**Parts List:**

1. 4x Pseudo-Doppler Sensor
   1. 1x Raspberry Pi 2 [$42.00](http://www.amazon.com/Raspberry-Pi-Model-Project-Board/dp/B00T2U7R7I/ref=sr_1_4?s=pc&ie=UTF8&qid=1448898147&sr=1-4&keywords=raspberry+pi+2) (alternate: BeagleBone Black [$55.00](http://www.amazon.com/Beagleboard-BEAGLBONE_BLACK_SELF-BeagleBone-Rev-C/dp/B00K7EEX2U/ref=sr_1_2?s=pc&ie=UTF8&qid=1448898231&sr=1-2&keywords=beaglebone+black), Arduino Uno [$19.99](http://www.amazon.com/arduino-org-A000066-Arduino-Uno-Rev/dp/B008GRTSV6))
   2. 1x Antenna Switch
      1. 1x Voltage Regulator (LT1965IMS8E) [$6.27](http://www.amazon.com/Linear-Technology-LT1965IMS8E-PBF/dp/B011NDMBKO/ref=sr_1_1?ie=UTF8&qid=1448293397&sr=8-1&keywords=LT1965IMS8E)
      2. 1x Voltage Translator (TXB0104) [$3.95](http://www.amazon.com/INSTRUMENTS-TXB0104D-VOLTAGE-TRANSLATOR-SOIC14/dp/B005T7JA2I/ref=sr_1_13?ie=UTF8&qid=1448293561&sr=8-13&keywords=TXB0104)
      3. 1x RF Mux (ADG904) [$4.63](http://www.digikey.com/product-detail/en/ADG904BRUZ/ADG904BRUZ-ND/1007291)
      4. 4x SMT micro coax connector
      5. 1x SMT SMA female connector
   3. 1x 8MHz Arduino Micro Pro microcontroller [$7.69](https://www.sparkfun.com/products/12587?gclid=Cj0KEQiAnJqzBRCW0rGWnKnckOIBEiQA6qDBaukrqNs3qrbFDDPkIK6Rk7p3BH6111NZQ0iKJbNxOVAaAlFe8P8HAQ)
   4. 1x Digital Compass [$8.99](http://www.amazon.com/SunFounder-Digital-Compass-HMC5883L-Raspberry/dp/B0151G64RU/ref=sr_1_1?ie=UTF8&qid=1449588443&sr=8-1&keywords=electronic+compass+for+raspberry+pi)
   5. 1x USB GPS receiver GlobalSat Model BU353-S4 [$59.99](http://www.amazon.com/GlobalSat-BU-353-S4-USB-Receiver-Black/dp/B008200LHW/ref=sr_1_1?ie=UTF8&qid=1448297540&sr=8-1&keywords=USB+GPS+receiver+GlobalSat+Model+BU353-S4) (alternate: [$35.00](http://www.amazon.com/Yuanj%C2%AEusb-GPS-Receiver-Computers-Laptops/dp/B010LJI6H8/ref=sr_1_8?s=pc&ie=UTF8&qid=1448898787&sr=1-8&keywords=usb+gps+receiver), [$23.49](http://www.amazon.com/Sunkee-G-mouse-Glonass-Support-Windows/dp/B00Z7N6BG2/ref=sr_1_2?s=pc&ie=UTF8&qid=1448898787&sr=1-2&keywords=usb+gps+receiver))
   6. 1x USB WiFi adapter w/ 16dBi Yagi antenna [$61.97](http://store.rokland.com/products/alfa-awus036nh-usb-adapter-16-dbi-yagi-antenna-5m-lmr-200-extension-cable)
      1. Alternative to Yagi antenna: 1x USB WiFi 5dBi adapter [$29.99](http://www.amazon.com/TRiver-Antenna-Adapter-Connection-Support/dp/B00WH8FKLM/ref=sr_1_1?s=pc&ie=UTF8&qid=1448899572&sr=1-1&keywords=USB+WiFi+dongle+5dbi) (alternate: [$15.98](http://www.amazon.com/GMYLE-Wireless-802-11n-Network-RTL8191SU/dp/B003Y6UNI6/ref=sr_1_5?s=pc&ie=UTF8&qid=1448899724&sr=1-5&keywords=USB+WiFi+dongle+5dbi))
   7. 1x12VDC to 5VDC voltage converter
   8. 1x12V 5AH Battery
