

Engineering And Robotics Learned Young

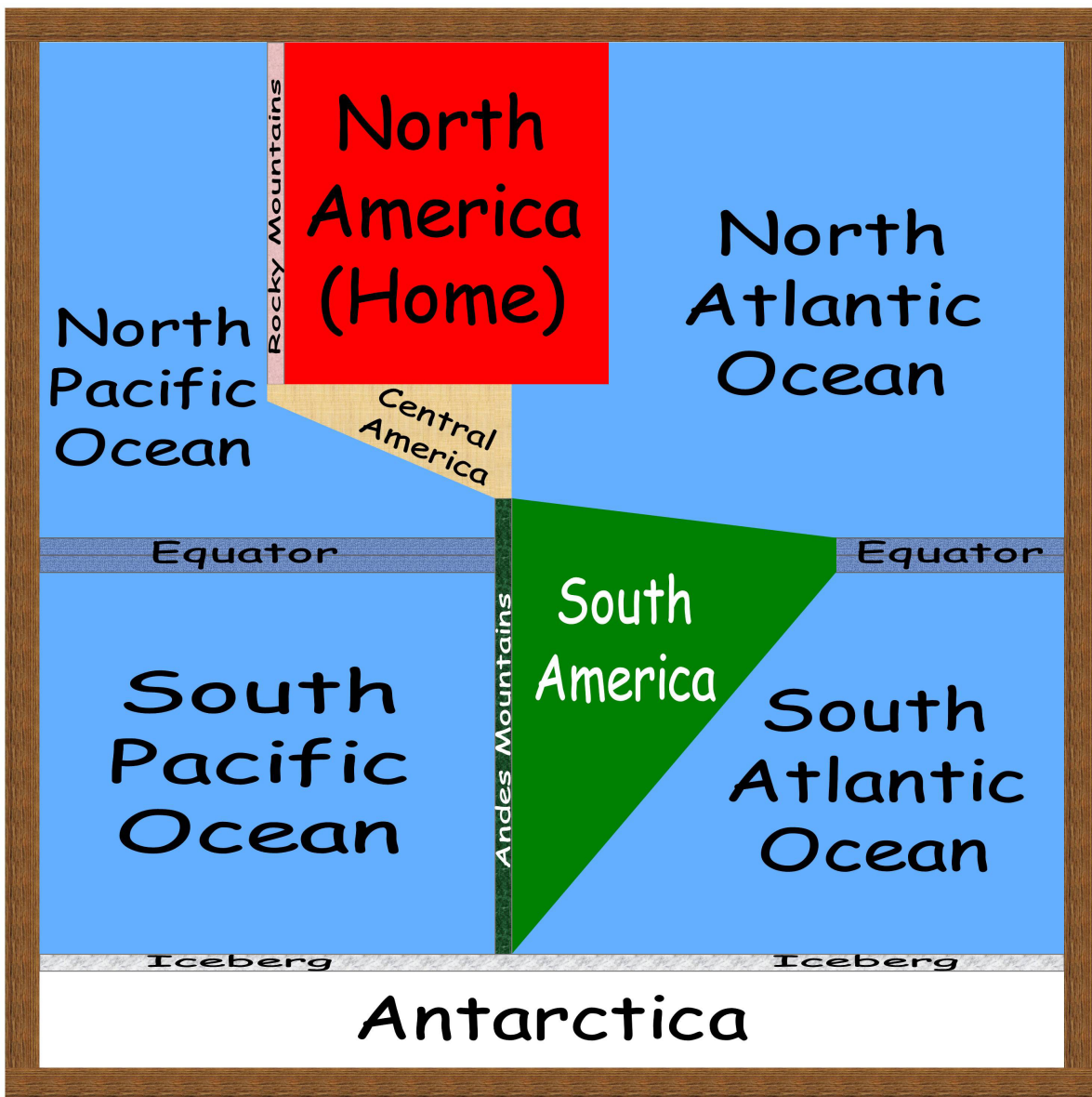
◆ EARLY ◆

2012-2013 Robotics Competition

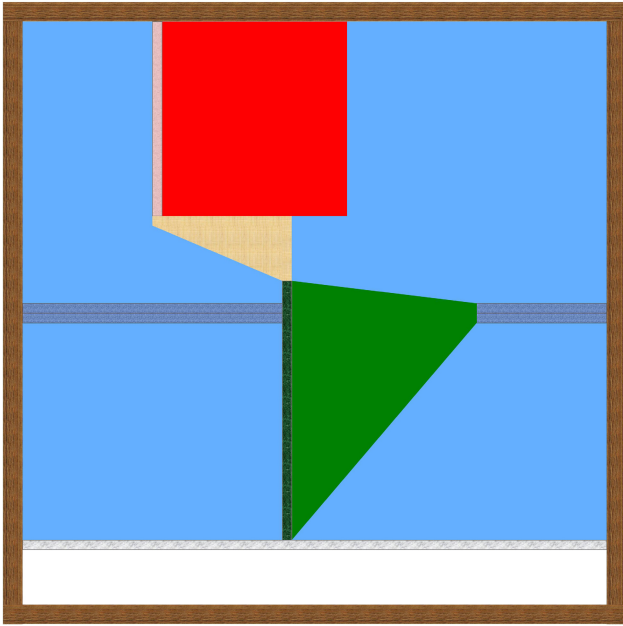
Mission Field Details

The 2012-2013 EARLY Robotics Competition mission field, the **Western Hemisphere**, 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.

Western Hemisphere



2012-2013 EARLY Mission Field



Mission Field Rendering



Mission Field Image

Field
48" x 48"
 $\frac{1}{2}$ " Plywood

