

Engineering And Robotics Learned Young

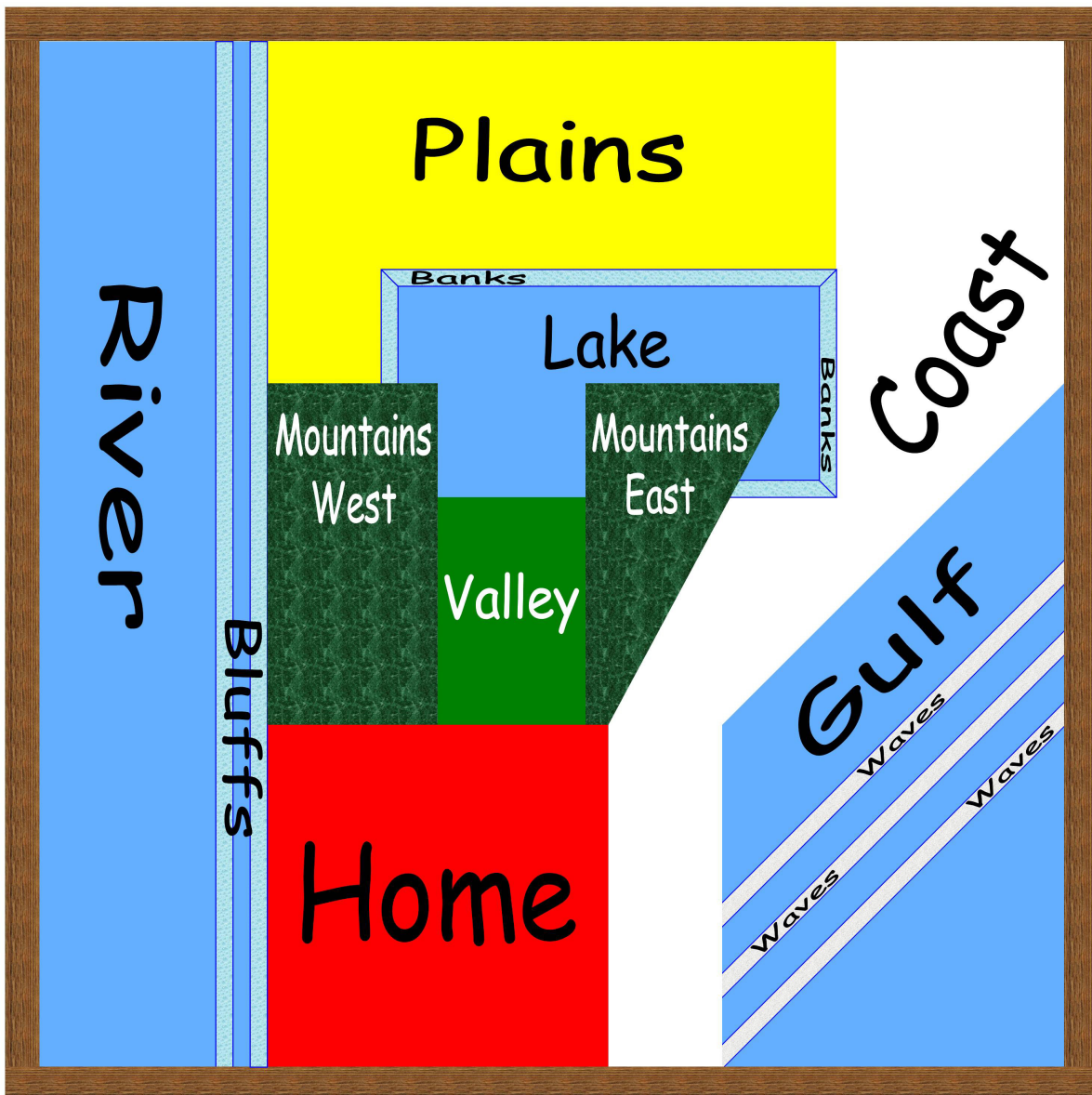
◆ EARLY ◆

2013-2014 Robotics Competition

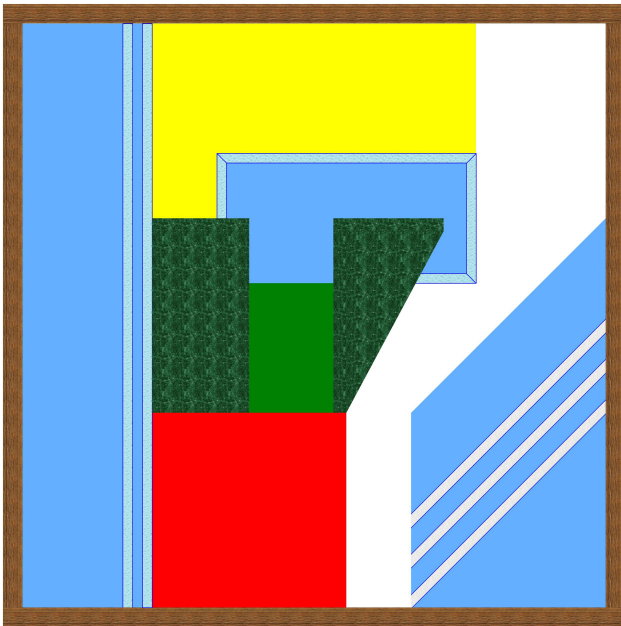
Mission Field Details

The 2013-2014 EARLY Robotics Competition mission field, **Doveland**, 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.

Doveland



2013-2014 EARLY Mission Field



Mission Field Rendering



Mission Field Image