   9. 1x 120VAC to 5VDC voltage converter
   10. 4x RTL Antenna (w/ SDR) [$16.47](http://www.amazon.com/DVB-T-RTL-SDR-Realtek-RTL2832U-Receiver/dp/B00JB3JAG2/ref=sr_1_6?s=pc&ie=UTF8&qid=1448902526&sr=1-6&keywords=USB+DVB-T+RTL-SDR+Realtek+R820T+RTL2832U)
   11. 1x Antenna Array Stand
   12. 1x USB Hub [$29.99](http://www.amazon.com/Belkin-Powered-Desktop-USB-7-Port/dp/B00R1UWJF6/ref=sr_1_21?ie=UTF8&qid=1448897507&sr=8-21&keywords=usb+hub&refinements=p_89%3ABelkin) (alternate [$39.99](http://www.amazon.com/Belkin-Hi-Speed-4-Port-USB-2-0/dp/B00CMYHMT4/ref=pd_sim_147_2?ie=UTF8&dpID=41i-lduPKZL&dpSrc=sims&preST=_AC_UL160_SR160%2C160_&refRID=0N2TWWJB7VS8EF2EGRAB), [$34.99](http://www.amazon.com/BobjGear-Powered-Tablet-Laptop-Chromebook/dp/B00O060VOK/ref=sr_1_10?s=pc&ie=UTF8&qid=1448898040&sr=1-10&keywords=usb+hub&refinements=p_n_feature_keywords_browse-bin%3A6801586011%2Cp_n_feature_five_browse-bin%3A2057435011))
   13. 5x USB-USB 2.0 connector $7.99
2. 4x PDOA Sensor
   1. 1x Raspberry Pi 2 [$42.00](http://www.amazon.com/Raspberry-Pi-Model-Project-Board/dp/B00T2U7R7I/ref=sr_1_4?s=pc&ie=UTF8&qid=1448898147&sr=1-4&keywords=raspberry+pi+2) (alternate: BeagleBone Black [$55.00](http://www.amazon.com/Beagleboard-BEAGLBONE_BLACK_SELF-BeagleBone-Rev-C/dp/B00K7EEX2U/ref=sr_1_2?s=pc&ie=UTF8&qid=1448898231&sr=1-2&keywords=beaglebone+black), Arduino Uno [$19.99](http://www.amazon.com/arduino-org-A000066-Arduino-Uno-Rev/dp/B008GRTSV6))
   2. 1x RTL Antenna (w/ SDR) [$16.47](http://www.amazon.com/DVB-T-RTL-SDR-Realtek-RTL2832U-Receiver/dp/B00JB3JAG2/ref=sr_1_6?s=pc&ie=UTF8&qid=1448902526&sr=1-6&keywords=USB+DVB-T+RTL-SDR+Realtek+R820T+RTL2832U)
   3. 1x USB GPS receiver GlobalSat Model BU353-S4 [$59.99](http://www.amazon.com/GlobalSat-BU-353-S4-USB-Receiver-Black/dp/B008200LHW/ref=sr_1_1?ie=UTF8&qid=1448297540&sr=8-1&keywords=USB+GPS+receiver+GlobalSat+Model+BU353-S4) (alternate: [$35.00](http://www.amazon.com/Yuanj%C2%AEusb-GPS-Receiver-Computers-Laptops/dp/B010LJI6H8/ref=sr_1_8?s=pc&ie=UTF8&qid=1448898787&sr=1-8&keywords=usb+gps+receiver), [$23.49](http://www.amazon.com/Sunkee-G-mouse-Glonass-Support-Windows/dp/B00Z7N6BG2/ref=sr_1_2?s=pc&ie=UTF8&qid=1448898787&sr=1-2&keywords=usb+gps+receiver))
   4. 4x USB-USB 2.0 connector $7.99
3. 2x Apple AirPort Express [$59.99](http://www.amazon.com/Apple-Airport-Express-MB321LL-A/dp/B0015YJOK2/ref=sr_1_4?s=pc&ie=UTF8&qid=1448898479&sr=1-4&keywords=Apple+AirPort) (no alternatives; constrained by ESG permissions)
4. 4x Uniden Walkie-Talkie batteries [$14.92](http://www.amazon.com/Uniden-BP-38-Replacement-Battery-GMRS-380/dp/B00009V330/ref=sr_1_5?ie=UTF8&qid=1449233223&sr=8-5&keywords=uniden+walkie+talkies+batteries)

**Projected Total: $2,132.90**