge Mondrian Madness Awards



- Thanks to everyone for participating in Mondrian Madness
- We understand how challenging it was to take time for this, when you were also preparing your submission for the FRC awards. Thank you!
- We had 47 teams submit entries, and they were all awesome!
 - 17 CT
 - 13 MA
 - 9 NH
 - 7 ME
 - 1 VT

Thanks to all the teams who submitted entries

Mondrian Madness Challenge #1 Participating Teams



47 New England Teams	58 The Riot Crew, South Portland, ME
17 CT	61 The Intimidators, Upton, MA
-	88 TJ2, Bridgewater, MA
13 MA	131 C.H.A.O.S., Manchester, NH
9 NH	133 BERT, Standish, ME
7 ME	151 Tough Techs, Nashua, NH
	155 The Technonuts, Berlin, CT
1 VT	172 Northern Force, Falmouth/Gorham, ME
0 RI	173 RAGE Robotics, Tolland, CT
	176 Aces High, Windsor Locks, CT
	178 The 2nd Law Enforcers, Farmington, CT
	195 CyberKnights, Southington, CT
	228 GUS Robotics, Meriden, CT
	558 Elm City Robo Squad, New Haven, CT
	839 Rosie Robotics, Agawam, MA
	1100 The T-Hawks, Northboro, MA
	1153 The Revolution, Walpole, MA
	1247 Blood, Sweat, and Gears, North Sutton, NH
	1729 Team Inconceivable!, Peterborough, NH
	1740 Ledyard Cyber Colonels, Ledyard, CT
	1991 4-H UHSSE Team 1991 Dragons, Hartford, CT
	2168 Aluminum Falcons, Groton, CT
	2170 Titanium Guardians, Glastonbury, CT

2262 Robo-Panther, Holliston, MA

2342 Team Phoenix, Nashua, NH 2648 Infinite Loop, Oakland, ME 2712 Power Surge 4-H Robotics, Woodbury, CT 2877 Ligerbots, Newton, MA 3182 Athena's Warriors, Hartford, CT 3461 Operation PEACCE Robotics, Bristol, CT 3623 BGCFL Terrorbots, Leominster, MA 3654 TechTigers, Middletown, CT 4169 Warrior Robotics, Sudbury, MA 4473 Delta Prime Robotics, Farmingdale, ME 4546 Shockwave Robotics, Dover, NH 4905 Andromeda One, Ayer, MA 4925 The Resistance, Wolfeboro, NH 5265 Radical Impact, Portland, ME 5687 Outliers, Portland, ME 5735 Control Freaks, Wayland, MA 5813 Morpheus, Concord, NH 5846 Southcoast Corsairs, North Dartmouth, MA 5962 perSEVERE, Lowell, MA 6895 Mechanical Madness 4H, Walpole, NH 6933 Archytas, Bethel, VT 8085 Milford MOJO, Milford, CT 8167 Cogantives, Durham, CT



And now... Awards!

Judge's Award



- The Judge's award recognizes a team whose solution to the Challenge was unique or otherwise noteworthy. This team's solution may not be the fastest, or have the most elegant code, but the judges felt that it solved the problem in a visibly creative way.
- This team's teleoperated solution was out of this world. While most teams chose to drive straight on to the finish line, this team chose to reverse course while executing the first turn and drive the robot backward for the rest of the course. For demonstration of stellar driving, the Judge's award goes to team 4905, Andromeda One!

Teleoperated Performance



• Third Place

4.37 seconds Team 151 Tough Techs Nashua, New Hampshire

Second Place

3.90 seconds Team 4905 Andromeda One Ayer, Massachusetts

• First Place

3.50 seconds Team 195 Cyber Knights Southington, Connecticut

Autonomous Performance



• Third Place Team

4.64 seconds151 Tough TechsNashua, New Hampshire

Second Place

4.32 seconds Team 3623 BGCFL Terrorbots Leominster, Massachusetts

• First Place

3.80 seconds Team 1729 Team Inconceivable! Peterborough, New Hampshire

Most Innovative Solution (3rd place)



- This team weaved together their solution using all WPILib tools at their disposal. They generated multiple trajectories for path following using PathWeaver and displayed robot data on both Shuffleboard and SmartDashboard dashboards. Their robot obeyed all orders given to it.
- The third place Most Innovative Solution award goes to team 178, The 2nd Law Enforcers, from Farmington, Connecticut!

Most Innovative Solution (2nd place)



- This team demonstrated the trinity of clean code: readable, wellstructured, and a clear README file. Their finely polished codebase's readability was improved with quality comments and a helper function to generate RAMSETE trajectory commands from a list of waypoints. Reading it, you might feel like you're seeing the code behind the Matrix.
- The second place Most Innovative Solution award goes to team 5813, Morpheus from Concord, New Hampshire!

Most Innovative Solution (winner)



- This team demonstrated how to keep their code organized and show progressive improvement. The structure of the program allowed them to iterate on multiple solutions from using Arc math to turn smoothly to 2-sided PID Control. This not only allowed multiple team members to harmoniously collaborate but also let the team run different parts of the code at a touch of a button. Their code was nothing but Chaotic.
- The first place Most Innovative Solution award goes to team 131, Chaos from Manchester, New Hampshire!

Shortest Combined Time



• Third Place

9.01 seconds Team 151 Tough Techs Nashua, New Hampshire

Second Place

8.72 seconds Team 1729 Team Inconceivable! Peterborough, New Hampshire

• First Place

8.43 seconds Team 195 Cyber Knights Southington, Connecticut

Fastest Overall Time



- Third Place
 3.9 sec teleop mode
 Team 4905 Andromeda One
 Ayer, Massachusetts
- Second Place
 3.8 sec auto mode
 Team 1729 Team Inconceivable!
 Peterborough, New Hampshire
- First Place
 3.5 sec teleop mode
 Team 195 Cyber Knights
 Southington, Connecticut

Thank you all!



- This has been a lot of work but also a lot of fun, but it's a warm-up for the rest of the BAE Systems Mini-bot challenge season
- We will have three more challenges, each building on the previous skill set.
- If you didn't participate in Mondrian Madness, you can still participate in the rest of the challenges!

Thank you all!



- Thank you to the teams, to the mentors, to our judges from WPI, to the amazing team at wpilb.org, to our print partners at Historic Mapworks and Turnone Graphics, to our sponsor, BAE Systems, and to New England FIRST for making this challenge possible.
- Please tune in next for the reveal of our next challenge: Color Conundrum