Frc game manual 2019 pdf

This is not an authoritarian source. The official manual and the referees have the final say for any rule violation. 2019 FIRST Destination Robotics Competition Game: Deep SpaceYear2019Team InformationNumber3,790[1]Number of regional62Number of district events111Champion locationHoustonGeorge R. Brown Convention CenterMinute Maid ParkDetroitCobo CenterFord FieldAwardsChairman's Award winnerHouston1902 - Exploding BaconDetroit1816 - The Green MachineWoodie Flowers Award winnerAllen Gregory IV - Team 3847Founder's Award winnerRaj Subramaniam - FedExChampionsHouston973 - Greybots13 23 - MadTown Robotics5026 - Iron Panthers4201 - The Vitruvian BotsDetroit3707 - Brighton TechnoDogs217 - ThunderChickens4481 - Team Rembrandts1218 - SCH Vulcan Robotics LinksWebsite SiteOfficial website ← FIRST Power Up Infinite Recharge → Destination : Deep Space, stylized as DESTINY: DEEP SPACE and officially known as Destiny: Deep Space Presented by Boeing Company, is the first robotics competition game for the 2019 season. [2] It involves two alliances of three teams each, with each team controlling a robot and performing specific tasks on a field to score points. The game revolves around an outer space theme involving two alliances consisting of three teams each competing to place polycarbonate hatch panels and orange rubber balls or cargo on rockets and cargo ships before returning to their HAB platform to climb at the end of the match. [3] Kick-off The kick-off event took place on January 5, 2019. The launch video was styled after a rocket launch, with information about FIRST and the game being linked to specific points in the countdown. The event was broadcast live from 10:30 a.m. Eastern time, with many teams participating in their own local launch events. [5] Field Destination: Deep Space is played on a field of 823 cm by 54 feet (1646 cm) that is covered by a gray carpet. The field is bordered by transparent polycarbonate guardrails on the longer sides and the walls of the Alliance Station on the shorter side. The field has two types of zones, one for each alliance. The hab zone contains robots at the beginning and end of each match, while the alliance station is where drivers control their robots. For the first time, a Google Cardboard headset was included in the launch kit to allow teams to view a virtual field. [6] Alliance Station Each alliance has its own Alliance Station which is positioned at one end of the field. Alliance Station is where drivers control their robots, human players deliver game pieces to robots, and coaches give advice to members of their team. Each alliance station features two game part retention areas in the sides of their driver stations. Deposits Deposits Are placed in the field next to the alliance stations, with two per alliance. Before the game begins, alliances are allowed to load into their respective deposits for robots to recover during the match. Sandstorm The sandstorm is installed above the alliance station of each alliance, and is used to block the team's view of the field drive during the sandstorm period. Once this period ends, the sandstorm retracts to allow riders to see the field for the remainder of the match. Charging stations Each alliance station has two charging stations near the edges of the alliance station. Human players use the charging stations to deliver hatch and cargo panels to robots via a parade, where they can be collected by a waiting robot. Scoring areas Rockets There are four rockets in the field, two per alliance. Each rocket has three levels, composed of two bays, where game pieces can be scored. Two hatch panels and two loads can be scored in each level. Cargo ships There are two cargo ships placed in the middle of the field, one per alliance. Like rockets, each freighter has bays where hatch and cargo panels can be punctuated. Each freighter has eight bays, each capable of holding a hatch cover and a cargo. HAB Platforms Each alliance controls a hab platform near the alliance station wall. The robots start the match on their alliance's hab platform, and must return to the same platform at the end of the match. Each hab platform has three levels, and parking at a higher level at the end of the match earns the alliance more points. Scoring and scoring elements There are two scoring elements in Destination: Deep Space; hatch and load panels. Hatch panels are 19 in. (~48 cm) diameter of polycarbonate toroids, and the load is represented by playground balls of 13 in. (~33 cm). Before the start of the match, teams can discuss and select the initial formation of their robots (i.e. what level hab they will start), as well as which game pieces they will preload on the freighter. Each of the six side slots can be loaded with a load ball or a 'null' sandstorm hatch panel For the 2019 season, the sandstorm period is the first 15 seconds of the match and replaces the standalone period, which had been used in many previous FRC games. The robots start the game on their respective HAB platforms, fully supported