



# Engineering And Robotics Learned Young

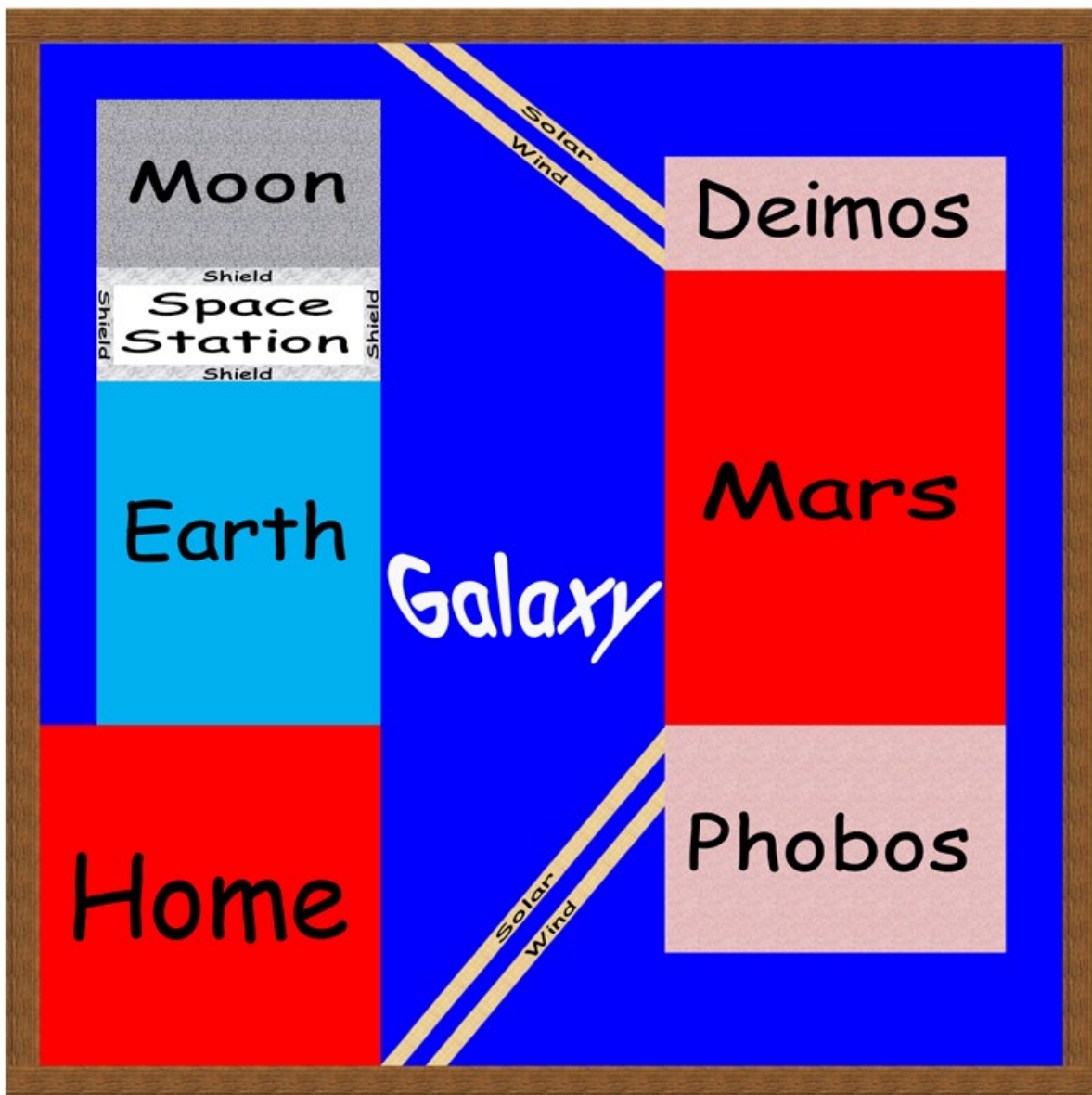
◆ EARLY ◆

## Galacticville Mission

### Mission Field Details

The EARLY Galacticville Robotics Competition Mission Field 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



