

P.2 AIRBORNE MAGNETIC INVESTIGATION FOR DETECTION OF EXPLODED AND UNEXPLODED ORDNANCE USING UAV SYSTEMS IN A FORMER MILITARY AREA

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ABSTRACT

Along with advanced UAV (Unmanned Aerial Vehicle) and quantum technology, geophysical devices are also developing. Investigation of structures that give magnetic anomalies has given birth to aerial magnetic researches with UAV, with the development of high technology in the last 10 years. Aerial magnetic method with UAV is one of the most effective methods used for the last 5 years in scanning faster and wider areas. It is the most effective method especially in areas where topography changes a lot and terrain conditions are difficult. It is a method that is actively used primarily in metallic mineral exploration in our country, and recently it is one of the leading methods used for archeology, forensic cases, detection of old oil wells, and exploded-unexploded ordnance (UXO) surveys.

In this thesis, it is aimed to quickly and accurately locate the explosive and unexploded munitions, which are dangerous, with high resolution magnetic data from the mortar, before the construction works to be carried out in an old military shooting range.

KEYWORDS: Aerial, Magnetic Survey, UXO, UAV