

Engineering And Robotics Learned Young

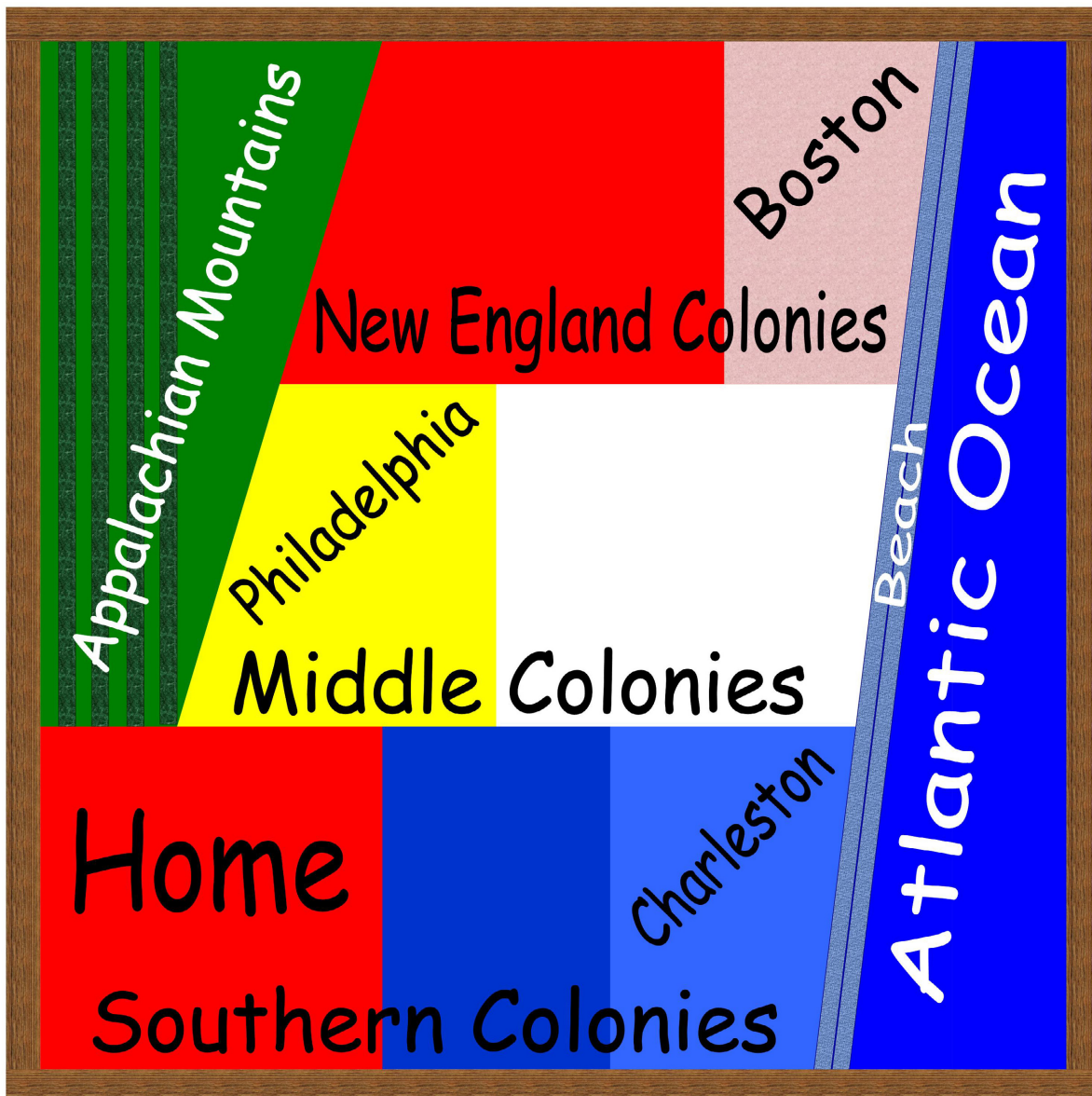
◆ EARLY ◆

Fall 2009 Robotics Competition

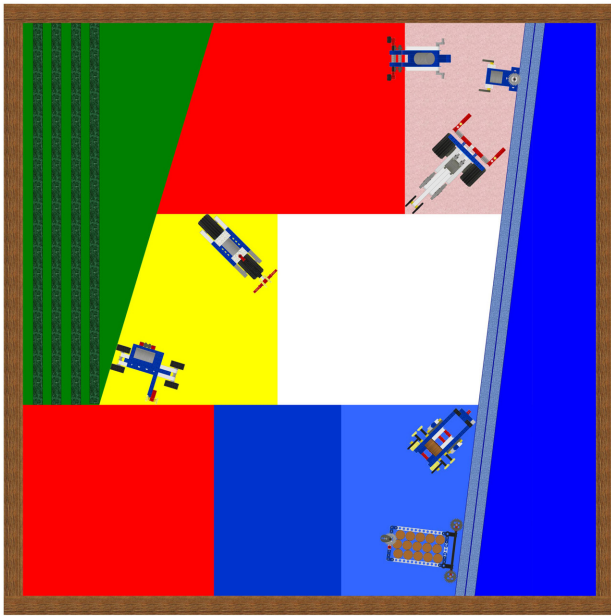
Mission Field Details

The Fall 2009 EARLY Robotics Competition mission field, The United States of America, is a 4' x 4' field with a 2" x 4" border with various terrain features. The following information is provided for constructing the mission field.

United States of America



Fall 2009 EARLY Mission Field



Fall 2009 Mission Model Positions