Field Perimeter
2" x 4" Boards

North America (Home)
15" x 15"
10" from Left Border

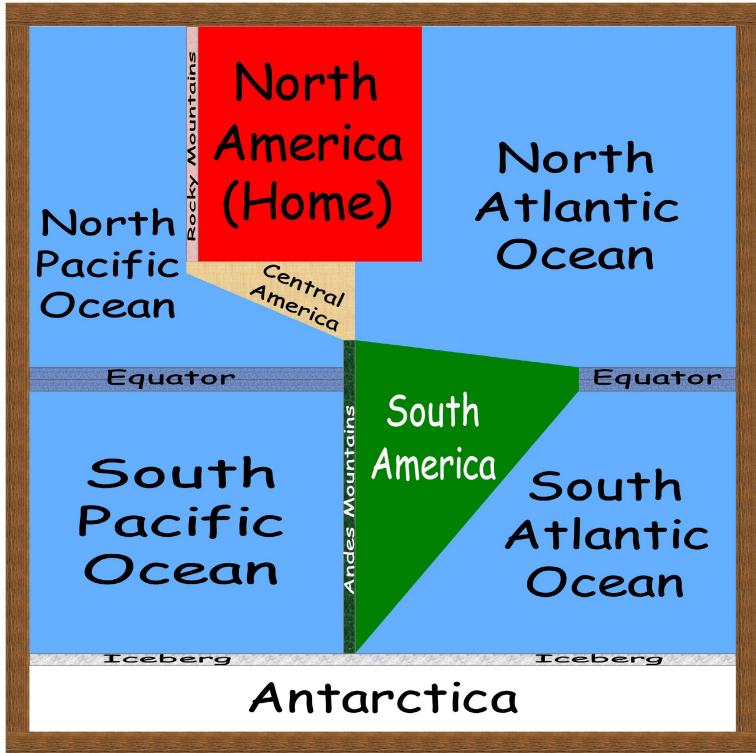
Rocky Mountains
 $\frac{3}{4}$ " x $\frac{1}{4}$ " Molding

Central America
 $10\frac{3}{4}$ " x 5"
 $\frac{3}{4}$ " Plywood

South America
15" x 20"

Andes Mountains
 $\frac{3}{4}$ " x $\frac{1}{4}$ " Molding

Antarctica
45" x 5"



North Pacific Ocean
20" x $21\frac{3}{4}$ "

North Atlantic Ocean
25" x $21\frac{3}{4}$ "

