

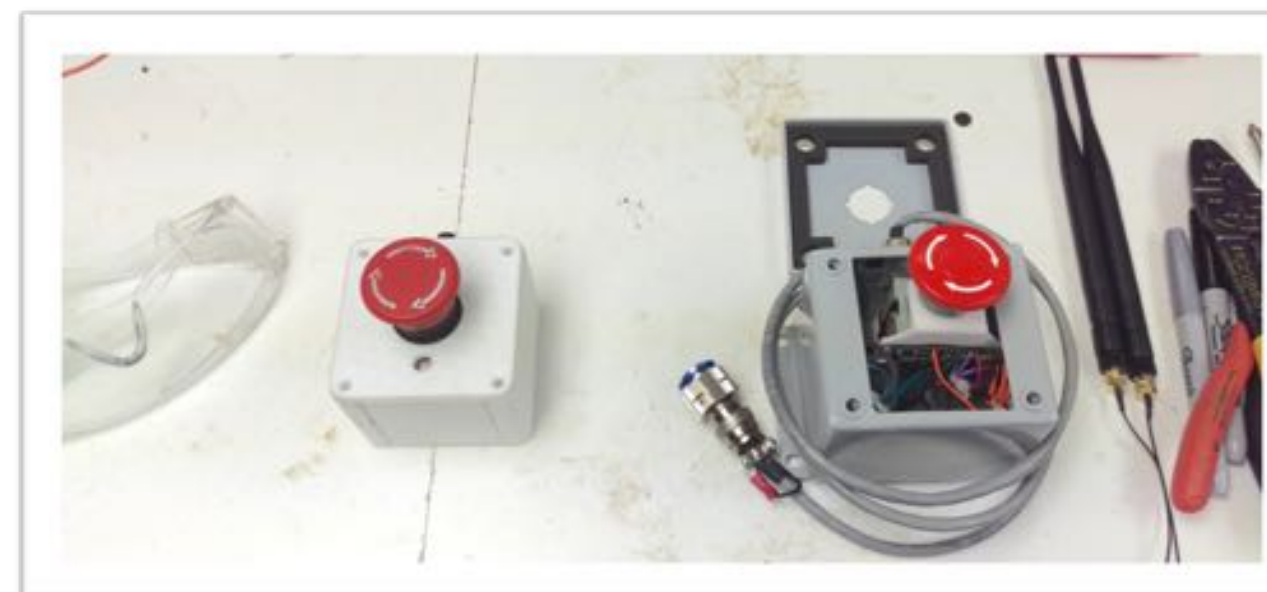
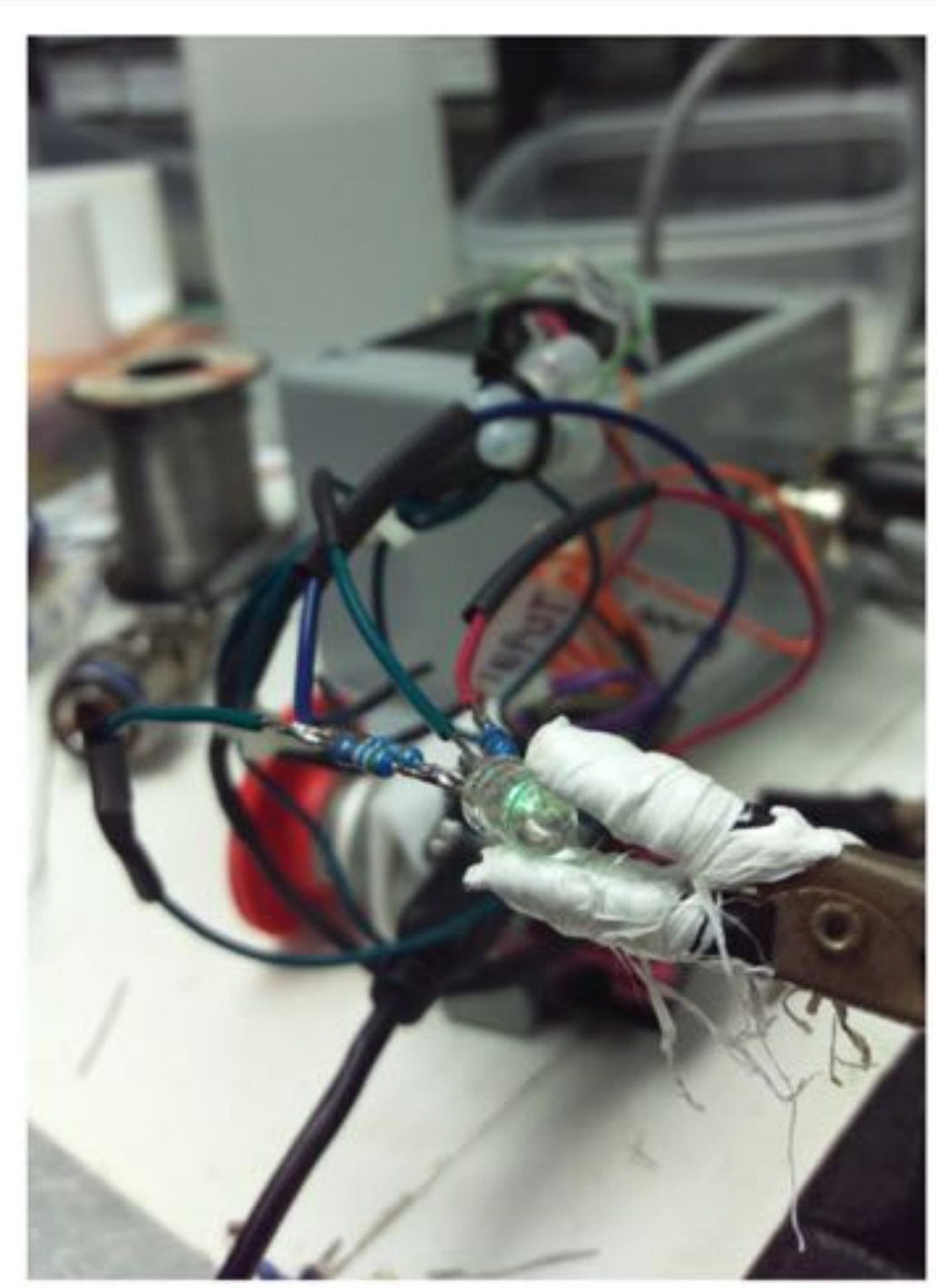
