

ABSTRACT

Information and communication technology is one technology that is rapidly growing. For example communication technology in world air transport, aircraft tracking system used by airports now are Automatic Dependant A Surveillance Broadcast (ADS-B). With this technology, the aircraft was the one who continually data send to the system "receiver" at the airport as a "broadcast". And now there is an open source application that can track aircraft with ADS-B system, the application of *gr-air-modes*. Therefore in this final project will discuss the application implemented *gr-air-modes*.

To build this application required USRP B210 connected to the laptop as a server and have the applications *gr-air-modes*, *UHD*, and *GNU Radio* as supporting applications will be a simple tool that is used to track the aircraft with ADS-B system. And will feature the best of data to be tracked on a laptop with a display user friendly.

Based on test results and the implementation of this final project can be drawn some conclusions. Application development *gr-air-modes ads-b* managed to do evident by looking at the applications can run smoothly in tracing the air broadcasts. And display data in a user friendly aircraft also successfully made evident by looking at the data plane can be displayed in the form of map and dashboard.

Keywords : ***ADS-B, gr-air-modes, USRP2-210***