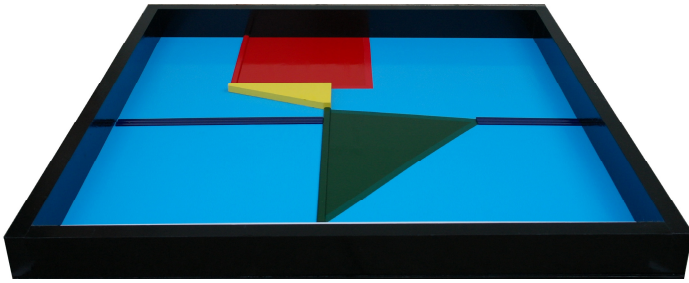
Equator
2 strips
 $\frac{3}{4}$ " x $\frac{1}{4}$ " Molding
Centered between
Top & Bottom Borders

South Pacific Ocean
20" x $16\frac{3}{4}$ "

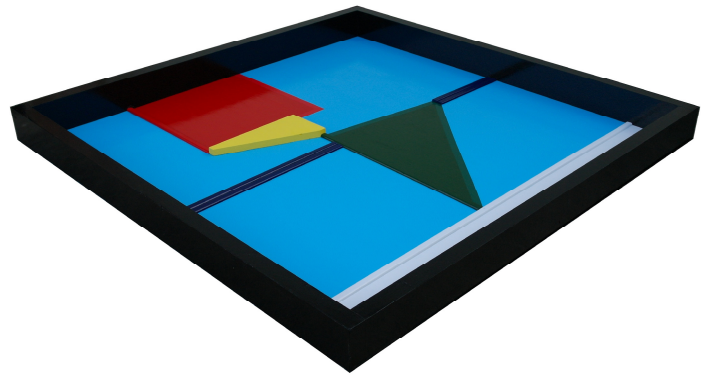
South Atlantic Ocean
25" x $16\frac{3}{4}$ "

