

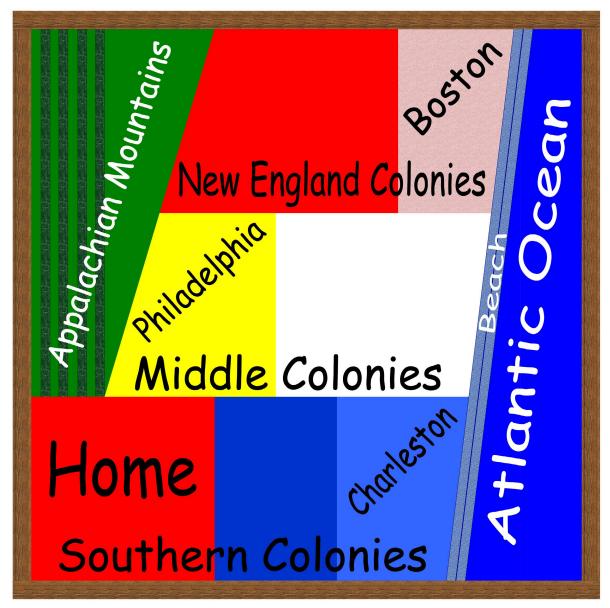
Engineering And Robotics Learned Young

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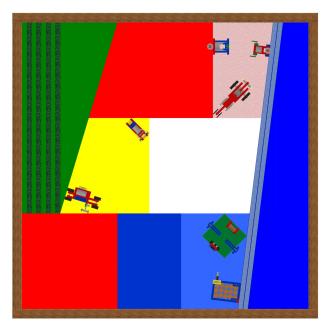
Fall 2009 Robotics Competition Mission Field Details

The Fall 2009 EARLY Robotics Competition mission field, The United States of America, is a 4' \times 4' field with a 2" \times 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" × 1

48" × 48" × 1/2" plywood Field Perimeter 2" x 4" boards

Appalachian Mountains

15" top / 6" bottom \times 30" tall 4 strips of $\frac{3}{4}$ " \times $\frac{1}{4}$ " 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 × 15" tall

Home

 $15" \times 15"$



United States of America

New England Colonies

25" top / $27\frac{1}{2}$ bottom \times 15" tall includes Boston

Boston

10" top / 8" bottom × 15" tall

3" plywood

Middle Colonies

27½" top / 30" bottom × 15" tall includes Philadelphia

Beach

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

Atlantic Ocean

5" top / 11" bottom × 45" tall



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 $\frac{3}{4}$ " $\times \frac{1}{4}$ " 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 $\frac{3}{4}$ " $\times \frac{1}{4}$ " 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@EARLY robotics.org with any questions or comments.

Thank you for maintaining the spirit of the game!