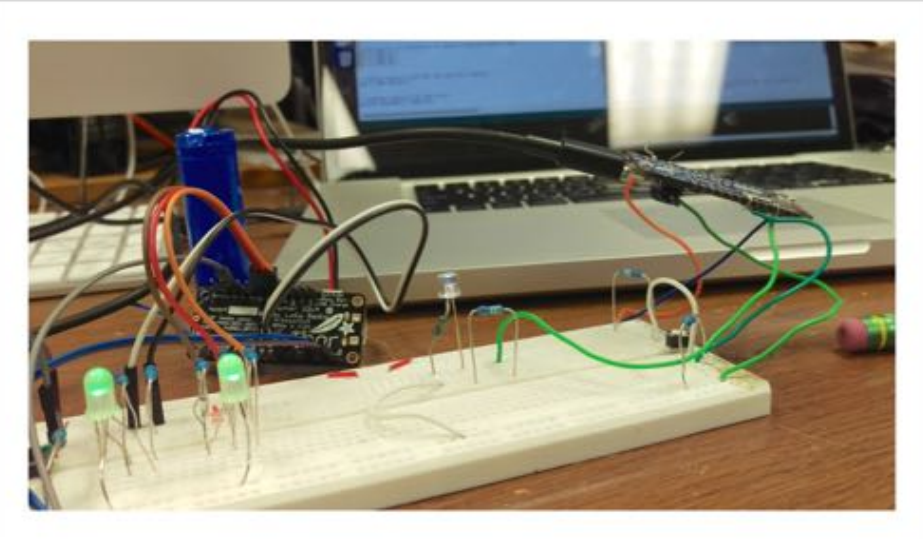
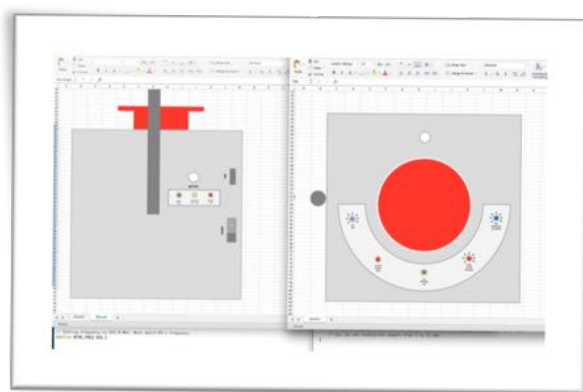
