



HACKtheMACHINE SEATTLE

Advanced Challenge: System Document

21-23 SEPTEMBER 2018

Last Updated: 09/10/2018

RECOMMENDED MATERIALS

RECOMMENDED HARDWARE

It is recommended you bring the following hardware with you:

- Laptop computer
- Cat5 Ethernet Cable (3 meters or greater)
- Software Defined Radio + Antennae
- USB thumb drive (4GB capacity or greater)
- USB CAN Analyzer (Optional)

SOFTWARE

The following is a list of recommended software. Be aware of different versions of the software that have different functionality.

- Wireshark
- NMAP
- GNU Radio
- CAN bus analyzer
- Metasploit
- Kali Linux

TECHNICAL SPECIFICATIONS

HARDWARE AND INTERFACING

Hardware	Network	Connection Type
NavNet TZtouch2	Voyage, IT	Ethernet, NMEA2000, WiFi
Furuno AIS Transponder FA50	Voyage	Ethernet, Coaxial
Furuno VHF Antenna FAB151D	Voyage	Coaxial
Furuno Radar DRS4D	Voyage	Ethernet
Furuno GPS Antenna GPA017	Voyage	Coaxial
Furuno GPS Receiver GP330B	Voyage	NMEA2000
Furuno Integrated Heading Sensor PG700	Voyage	NMEA2000
Furuno Satellite Weather Receiver BBWX3	Voyage	Ethernet
Furuno Satellite Weather Antenna WX1	Voyage	Ethernet
AirMax Weather Station 220WX	Voyage	NMEA2000
Furuno NMEA Junction FI5002	Engineering	NMEA2000
Furuno Autopilot Control FAP7011	Engineering	Serial (Proprietary)
Furuno Autopilot Processor FAP7002	Engineering	NMEA2000
Furuno Rudder Reference FAP6112	Engineering	Serial (Proprietary)
Furuno DST-800MSF	Engineering	NMEA2000
Furuno HUB101	IT	Ethernet
Cradlepoint 1BR1100 Modem/Router	IT	Wi-Fi
Email Server	IT	Wi-Fi, Ethernet
Automation Direct Programmable Controller P2-550 (P2000 CPU)	Engineering	Ethernet
Automation Direct Programmable Controller P2-08ND3-1 (DC Input Sink/Source)	Engineering	BUS
Automation Direct Programmable Controller P2-04B (P2000 4-Slot Base)	Engineering	BUS
Automation Direct P2-01AC (P2000 AC Power Supply)	Engineering	BUS
Automation Direct P2-08ND3-1 Discrete Output Module	Engineering	BUS
Automation Direct P2-RTB-1 (P2000 Terminal Block)	Engineering	BUS
C-More EA9-T8CL Touch Screen	Engineering	Ethernet
Atomic Market IR Flame Sensor Module	Engineering	n/a

TmallTech AC/DC Buzzer	Engineering	n/a
JBtek 4 Channel DC DSP, AVR, PIC ARM	Engineering	n/a
Swiftech 12V DC Centrifugal Pump	Engineering	n/a
Mean Well RS-15-5 AC to DC Power Supply	Engineering	n/a
MQ-2 Smoke Detector	Engineering	n/a
GALYGG Universal Regulated Switching Power Supply	Engineering	n/a
Reservoir Tanks	Engineering	n/a