

ABSTRACT

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Title of Thesis :

Automatic Motor System Of Antenna Elevation And Azimuth As A Moving Object Tracker

This thesis explores how to make the antenna tracking antenna to be applied as a pointer to the balloon payload atmosphere. So that the antenna can move in the direction payload balloon atmosphere vertically and horizontally, then formed a design with components therein such as GPS to determine the position of the receiving antenna, the motor as the driving antenna vertically and horizontally, a digital compass as limiting movement of the motor in the horizontal direction , angle sensors as limit the movement of the motor in a vertical direction and a microcontroller to control the movement of the antenna. From the analysis of experimental data the whole system, this system works well and has a value of error of less than 5%.

Keywords:

Antenna, Pointer, Payload Balloon atmosphere, Vertical, Horizontal, GPS, Digital Compass, Angle Sensor