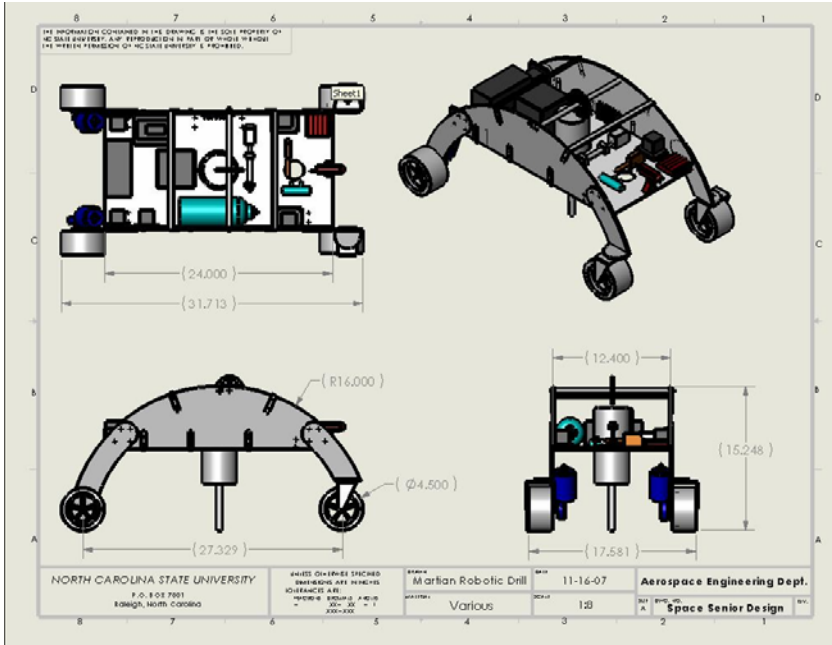
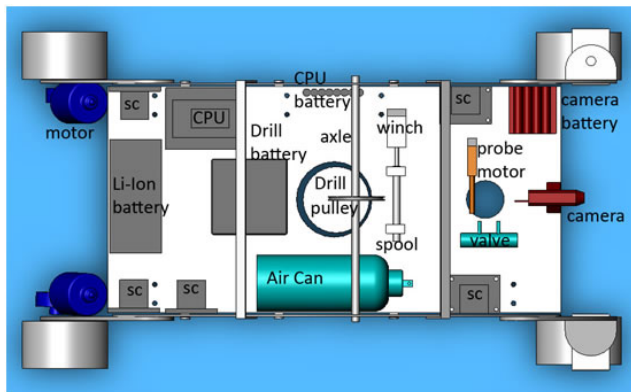


Martian Robotic Drill – NC State University



Mission: The mission of the Martian Robotic Drilling Team is to design and construct a robotic drilling platform for exploration of the Martian surface. NASA's current plans require robotic explorations of Mars, both from orbit and from the ground, within the next ten years. Following the colonization of the Moon, NASA intends to send human missions to Mars. It will be necessary to explore as much of the planet as possible before such manned missions take place. The design of this drilling platform will serve as a test of the feasibility and practicality of robotic drilling, as well as provide a potential design for a probe to be deployed to Mars in the near future.

The platform will be able to drill in several different locations up to a depth of 6 inches at a diameter of ½ an inch. After successfully drilling a hole, the rover will deploy a sensor array consisting of a camera and an Alpha Particle X-Ray Spectrometer into the hole. These instruments will send back a wealth of data about the subsurface Martian environment. It is hoped that the continuing search for water and for life will be aided by the development of the Martian Robotic Drill.



- your contact information -

http://www.mae.ncsu.edu/research/space_design/Drill/Homepage.html