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

Field Perimeter
2" x 4" Boards

River
10" x 45"

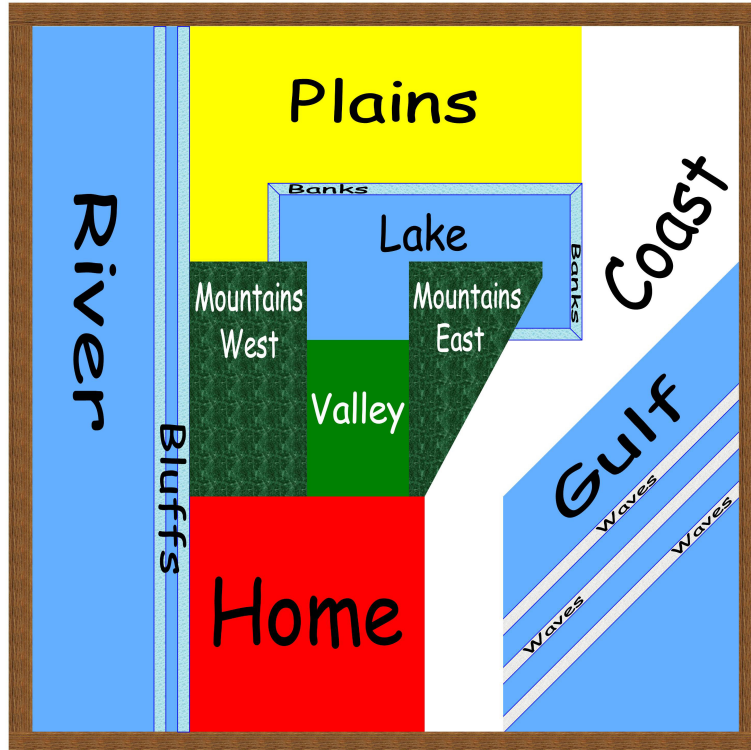
Bluffs
2 strips
 $\frac{3}{4}$ " x $\frac{1}{4}$ " Molding
 $\frac{3}{4}$ " apart

Mountains - West
 $7\frac{1}{2}$ " x 15"
 $\frac{3}{4}$ " Plywood

Mountains - East
 $7\frac{1}{2}$ " x 15"
 $\frac{3}{4}$ " Plywood

Valley
 $6\frac{1}{2}$ " x 10"

Home
15" x 15"



Plains
25" x 15"

