

# Engineering And Robotics Learned Young

◆ EARLY ◆

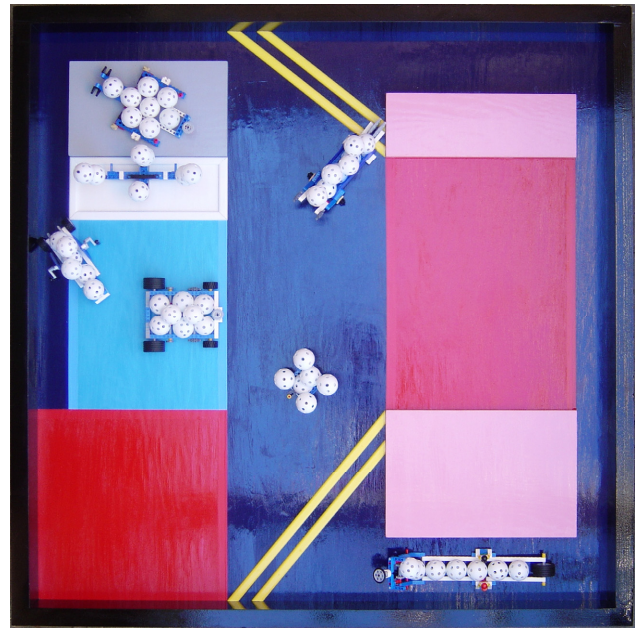
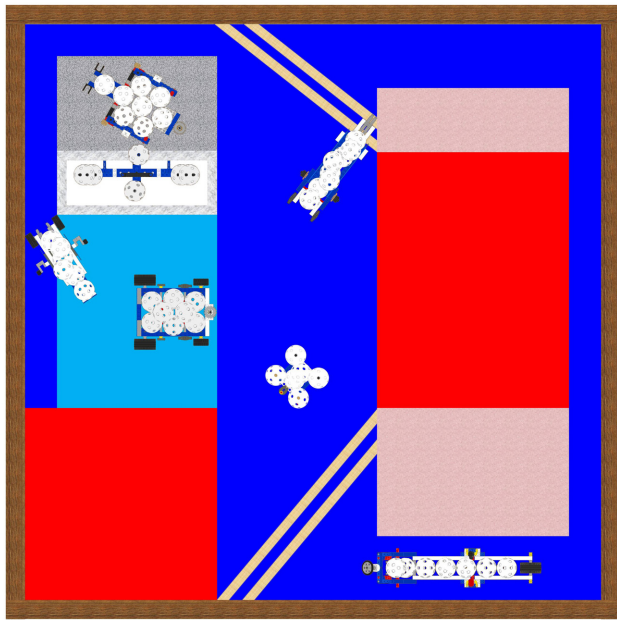
## Fall 2011 Robotics Competition Mission Field Details

The Fall 2011 EARLY Robotics Competition mission field, Galacticville, 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.