Iceberg
 $\frac{3}{4}$ " x $\frac{1}{4}$ " Molding

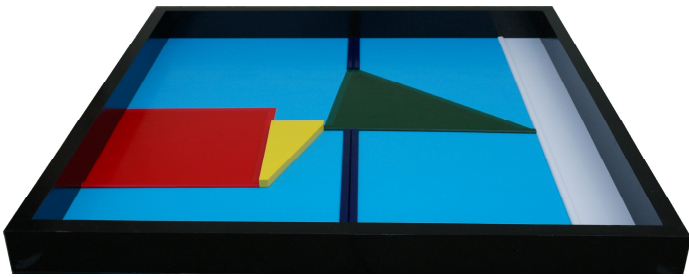
Western Hemisphere



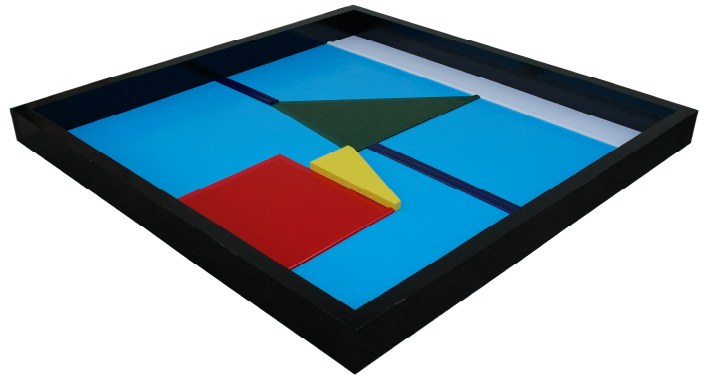
View from the **ANTARCTICA**



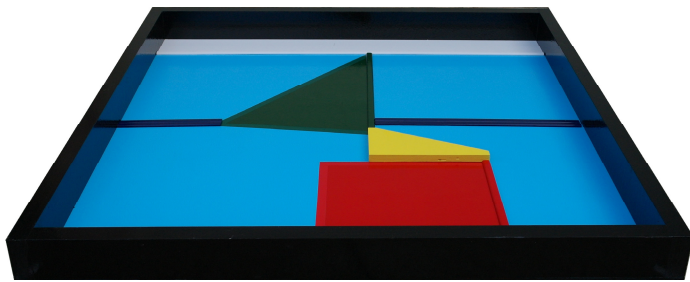
View from the **SOUTH PACIFIC OCEAN**



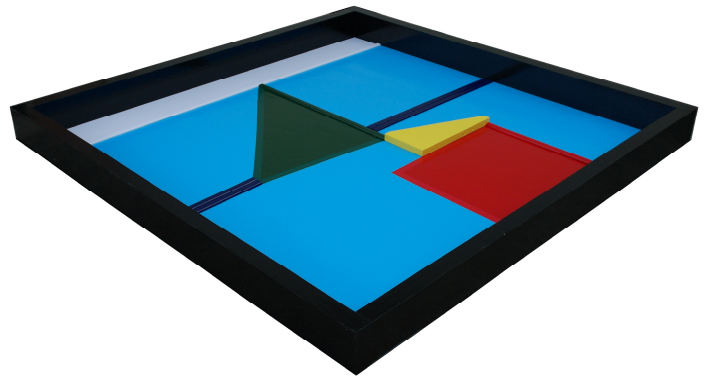
View from the **PACIFIC EQUATOR**



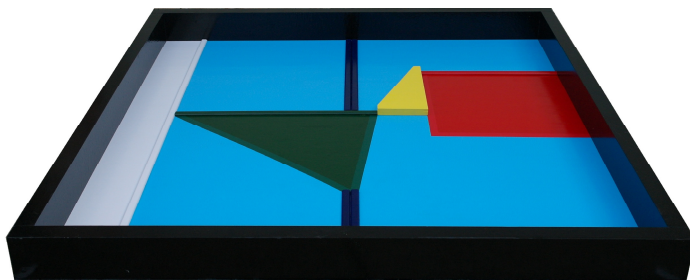
View from the **NORTH PACIFIC OCEAN**



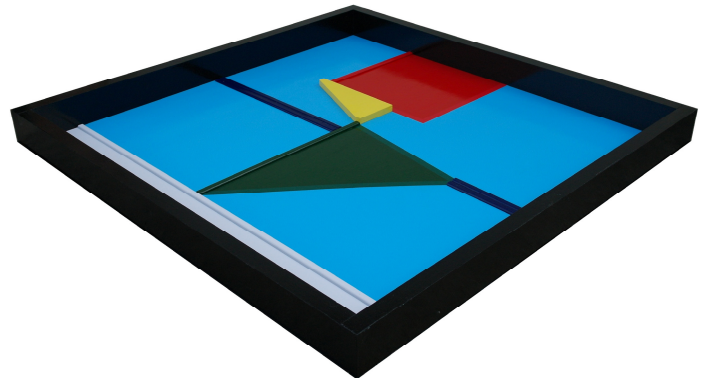
View from **NORTH AMERICA (HOME)**



View from the **NORTH ATLANTIC OCEAN**

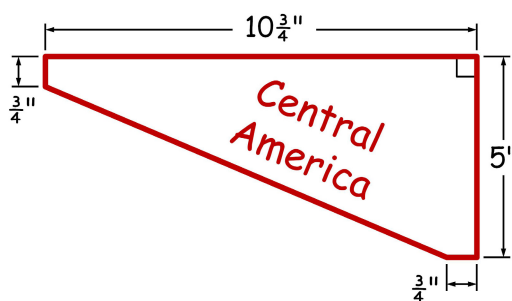


View from the **ATLANTIC EQUATOR**

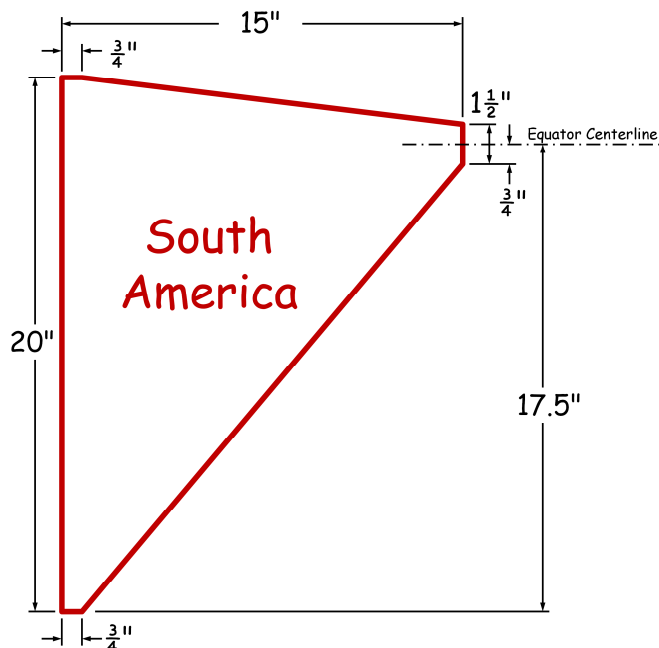


View from the **SOUTH ATLANTIC OCEAN**

- 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**, which is also **NORTH AMERICA**, is a 15" by 15" area and is **red**. **HOME** is 10" from the left mission field boundary and is adjacent to the upper mission field boundary. **HOME** includes the **ROCKY MOUNTAINS** that define the left border of **HOME** and is made from $\frac{3}{4}$ " x $\frac{1}{4}$ " screen molding; 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).
- **CENTRAL AMERICA** is a 10.75" by 5" right triangular piece of $\frac{3}{4}$ " plywood with $\frac{3}{4}$ " flats on the two acute angles and is **yellow**. **CENTRAL AMERICA** is adjacent to **HOME** and is aligned with the left border of **HOME**. The plywood is fastened to the mission field with glue, nails, or screws.



- **SOUTH AMERICA** is a 15" by 20" triangular area and is **green**. **SOUTH AMERICA** is 20" from the left mission field boundary and is adjacent to **CENTRAL AMERICA** and **ANTARCTICA**. The angles adjacent to **CENTRAL AMERICA** and **ANTARCTICA** have $\frac{3}{4}$ " flats and the angle adjacent to the **ATLANTIC EQUATOR** has a $1\frac{1}{2}$ " flat. **CENTRAL AMERICA** includes the **ANDES MOUNTAINS** that define the left border of **SOUTH AMERICA** and is made from $\frac{3}{4}$ " x $\frac{1}{4}$ " screen molding; 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).



