

AUTOMATIC RECOGNITION OF FLYING OBJECTS IN THERMOVISION PICTURE

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ABSTRACT *The paper presents the method for the detection of low-flying objects in infrared spectral range, which is based on the analysis of a thermal scene. The thermal image of a man-made aerial object has specific features that allow for object's detection. Proper selection of such features leads to the development of an detection algorithm which performs the numerical analysis of the recorded thermal image. The presented method has been applied for helicopter detection. Automatic detection method takes into account variable weather conditions and their influence on resulting thermal image, thus reducing the false alarm rate. Detailed analysis of radiative properties of the object to be detected allows for optimal choice of image processing procedures in order to increase the detection range and shorten the required processing time.*

Keywords: *thermovision radiation, thermal image, numerical analysis of image*