Field
48" x 48" x 1/2"
plywood

Field Perimeter
2" x 4" boards

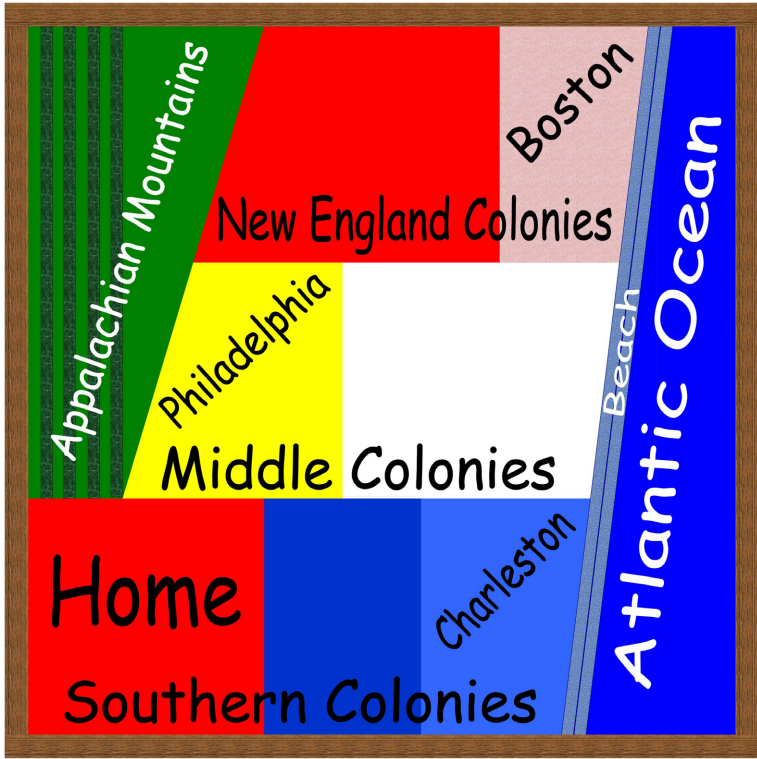
Appalachian Mountains
15" top / 6" bottom
x 30" tall
4 strips of
 $\frac{3}{4}$ " x $\frac{1}{4}$ " molding

Philadelphia
9 $\frac{1}{2}$ " top / 14" bottom
x 15" tall

Southern Colonies
36" top / 34" bottom
includes
Home & Charleston

Charleston
11" top / 9" bottom
x 15" tall

Home
15" x 15"



New England Colonies
25" top / 27 $\frac{1}{2}$ " bottom
x 15" tall
includes Boston

