

## Hardware Threat Model

1. USB ports
  - a. <https://www.sans.org/reading-room/whitepapers/threats/usb-ubiquitous-security-b-ackdoor-33173>
2. Flight controller
  - a. <http://www.securityweek.com/design-flaws-expose-drones-hacker-attacks-researcher>
3. Sensors
  - a. GPS
    - i. [https://www.owasp.org/images/5/5e/OWASP201604\\_Drones.pdf](https://www.owasp.org/images/5/5e/OWASP201604_Drones.pdf)
  - b. Other
    - i. [https://ccdcoe.org/cycon/2013/proceedings/d3r2s2\\_hartmann.pdf](https://ccdcoe.org/cycon/2013/proceedings/d3r2s2_hartmann.pdf)
4. Flashing
  - a. Need to find previous research
5. General
  - a. <http://ieeexplore.ieee.org/document/6815228/>
  - b. [https://www.rsaconference.com/writable/presentations/file\\_upload/ht-w03-hacking\\_a\\_professional\\_police\\_drone.pdf](https://www.rsaconference.com/writable/presentations/file_upload/ht-w03-hacking_a_professional_police_drone.pdf)
6. Propellers
  - a. Motor spoofing

## OS Threat Model

1. Exploit Packages
  - a. Any resources Dominic has found on those available
2. Encryption (or lack thereof)
  - a. [https://www.joanneum.at/fileadmin/UNTERNEHMEN/news/Zukunftskonferenz\\_2016/Stefan\\_Rass.pdf](https://www.joanneum.at/fileadmin/UNTERNEHMEN/news/Zukunftskonferenz_2016/Stefan_Rass.pdf)
  - b. [http://brl.ee.washington.edu/eprints/6/1/2015\\_Teleop\\_Security\\_Threats.pdf](http://brl.ee.washington.edu/eprints/6/1/2015_Teleop_Security_Threats.pdf)
  - c. <http://journal.frontiersin.org/article/10.3389/frobt.2015.00023/full>
3. Resource Access
  - a. [https://www.researchgate.net/publication/310671472\\_SROS\\_Securing\\_ROS\\_over\\_the\\_wire\\_in\\_the\\_graph\\_and\\_through\\_the\\_kernel](https://www.researchgate.net/publication/310671472_SROS_Securing_ROS_over_the_wire_in_the_graph_and_through_the_kernel)
4. Authentication
  - a. <http://ieeexplore.ieee.org/document/6869141/>
5. General
  - a. <https://www.willowgarage.com/sites/default/files/icraoss09-ROS.pdf>

## Network Threat Model

1. Flight Control System
  - i. <https://www.dji.com/naza-m-v2>
  - b. Ardupilot
    - i. <http://ardupilot.org/copter/docs/common-pixhawk-overview.html>
2. Wireless
  - i. <https://wiki.wireshark.org/CaptureSetup/WLAN>
  - ii. <https://security.stackexchange.com/questions/17344/how-do-you-analyze-an-unknown-network-protocol>
  - iii. [https://www.aircrack-ng.org/doku.php?id=getting\\_started](https://www.aircrack-ng.org/doku.php?id=getting_started)
  - b. 2.4Ghz
    - i. <http://www.grymoire.com/Security/Hardware.html#TOC>
  - c. 900Mhz
    - i. [http://www.grymoire.com/Security/Hardware.html#Hacking\\_the\\_.3C1Ghz\\_Range\\_.28900Mhz\\_.29\\_Spectrum](http://www.grymoire.com/Security/Hardware.html#Hacking_the_.3C1Ghz_Range_.28900Mhz_.29_Spectrum)
  - d. Packets (MitM)
    - i. [http://brl.ee.washington.edu/eprints/6/1/2015\\_Teleop\\_Security\\_Threats.pdf](http://brl.ee.washington.edu/eprints/6/1/2015_Teleop_Security_Threats.pdf)
  - e. MAVLink
    - i. <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA598977>
3. Fuzzing
  - i. <https://blog.fuzzing-project.org/27-Network-fuzzing-with-american-fuzzy-loop.html>
4. DoS/DDos
  - a. <http://drwxr.org/tag/denial-of-service/>
5. General