

Determining Coordinates of Ultra-Light Drones Based on the Time Difference of Arrival (TDOA) Method

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Abstract : The use of the active radar to measure the coordinates of ultra-light drones is frequently difficult due to long-distance, absolutely small radar cross-section (RCS) and obstacles. Since ultra-light drones are usually controlled by the Time Difference of Arrival (RF), the paper proposed a method to measure the coordinates of ultra-light drones in the space based on the arrival time of the signal at receiving antennas and the time difference of arrival (TDOA). The experimental results demonstrate that the proposed method is really potential and highly accurate.

Keywords : ultra-light drone, TDOA, radar cross-section (RCS), RF

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