by the HAB level one or two platform. The Sandstorm is a black curtain that begins to obscure the view of players from the field. During the period, robots can act only on pre-programmed instructions, acting autonomously or under control of their drivers with the optional aid of a robot-mounted vision system (as they are unable to directly see the field due to the Sand). Robots can earn points in several ways. For each robot that fully crosses the HAB line during the sandstorm period, the alliance earns three points if the robot started on the HAB platform level one and six points if the robot robot on level two. Robots are also able to earn points to mark hatch and cargo panels on the rockets and cargo ships of their alliance. Because these actions have the same point value as if they had occurred in the tele-operated period (or teleop), they will be further discussed in this section. After the end of the 15-second sandstorm period, the curtain retracts to give players the view of the field, and the teleop begins. Electromagnets within the release of the freighter after the end of this period, releasing any load not protected by hatch panels. Therefore, there is some risk in selecting to load the freighter with load balls over null hatch panels - the null hatch panels will immediately hold a load ball, for a total value of (0 + 2 =) 2 points, however, a load ball held by a hatch panel before the end of the sandstorm phase is worth a total value of (3 + 2 =) 5 points. The score is also described in the Score Summary section. Period operated by tele-operated After the end of the sandstorm period, begins the period of teleoperation, which lasts 135 seconds. Drivers control their robot from their Driver Station and human players can deliver game pieces to the robots. During this period, as in standalone, each hatch panel punctuated on a rocket or freighter will earn two points for the alliance. In addition, the load score on a rocket or freighter will earn three points for the alliance. Hatch panels must be scored before loading (as the load will simply be thrown) unless there are hatch panels installed in the bay. End of game The last 30 seconds of the teleop period are called end game. During this time, robots can earn additional points by climbing back to their alliance's HAB platform. A robot finishing the match at hab level one will earn the alliance 3 points, while finishing the match at level two will earn 6 points and finish the match at level three will earn 12 points. Special score In tournament games, teams are ranked by their ranking score, or by the average ranking points they reach per match. Leaderboard Points are earned through both winning matches and completing secondary objectives. Therefore, it is more beneficial to focus on accumulating as many points in the ranking as possible, rather than simply winning all matches. An alliance can earn a leaderboard point during qualifying rounds by accumulating a total of 15 points at the end of the match by escalating the HAB, known as the hab mooring bonus. An alliance can also earn a rating point by completing a rocket, which implies scoring two hatch panels and two pieces of charge on each of its three levels. will result in 3 points credited to the opponent's alliance, and a technical foul will result in 10 points credited to the opponent's alliance. Score Summary Action Sandstorm Teleop Rating Points (in qualifying) Sandstorm Bonus (Level One) 3 Points Sandstorm Bonus (Level Two) 6 points Panel hatch 2 2 2 2 points Cargo 3 points 3 points Hab Climb Bonus (Level One) 3 points Hab Climb Bonus (Level Two) 6 points Hab Climb Bonus (Level Three) 12 points Hab Docking 1 RP One Rocket Complete 1 RP Foul 3 points to the opposing alliance 3 points to the opposing alliance Tech Foul 10 points to the opposing alliance 10 points for the opposing alliance Win 2 RP Tie 1 RP [7] Events The competition season for Destiny: Deep Space is divided into seven weeks, with many events taking place simultaneously during each week. After Week 7, teams that qualified compete in the FIRST Championship, held over two weeks in Houston and Detroit. Only regional and district championship events are shown. Week 1 Event Venue Date Palmetto Myrtle Beach, South Carolina February 27 - March 2 Montreal Montreal, Canada February 27 - March 2 Orange County Costa Mesa, California February 27 - March 2 Del Mar Del Mar, California 1 - March 3 Istanbul Istanbul, Turkey 1 - 4 Week 2 Event Location Date Bosphorus Istanbul Location Date, Turkey 5-7 Lake Superior Duluth, Minnesota March 6-9 Northern Lights Duluth, Minnesota 6-9 Oklahoma Oklahoma City, Oklahoma 6-9 Arkansas Rock City Little Rock, Arkansas 6-9 Miami Valley Dayton, Ohio 6-9 New York Tech Valley Troy, New York 6-9 Canadian Pacific Victoria, Canada 6-9 Central Valley Fresno, California 6-9 March, Chicago, Illinois 6-9 Monterrey , Mexico March 6-9 San Diego Del Mar , California 6-9 Southern Cross Sydney Olympic Park, Australia 9-12 Week 3 Local Event Date Arizona North Flagstaff, Arizona 13-16 March