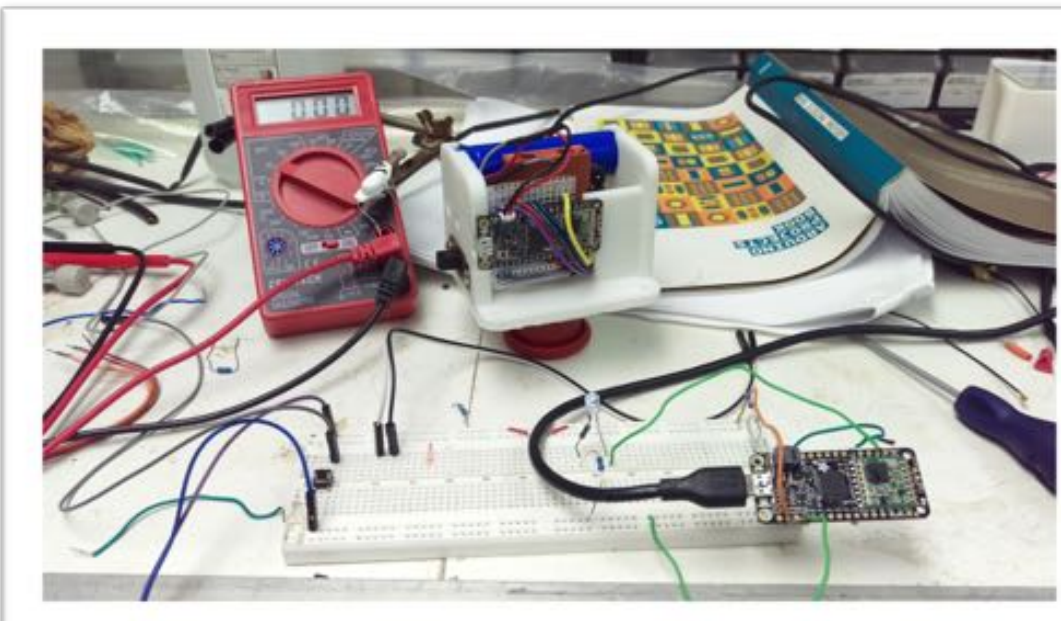
CREDIT: DAVE AKIN