### Galacticville



Fall 2011 EARLY Mission Field



Fall 2011 Mission Model Positions

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

**Field Perimeter**  
2" x 4" boards

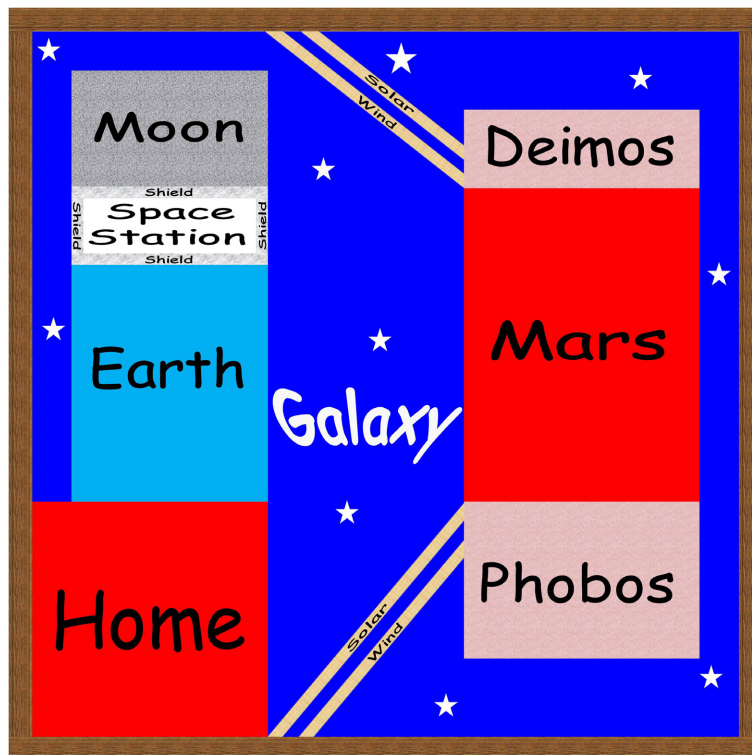
**Moon**  
12.5" x 7.5"  
3/4" plywood

**Space Station**  
12.5" x 5"  
"Shielded" with  
3/4" x 1/4" molding

**Earth**  
12.5" x 15"

**Solar Wind**  
4 strips  
3/4" x 1/4" molding  
3/4" separation

**Home**  
15" x 15"



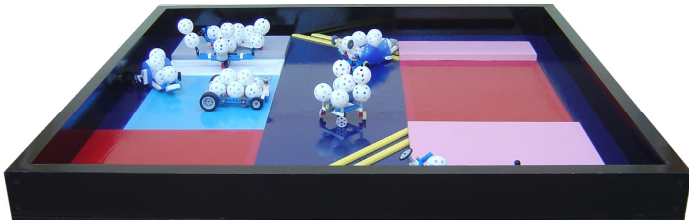
**Deimos**  
15" x 5"  
3/4" plywood  
5" from Upper Border  
2 1/2" from Right Border

**Mars**  
15" x 20"

**Phobos**  
15" x 10"  
3/4" plywood  
5" from Lower Border  
2 1/2" from Right Border

★ **Galaxy** ★  
45" x 45"  
"Everything Else"