St. Louis St. Louis, Missouri 13-16 Rocket City Huntsville, Alabama 13-16 Finger Lakes Rochester, New York 13-16 Florida 13-16 March Central New York Utica, New York March 13-16 Heartland Olathe, Kansas 13-16 Great Northern Grand Forks, North Dakota 13-16 Mexico City Mexico City, Mexico March 13-16 Los Angeles North Valencia, California March 14-17 San Francisco, California 14-1 March 7 South Pacific Sydney Olympic Park, Australia Week 4 Event Local date Iowa Falls , Iowa 20-23 Bayou Kenner, Louisiana 20-23 Greater Pittsburgh California, Pennsylvania March 20-23 Laguna Torreón , Mexico March 20-23 Colorado Denver, Colorado 20-23 Central Illinois Peoria, Illinois 20-23 Los Angeles Los Angeles, California 20-23 Greater Kansas City Kansas City, Missouri March 20-23 Sacramento Davis, California March 20-23 Hudson Valley Suffern, New York 21-24 Monterey Bay Seaside, California 21-24 SBPLI Long #1 Island Hempstead, New York 24-27 Week 5 Week 5 Event Location Date Smoky Mountains Knoxville, Tennessee 27-30 South Florida West Palm Beach, Florida 27-30 Wisconsin Wisconsin 27-30 Buckeye Cleveland, Ohio 27-30 Utah West Valley City, Utah 27-30 Havaí Honolulu, Havaí 27-30 Idaho Nampa, Idaho 27-30 De março Ventura Ventura, Califórnia 27-30 de março Las Vegas Las Vegas, Nevada 27-30 SBPLI Long Island #2 Hempstead, Nova York 27-30 Minnesota 10.000 Lakes Minneapolis, Minnesota 27-30 Minnesota North Star Minneapolis, Minnesota 27-30 Silicon Valley San Jose, Califórnia 28-31 Israel District Championship Tel Aviv, Israel 2-4 Semana 6 Local de evento Data sete rios La Crosse, Wisconsin 3-6 Pacific Northwest District Championship Tacoma, Washington 3-6 Mid-Atlantic District Championship Bethlehem, Pensilvânia 3-6 Arizona West Phoenix, Arizona 3-6 Quebec City Quebec City , Canadá 3-6 Peachtree District Championship Emerson, Geórgia 3-6 De abril Aerospace Valley Lancaster, Califórnia 3-6 Canadense Rockies Calgary, Canadá 3-6 Texas District Championship Austin , Texas 4-6 Nova York Cidade nova-iorquina, Nova York 4-7 Central Missouri Sedalia, Missouri 4-7 North Carolina District Championship Lillington, Carolina do Norte 5-7 Semana 7 Semana 7 Local de Localização do

Evento Data Chesapeake District Championship Fairfax, Virginia 10-13 Michigan District Championship University Center, Michigan 10-13 Ontario District Championship Mississauga, Ontário 10-1 abril 3 New England District Championship Worcester, Massachusetts 10-13 Indiana District Championship Kokomo, Indiana 11-13 FIRST Championship Event Location Date FIRST Championship (Houston) Houston, Texas 17-20 FIRST Championship (Detroit) Detroit , Michigan 24 a 27 de abril [8] Resultados As tabelas a seguir mostram os vencedores das subdivisões e finais em cada evento do FIRST Championship. Medalha concedida à aliança finalista em Hudson Valley, Nova York. Houston Subdivision Winners Division Captain 1st Pick 2nd Pick 3rd Pick Carver 1678 7179 3132 1939 Galileu 971 179 3646 498 Hopper 2122 2046 6485 4192 Newton 973 1323 5026 4201 Roebling 148 3847 6829 2907 Turing 254 3310 6986 948 Einstein Round Robin Pos Division Pld W L Pts Qualification 1 Turing (Q) 5 0 2 Avanço para Einstein Finals 2 Newton (Q) 5 4 1 1.6 3 Carver 5 2 3 3 3 3 0,8 4 Galileu 5 2 3 0.8 5 Hopper 5 1 4 0.4 6 Roebling 5 1 4 0.4 Fonte: [9](Q) Qualificado para a fase indicada. Finals Division Alliance 1 2 3 Wins Turing 254-3310-6986-948 117 98 103 1 Newton 973-1323-5026-4201 1 06 119 114 2 Detroit Subdivision Winners Division Captain 1st Pick 2nd Pick 3rd Pick Archimedes 5406 930 1310 4004 Tesla 346 548 5401 253 4 Carson 5050 111 4607 2052 Darwin 3707 217 4481 1218 Curie 195 3538 1073 230 Daly 4003 13 3 862 2614 Einstein Round Robin Pos Division Pld W D L Pts Qualification 1 Archimedes (Q) 5 4 1 0 1.8 Avanço para Einstein Finals 2 Darwin (Q) 5 3 1 1 1.4 Curie 5 3 0 2 1.2 4 Tesla 5 2 2 1 1.2 5 Carson 5 1 0 4 0.4 6 Daly 5 0 5 0 Source: [10](Q) Qualified for the indicated stage. Finals Division Alliance 1 2 3 Wins Archimedes 5406-930-1310-4004 107 78 90 1 Darwin 3707-217-4481-101 96 91 2 References ^ FIRST Robotic Competition 2019 Facts of the Season (PDF). www.firstinspires.org. Retrieved 2019-01-05. ^ King, Tierney (2019-01-08). Students navigate deep space in STEM-related play at the FIRST Robotics Competition. News about electronic components. Retrieved 2019-01-12. First. FIRST RELEASE 2019. info.firstinspires.org. Recovered 2018-06-13. ^ 2019 FIRST Robotics Kickoff Competition. First. 2018-08-16. Retrieved 2018-11-05. ^ Robotics starts its program 'Deep Space'. Tribune of San Marino. 01/01/2019. Retrieved 2019-01-12. ^ Experiencing Deep Space: A VR Project Update. First. 2018-11-16. Retrieved 2018-11-18. ^ FIRST Robotics Competition 2019 Game Manual (PDF). firstfrc.blob.core.windows.net. Retrieved 2019-01-05. ^ Home : FRC Web Event. frc-events.firstinspires.org. Retrieved 2018-08-29. ^ CmPTX Playoff Matches : FRC Web Event. frc-events.firstinspires.org. Recovered 2019-04-21. ^ CMPMI Playoff Matches : FRC Web Event. frc-events.firstinspires.org. Retrieved 2019-04-27. Recovered from