

# **Optimal Location of GPS Antenna to Improve Performance of the System in Flying Objects**

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## **Abstract:**

*Multipath is the most important sources of errors that effect on the accuracy and reliability of the Global Positioning System (GPS) which provide high accurate for the position (latitude, longitude and altitude) and velocity with time. The selection of optimal location of the GPS antenna is the best solution to overcome this problem and reduction of the error that impact on the accuracy of GPS readings, thus to Improve Performance of the System in Flying Objects. In this paper we will prepare two tests to give us options to select the optimal location of GPS antenna, the first test is the Impact caused by change in the rotation angle of GPS antenna that achieved by means of using a specially rotation platform and the second test by using two separate antennas on two different locations for one system.*