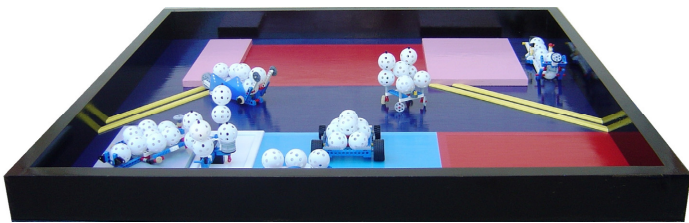
## Galacticville



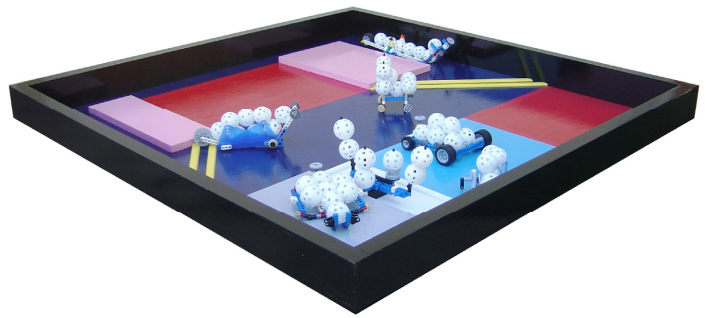
View from the **HOME & PHOBOS**



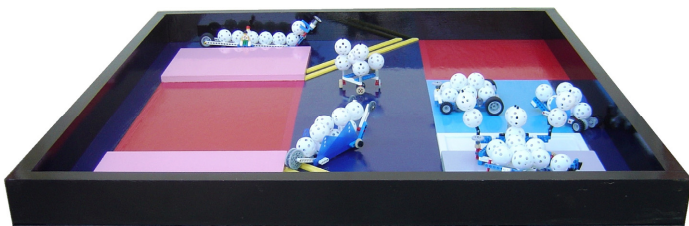
View from the **HOME**



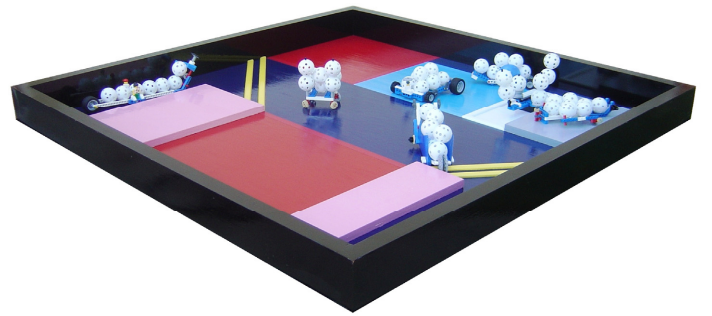
View from the **EARTH**



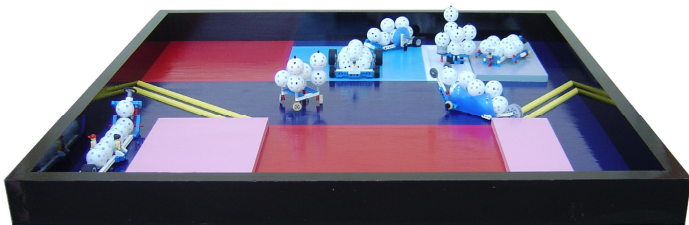
View from the **MOON**



View from the **MOON & DEIMOS**



View from the **DEIMOS**



View from the **MARS**



View from the **PHOBOS**

- 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*.
- The **EARTH** is a 12.5" by 15" flat area and is *light blue*. The **EARTH** is adjacent to **HOME**, is adjacent to the **SPACE STATION**, and is 2.5" away from the mission field boundary.
- The **SPACE STATION** is a 12.5" by 5" area and is *white*. The **SPACE STATION** is adjacent to **EARTH**, is adjacent to the **MOON**, and is 2.5" away from the mission field boundary. The **SPACE STATION** includes the **SHIELD** that defines the perimeter of the **SPACE STATION** 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 **MOON** is a 12.5" by 7.5" piece of  $\frac{3}{4}$ " plywood and is *gray*. The **MOON** is adjacent to the **SPACE STATION**, is 2.5" away from the left mission field boundary, and is 2.5" from the top mission field boundary. The plywood is fastened to the bottom of the mission field with glue, nails, or screws.
- **DEIMOS** is a 15" by 5" piece of  $\frac{3}{4}$ " plywood and is *pink*. **DEIMOS** is adjacent to **MARS**, is 2.5" from the right mission field boundary, and is 5" from the upper mission field boundary. The plywood is fastened to the bottom of the mission field with glue, nails, or screws.
- **MARS** is a 15" by 20" flat area and is *red*. **MARS** is adjacent to **DEIMOS**, is adjacent to **PHOBOS**, and is a 2.5" away from the mission field boundary.
- **PHOBOS** is a 15" by 10" piece of  $\frac{3}{4}$ " plywood and is *pink*. **PHOBOS** is adjacent to **MARS**, is 2.5" from the right mission field boundary, and is 5" from the lower mission field boundary. The plywood is fastened to the bottom of the mission field with glue, nails, or screws.
- The **GALAXY** is a 45" by 45" flat area and is *navy blue*. The **GALAXY** includes all the area that is not covered by **HOME**, the **EARTH**, the **SPACE STATION**, the **MOON**, **DEIMOS**, **MARS**, and **PHOBOS**. The **GALAXY** includes the **SOLAR WIND**.
- The **SOLAR WIND** is made from  $\frac{3}{4}$ " x  $\frac{1}{4}$ " screen molding and is *yellow*. The **SOLAR WIND** is made of two sets of molding with two strips each; the molding is  $\frac{3}{4}$ " apart and 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 2 parts white paint.
- The *gray* color can be made by mixing 1 part black paint with 3 parts white paint.
- The *pink* color can be made by mixing 1 part red paint with 10 parts white paint.

Please contact [Mission.Control@EARLYrobotics.org](mailto:Mission.Control@EARLYrobotics.org) with any questions or comments.

Thank you for maintaining the spirit of the game!