- **ANTARCTICA** is a 45" by 5" area and is *white*. **ANTARCTICA** is adjacent to the left, right, and lower mission field boundaries. **ANTARCTICA** includes the **ICEBERG** that defines the upper border of **ANTARCTICA** and is made from $\frac{3}{4}$ " x $\frac{1}{4}$ " screen molding; 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 **NORTH PACIFIC OCEAN** is a 20" by 21.75" flat area and is *light blue*. The **NORTH PACIFIC OCEAN** is adjacent to the left and upper mission field boundaries. The **NORTH PACIFIC OCEAN** does not include **NORTH AMERICA**, **CENTRAL AMERICA**, nor **SOUTH AMERICA**.
- The **NORTH ATLANTIC OCEAN** is a 25" by 21.75" flat area and is *light blue*. The **NORTH ATLANTIC OCEAN** is adjacent to the upper and right mission field boundaries. The **NORTH ATLANTIC OCEAN** does not include **NORTH AMERICA**, **CENTRAL AMERICA**, nor **SOUTH AMERICA**.
- The **SOUTH PACIFIC OCEAN** is a 20" by 16.75" flat area and is *light blue*. The **SOUTH PACIFIC OCEAN** is adjacent to the left mission field boundary and **ANTARCTICA**. The **SOUTH PACIFIC OCEAN** does not include **SOUTH AMERICA**.
- The **SOUTH ATLANTIC OCEAN** is a 25" by 16.75" flat area and is *light blue*. The **SOUTH ATLANTIC OCEAN** is adjacent to the right mission field boundary and **ANTARCTICA**. The **SOUTH ATLANTIC OCEAN** does not include **SOUTH AMERICA**.
- The **EQUATOR** is made from two strips of $\frac{3}{4}$ " x $\frac{1}{4}$ " screen molding centered between the upper and lower mission field boundaries and is *navy blue*. The **PACIFIC EQUATOR** is comprised of two strips of molding 20" long. The **ATLANTIC EQUATOR** is comprised of two strips of molding 10" long. 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 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!