Biobot carries the portable life support system for the astronaut. The concept behind this is to eliminate the physical exertion of having to wear the life support system. Several designs are being developed in the space systems laboratory at the University of Maryland.

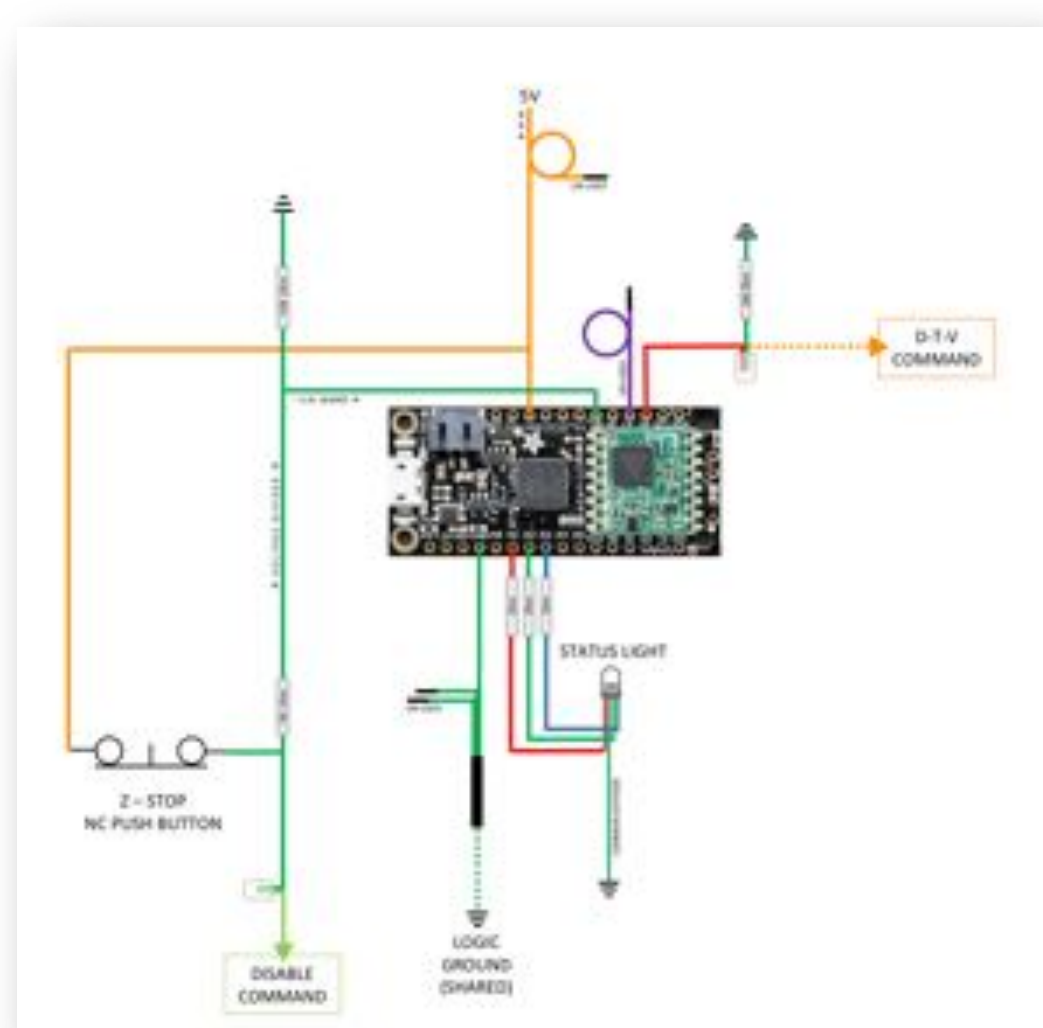


BIOBOT Z-STOP

The remote ability to safely stop Biobot



```
// Lastly, check state of battery voltage every 20 seconds // -- 20 seconds selected as a cheap version of histogram.
// @param int pin(C) -- pin(Library) == 2000 // -- This avoids the use of delay. This way the Z-stop can be seen as an
// Look at value on battery pin
battery_voltage = analogRead(battery_pin);
// Convert to voltage
// -- Small delay for analog read in
delay(5); // -- Small delay for analog read in
// Analog to digital mapping, referencing, and conversion of battery_voltage read in
battery_voltage *= 5; // -- scale resistor division
battery_voltage /= 1024; // -- convert to digital
// Turn on lights according to voltage (0.0 = 200 = 0V)
if (battery_voltage == 3.4)
{
  // Green
  digitalWrite(red_analog_pin, 0);
  digitalWrite(green_analog_pin, 1);
  digitalWrite(blue_analog_pin, 0);
}
else if (battery_voltage == 3.4)
{
  // Red
  digitalWrite(red_analog_pin, 1);
  digitalWrite(green_analog_pin, 0);
  digitalWrite(blue_analog_pin, 0);
}
// Monitor of battery voltage
Serial.print("The battery voltage is: ");
Serial.println(battery_voltage);
// Opening battery pin(Library) == 2000(C)
pinMode(Library) = OUTPUT;
```



UMBILICAL EXTENSION

Umbilical extension of life support systems