Boston
10" top / 8" bottom
x 15" tall
 $\frac{3}{4}$ " plywood

Middle Colonies
27 $\frac{1}{2}$ " top / 30" bottom
x 15" tall
includes Philadelphia

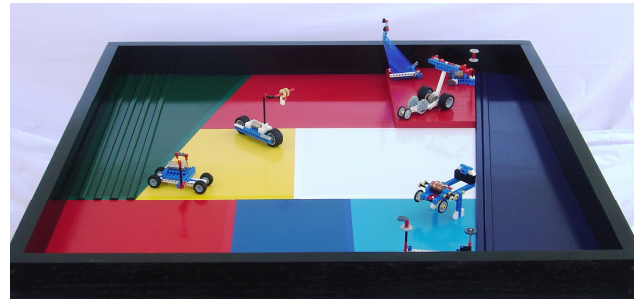
Beach
2 strips of
 $\frac{3}{4}$ " x $\frac{1}{4}$ " molding

Atlantic Ocean
5" top / 11" bottom
x 45" tall

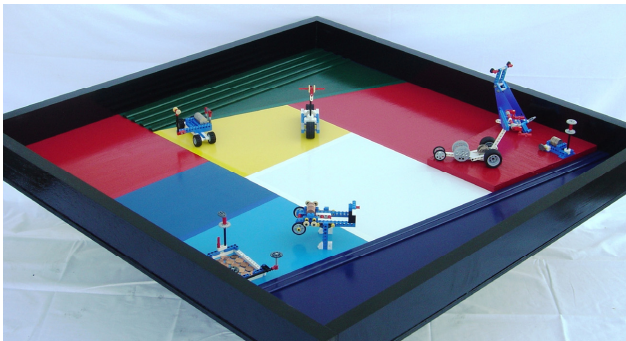
United States of America



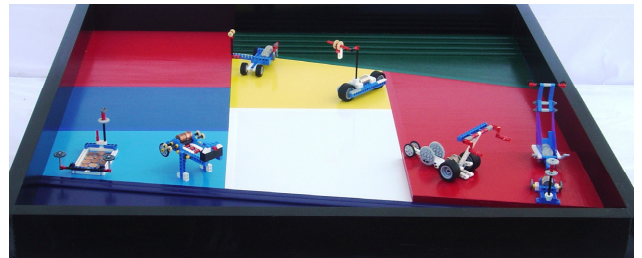
View from the **HOME**



View from the **SOUTHERN COLONIES**



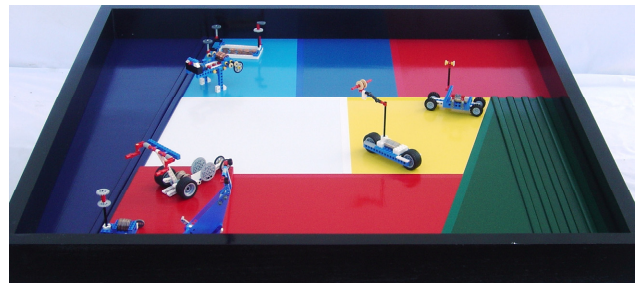
View from the **SOUTHEAST**



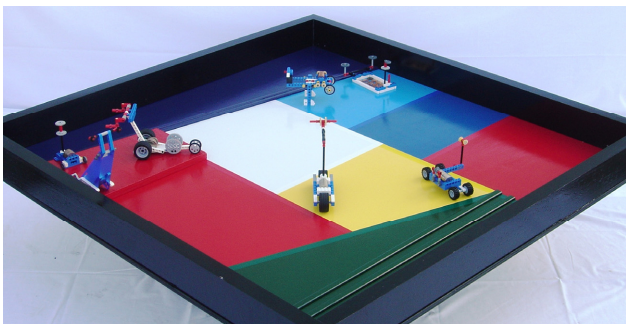
View from the **ATLANTIC OCEAN**



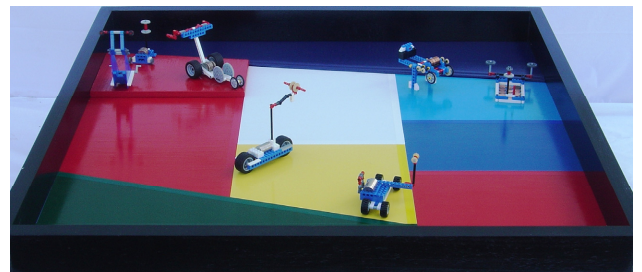
View from the **NORTHEAST**



View from the **NEW ENGLAND COLONIES**



View from the **NORTHWEST**



View from the **APPALACHIAN MOUNTAINS**

- The bottom of the mission field is a 4' x 4' sheet of $\frac{1}{2}$ " plywood.
- The outer boundary of the mission field is made of 2x4 boards (actual dimension of $1\frac{1}{2}$ " x $3\frac{1}{2}$ ") and is **black**. The side of the 2x4 board that is $1\frac{1}{2}$ " is attached to the plywood with glue, nails, or screws.
- **HOME** is a 15" by 15" flat area and is **red**.
- **CHARLESTON** is a trapezoidal flat area and is **light blue**. The border of the trapezoid adjacent to the **MIDDLE COLONIES** is 11", the border adjacent to the field boundary is 9", and the west border is 15".
- The remainder of the **SOUTHERN COLONIES** is a 10" by 15" flat area and is **blue**.
- **PHILADELPHIA** is a trapezoidal flat area and is **yellow**. The border of the trapezoid adjacent to the **NEW ENGLAND COLONIES** is $9\frac{1}{2}$ ", the border adjacent to the **SOUTHERN COLONIES** is 14", and the east border is 15".
- The remainder of the **MIDDLE COLONIES** is a trapezoidal flat area and is **white**. The border of the trapezoid adjacent to the **NEW ENGLAND COLONIES** is 18", the border adjacent to the **SOUTHERN COLONIES** is 16", and the border adjacent to **PHILADELPHIA** is 15".