Galacticville Mission Field

**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"



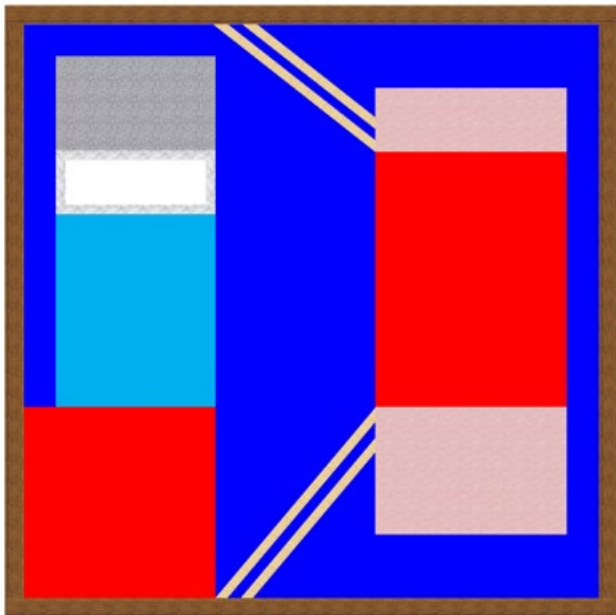
**Deimos**  
15" x 5"  
3/4" plywood  
5" from Upper Border  
2 1/2" from Right Border

**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"

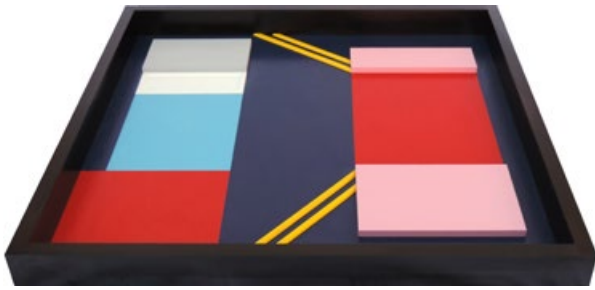
Galacticville Mission Field Dimensions



Galacticville Mission Field Rendering



Galacticville Mission Field Image



View from the HOME & PHOBOS



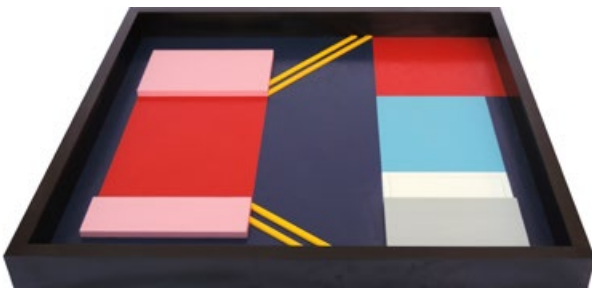
View from the HOME



View from the EARTH



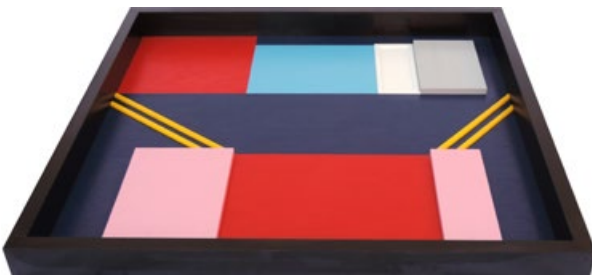
View from the MOON



View from DEIMOS & the MOON



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, also referred to as the border and field perimeter, 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" from the left border.
- 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" from the left border. The **SPACE STATION** includes the **SHIELD** that is made of  $\frac{3}{4}$ " x  $\frac{1}{4}$ " screen molding, and is **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 **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" from the left border, is 2.5" from the top border, and is fastened to 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 border, is 5" from the top border, and is fastened to 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" from the right border.
- **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 border, is 5" from the bottom border, and is fastened to 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!