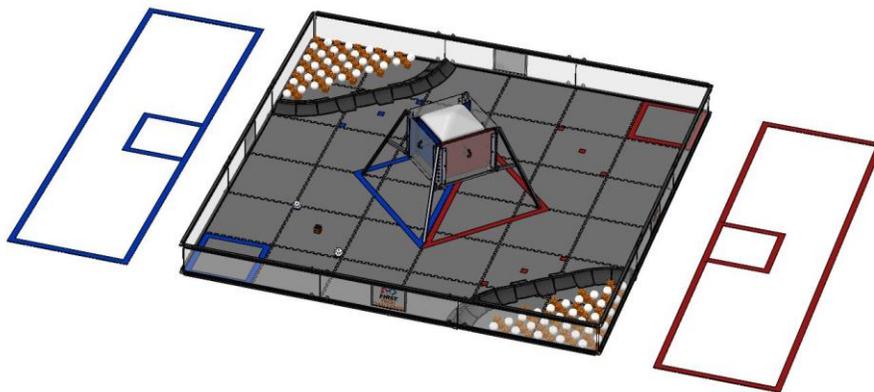


ROVER RUCKUS



Presented By **Qualcomm**



The Game:

ROVER RUCKUSSM presented by Qualcomm[®] Incorporated is played on a 12 ft. x 12 ft. (3.7m x 3.7m) square field with approximately 1 ft. (0.3 m) high walls and a soft foam mat floor. The object of the game is to attain a higher score than the opposing alliance by descending from the Lander, collecting Minerals from the Crater, sorting and scoring Minerals into the Cargo Hold of the Lander, performing Autonomous tasks, and navigating to specific parts of the Playing Field. The Scoring Elements for the game are 60 Silver Minerals and 90 Gold Minerals, and a team supplied Team Marker.

There are two alliances of two robots each – “red” and “blue”. There are two alliance-neutral Craters sit in opposite corners of the Playing Field and two Alliance-specific Depots are in the other corners. Unique navigation targets are placed in the center of each field wall. In front of each corner is a Mineral Sampling Field with 2 Silver Minerals and 1 Gold Mineral, randomly lined up. Field personnel will randomize the Minerals in the Sampling Field prior to the start of the Match. The remaining Minerals are divided approximately equally and placed in each Crater.

The Lander sits in the center of the field with Alliance-specific Landing Zones marked by red and blue tape surrounding it. Prior to the start of a match, robots may be Latched onto the Lander. Robots that cannot be Latched must start in the alliance’s Landing Zone under one of the Alliance’s Lander Support Bracket. Robots may also preload a Team Marker.

Matches have two distinct periods of play: a 30-second autonomous period followed by a two-minute driver-controlled period, the last 30 seconds of the driver-controlled period is called the end game which adds new scoring opportunities for robots to achieve.

Autonomous Period:

During the autonomous period, robots operate using only pre-programmed instructions and sensor inputs. Alliances earn points by: Landing – robots lower themselves from

the Lander onto the Playing Field; Sampling – robots identify the single Gold Mineral in each Sample Field; Claiming – Robots place the Team Marker in their corresponding Depot; and Parking – robots that end the autonomous period in a Crater earn points.

Driver-Controlled Period:

During the driver-controlled period, alliances earn points by placing Minerals into their alliance’s Cargo Holds and Depot. Gold Minerals must be placed in the Gold Cargo Hold and Silver Minerals into the Silver Cargo Hold to score. Any Mineral in the Depot increases the Alliances score.

End Game:

The final 30 seconds of the driver-controlled period is called the end game. In addition to the driver-controlled period tasks, Alliances earn points by Latching onto the Lander or by Parking In or Completely in any Crater.

Autonomous Period Scoring:

Landing	30 points
Sampling	25 points
Claiming	15 points
Parking	10 points

Driver-Controlled Period Scoring:

Gold Mineral in Gold Cargo Hold.....	5 points/Mineral
Silver Mineral in Silver Cargo Hold.....	5 points/Mineral
Any Mineral in Depot	2 points/Mineral
Incorrect Mineral in either Cargo Hold.....	0 points/Mineral

End Game Scoring:

Robots Latched	50 points/robot
Robots Parked In Crater	15 points
Robots Parked Completely In Crater	25 points

