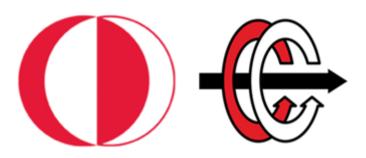
# MIDDLE EAST TECHNICAL UNIVERSITY DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING





# 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

| ND EQ 41 Q4  | 00051155 500   |   |  |
|--|--|---|--|
| NRF24L01   | CDSENET E32-<br>433T20DT<br>(LoRa SX1278)  | FlySky FS-i6  | APC220   |
| The state of the s | E32 miles Care as a community of the com | FS-IG   |  |
| -2.4 GHz<br>-Small range but<br>can be improved<br>-Cheap  | -433MHz<br>-Long<br>range(3000m) but<br>small datarate   | -2.4 GHz<br>-6Channel<br>-Maximum range<br>is about 1000m | <ul><li>431-478 MHz</li><li>Range is around</li><li>1200m.</li><li>Easy to setup</li><li>Low power consumption</li></ul> |
| Price:\$0.78 (aliexpress.com)  | Price: \$7.15<br>(aliexpress.com)  | Price :\$42.98<br>(banggood.com)                          | Price:\$25.99<br>(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 .