**MIDDLE EAST TECHNICAL UNIVERSITY**

**DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING**



**TROY TECH**

**WEEKLY REPORT #6**

**14.11.2018-20.11.2018**

**Section :** 7

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**Progresses for Previous Week:**

🡪 The FPV Camera has reached us but we are still waiting the FPV receiver module to test them.

🡪 We searched about power unit for FPV camera. We thought that it can be a lipo battery or a powerbank.

🡪 We realised that if we choose 2.4 GHz for command tranmission we need to be sure that the signals should not interfere or coincide.

🡪 We searched some wireless communication submodules for command transfer as shown in Table 1. Further information about these modules are in ‘TROY-TECH/Searches/Wireless Transmission/Researches on Command Transmission.docx’

*Table 1. Some wireless communication submodules for command transfer*

|  |  |  |  |
| --- | --- | --- | --- |
| NRF24L01 | CDSENET E32-433T20DT  (LoRa SX1278) | FlySky FS-i6 | APC220 |
|  |  |  |  |
| -2.4 GHz  -Small range but can be improved  -Cheap | -433MHz  -Long range(3000m) but small datarate | -2.4 GHz  -6Channel  -Maximum range is about 1000m | - 431-478 MHz  - Range is around 1200m.  - Easy to setup  - Low power consumption |
| Price:$0.78  (aliexpress.com) | Price: $7.15  (aliexpress.com) | Price :$42.98  (banggood.com) | Price:$25.99  (banggood.com) |

🡪 After all, we have discussed about these modules and purchased APC220 for Command Transmission.

**Plans for the Next Week:**

* Deciding the power unit of FPV camera and command receiver module.
* Purchasing the power unit.
* Testing the FPV camera and FPV reciever module.
* Searching about command transfer, shooting system and motor drive.
* Discussing about test results .