Lake
20" x 10"

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

Gulf
15" x 30"

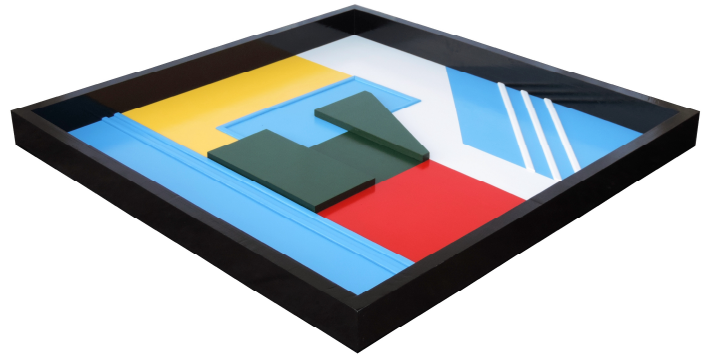
Waves
3 strips
 $\frac{3}{4}$ " x $\frac{1}{4}$ " Molding
45° & $1\frac{1}{2}$ " apart

Coast
20" x 45"

Doveland



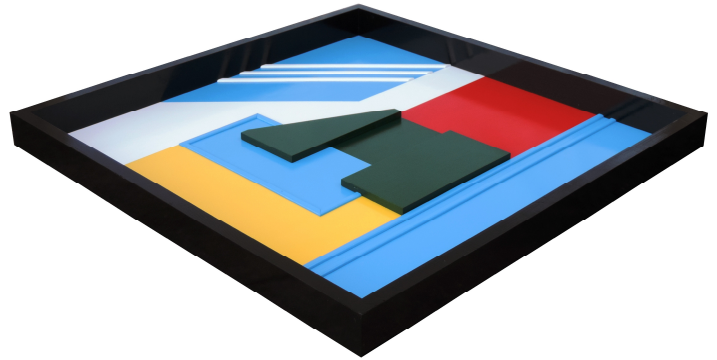
View from the HOME



View from the lower RIVER



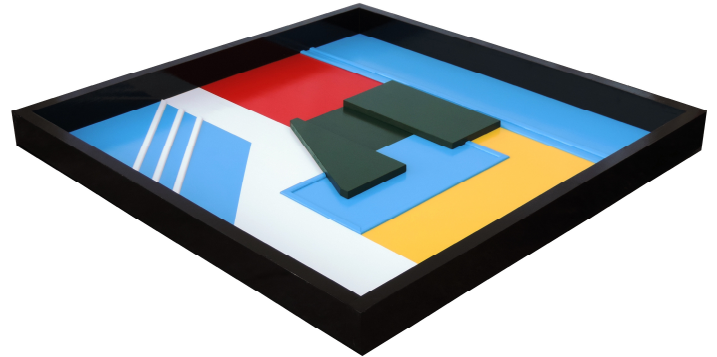
View from the middle RIVER



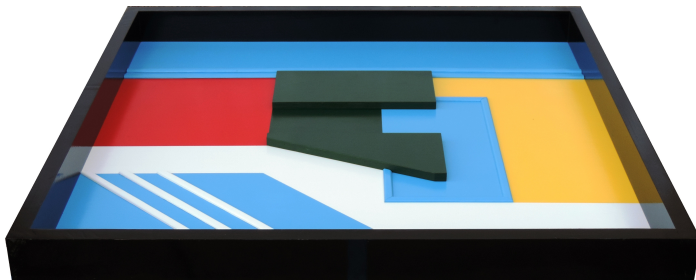
View from the upper RIVER



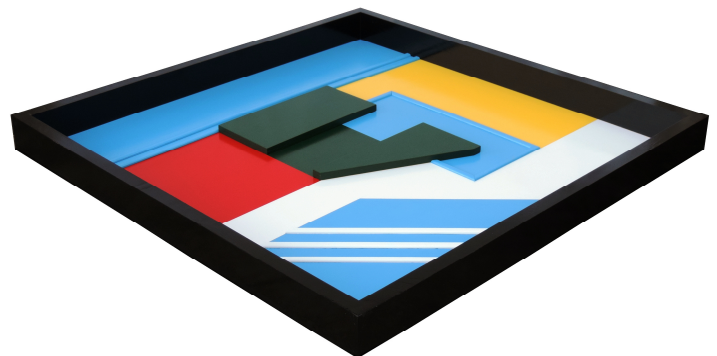
View from PLAINS



View from the upper COAST

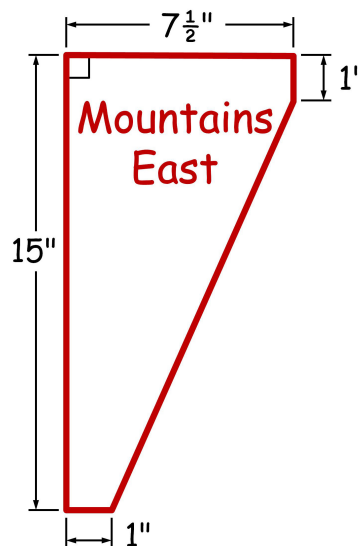


View from the COAST & GULF



View from the GULF

- 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*. **HOME** is 10" from the left mission field boundary.
- The **RIVER** is a 10" by 45" area and is *blue*. The **RIVER** includes the **BLUFFS** that define the right border of the **RIVER** and is made from two 45" strips of $\frac{3}{4}$ " x $\frac{1}{4}$ " screen molding separated by $\frac{3}{4}$ "; 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 **PLAINS** is a 15" by 20" flat area and is *yellow*. A portion of the **PLAINS** area is overlapped by the **LAKE**.
- The **LAKE** is a 20" by 10" area and is *blue*. The **LAKE** is 15" from the left mission field boundary and adjacent to the **VALLEY**, the **MOUNTAINS-WEST**, the **MOUNTAINS-EAST**, the **PLAINS**, and the **COAST**. A portion of the **LAKE** is overlapped by the **MOUNTAINS**. The **LAKE** includes the **BANKS** that are made from four strips of $\frac{3}{4}$ " x $\frac{1}{4}$ " screen molding; the **BANKS** are on the edge of the **LAKE** that