



Northern Sky District Spring Camporee 2019 “Robots of Random”



Camp Contacts: Korgen Halver (218) 849-2947, Jefri Jones (701) 373-1420

Dave Mohn (701) 238-8099, **If you need technical help contact Dave Mohn*

When: April 26-28, 2019

Where: Fargo Air Museum

Early Registration Ends at 1:00pm, April 13th: \$55

Late Registration Ends at Midnight on April 16th: \$60

****Minimum Attendance is 55 Scouts. If less than 55 Scouts are registered by the time registration closes, we will issue a full refund. ****

This event will also complete the robotics merit badge for Scouts participating.

The Fun: Scouts will have the perfect opportunity to get introduced to robotics as this camporee is meant to spark interest and enable Scouts to learn about robotics and all it has to offer. The Arduino has many options to continue to build in robotics with a wide variety of sensors that are on the market. These sensors are used in the industry that range anywhere from a temperature probe used on an airplane, to a camera on your car. Scouts will learn the basics of designing, building, and programming a simple robot where they get to build and take home a robot that will drive a programmed path. Scouts will also get to explore a multitude of other sensors, and robotic components to learn and experiment with that are being lent to the event. They will also get to complete the robotics merit badge, where they will learn about different applications of robotics and real jobs that are in the world. Scouts will have an opportunity to put what they have learned to the test in the ultimate robotics challenge.

Logistics

Required For Scouts To Bring:

- A computer with the downloaded programming software from <https://www.arduino.cc/en/Main/Software>

**No Google Chrome Books as it requires you to pay for the software*

***If you do not have a computer you can bring, please call and we can possibly help. The sooner we know the better. ☺**

- Quick to eat lunch (Bag Lunch), along with other meals
- Weekend Camping Gear
- Signed Blue card
- One 9-Volt Battery
- Helpful items to bring if you have them
 - Small Screwdrivers, Small Wrenches, Pliers, Etc.
 - USB to B-Port Cord, USB to Mini Cord

What Scouts Will Take Away:

- Robotics Merit Badge (and Spring Camporee Patch)
- Robot Parts
 - Arduino (Main Robot Board), Motor Hat (Add-on Board that allows motors to be controlled), 2 Motors, 2 Wheels, and other robot parts. **(Store Value of \$50)**
- A robot that can drive around a programmed path

***Note: The flyer shared earlier stated it would be controlled, however due to budget and time constraints it won't be possible.**

Camping: Green space is limited therefore tents need to be at capacity should you chose to or need camping nights. There will also be space designated inside the air plane hangar to set up a cot for two nights sleeping. A public restroom is available inside the Air Museum. **No Showers are available.** Potable water is available on site. Parking is limited; please do not bring troop trailers. The museum will be open to the public while we are there on Saturday. If you would like to join us for just the robotics activity on Saturday, plan on arriving at the Air Museum no later than 8:15 AM. The fee is the same whether you sleep over night or not. The fee covers electronic supplies and the processors the boys will be taking home with them.

Cooking: Fires will not be allowed. Gas stoves should be considered primary for cooking

Tentative Schedule

Friday

- 7 - 8 PM Check in
- 7 - 9 PM Scheduled Computer Help (*For those needing help installing the software - Contact Dave or Korgen to schedule assistance*)
- 10 PM Lights Out

Saturday

- 7:30 AM Wake Up
- 8 - 9 AM Breakfast
- 9 - 12 AM Building, Designing, and Programming
- 12 - 12:30 PM Lunch Break ***Quick Bag Lunch Required**
- 12:30 - 3 PM Building, Designing, and Programming
- 3 - 5 PM The Challenge
- 5 - 6:30 PM Supper
- 6:30 - 8:30 PM Robotics Exploration
- 10 PM Lights Out

Sunday

- 7:30 AM Wake Up
- 8 - 9 AM Breakfast/Pack Up
- 9 - 12 AM Robotics Exploration