

# May 2024

## 22nd May, Wednesday

### Met Matias Rittatore (Vid)

First meeting with Mike took place. Video call with Matias Rittatore, project manager of this project, at Deimos. There will be another meeting 10th June.

### Established Technical Baseline (Due 5th)

For approx *June 5th*, we have to put together the ETB. This is the first technical assessment and proposal that will show the price, lead time, technical abilities etc of the radar capability side of the project.

### PDR (need to check)

For approx late *June 22nd*, the PDR will be shared.

== Mike will be gone this month (Rome) == There will be an in-person meeting at Deimos with this. Further details need to be checked in the project documents.

### Tasks

**Established Technical Baseline. Due 5th June (2 Weeks)** First task, to summarise the technical components and specifications, cost and lead time for the items required for the device. This will be written in the file s0\_ETB.

- ☐ **Hardware**
  - ☐ USRP (Coherent, 2 Channels), (<700MHz, >16MHz Bandwidth, 12 bits)
  - ☐ BPF (ask Joe)
  - ☐ LNA (ask Joe)
  - ☐ Antennas (High Directional Gain)
    - ☐ Patch antenna (ask Joe)
    - ☐ Yagi-Uda
- ☐ **Signal Processing**
  - ☐ Range Doppler Maps (Using the direct tx signal)
  - ☐ Detector (CFAR)
- ☐ **Training**
  - ☐ Passive Radar Basics (RRE, Range compression, Velocity Measurements)
  - ☐ Spectral Analysis for passive radar in an environment (Learn Spectrum Analyser)

**Familiarise with essential radio equipment** This to be performed in the Birmingham environment at first, then repeated in Greece (in June)

- ☐ Get a handle on Spectrum Analyser (SA)
  - ☐ Record Data to Disk
  - ☐ Get and attach a 7000MHz antenna
  - ☐ Work with Battery Power