are adjacent to the **PLAINS** and the **COAST** --- NOT on edges of the **LAKE** that are adjacent to the **MOUNTAINS** and the **VALLEY**; 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 **MOUNTAINS-WEST** is a 7.5" by 15" piece of $\frac{3}{4}$ " plywood and is *green*. The **MOUNTAINS-WEST** is adjacent to the **RIVER BLUFFS**.
- The **MOUNTAINS-EAST** is a 7.5" by 15" right triangular piece of $\frac{3}{4}$ " plywood with 1" flats on the two acute angles and is *green*.



- The **VALLEY** is a 6.5" by 10" flat area and is *green*. The **VALLEY** is adjacent to **HOME**, the **MOUNTAINS-WEST**, the **LAKE**, and the **MOUNTAINS-EAST**.

- The **GULF** is a 15" by 30" trapezoidal area and is *blue*. The trapezoid is 15" adjacent to the lower mission field boundary, 30" adjacent to the right mission field boundary, 15" adjacent to the lower **COAST**, and 21 $\frac{1}{4}$ " (45° angle) adjacent to the central **COAST**. The **GULF** includes the **WAVES** that are made from three 21 $\frac{1}{4}$ " strips of $\frac{3}{4}$ " x $\frac{1}{4}$ " screen molding positioned at a 45° angle, separated by 1 $\frac{1}{2}$ " and are *white*; 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 **COAST** is a 20" by 45" flat area and is *white*. The **COAST** extends from the lower mission field boundary to the upper mission field boundary and is adjacent to **HOME**, the **MOUNTAINS-EAST**, the **LAKE**, the **PLAINS**, and the **GULF**. A portion of the **COAST** is overlapped by the **MOUNTAINS-EAST**, the **LAKE**, the **PLAINS**, and the **GULF**.
- The *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!