- **BOSTON** is a trapezoidal piece of $\frac{3}{4}$ " plywood and is **red**. The border of the trapezoid adjacent to the field boundary is 10", the border adjacent to the **MIDDLE COLONIES** is 8", and the west border is 15". It is fastened to the bottom of the mission field with glue, nails, or screws.
- The remainder of the **NEW ENGLAND COLONIES** is a trapezoidal flat area and is **red**. The border of the trapezoid adjacent to the field boundary is 15", the border adjacent to the **MIDDLE COLONIES** is $19\frac{1}{2}$ ", and the border adjacent to **BOSTON** is 15".
- The **APPALACHIAN MOUNTAINS** is a trapezoidal area and is **green**. The north border adjacent to the field boundary of the trapezoid is 15", the border adjacent to **HOME** is 6", and the west border adjacent to the field boundary is 30". The **APPALACHIAN MOUNTAINS** area includes four strips of $\frac{3}{4}$ " x $\frac{1}{4}$ " screen molding 30" long; the strips are equally spaced between the border and the intersection of **HOME**, **PHILADELPHIA**, and the **APPALACHIAN MOUNTAINS**. The molding is fastened to the mission field with glue, nails, or screws; the screen molding can be purchased at Home Depot (part # 927-139).
- The **ATLANTIC OCEAN** is a trapezoidal area and is **navy blue**. The north border of the trapezoid is 5", the south border is 11" and the east border is 45". The **ATLANTIC OCEAN** includes the **BEACH** which is two strips of $\frac{3}{4}$ " x $\frac{1}{4}$ " screen molding approximately $45\frac{1}{4}$ " long; the strips are placed side-by-side on the east border of the **ATLANTIC OCEAN**. The molding is fastened to the mission field with glue, nails, or screws; the screen molding can be purchased at Home Depot (part # 927-139).
- The **light blue** color can be made by mixing 1 part blue paint with 1 part white paint.
- The **blue** color can be made by mixing 10 parts navy blue paint with 1 part white paint.

Please contact Mission.Control@EARLYrobotics.org with any questions or comments.

Thank you for maintaining the spirit of the game!