systems has several limitations. Firstly, the need to ensure the required accuracy of position detection, and secondly, the possibility of using by opponent SNS signal suppression systems. In nowadays more and more systems of electronic warfare with UAVs using GPS-spoofing are gaining traction. A GPS spoofing attack attempts to deceive a GPS receiver by broadcasting counterfeit GPS signals, structured to resemble a set of normal GPS signals, or by rebroadcasting genuine signals captured elsewhere or at a different time. These spoofed signals may be modified in such a way as to cause the receiver to estimate its position to be somewhere other than where it actually is. Therefore, the problem arises of developing an additional source of navigation information, which should allow positioning of UAV at the times, when the information is not available from the SNS or does not provide the required positioning accuracy. As such, a source of navigation information is proposed to use computer vision system. To decrease the growth of the inertial system errors proposed intermittent correction of dead reckoning with a more precise technology. The method of inertial dead reckoning with the correlation-extreme was used. In this work, attention is focused on the research of adaptability of correlation-extreme navigation system (CENS) for the correction operation of an inertial navigation system (INS). After all, it is proposed to use CENS as duplication of satellite navigation system (SNS) in the case of interference in the reception of satellite signals. For this case offered a simplified block-diagram of CENS, where GPS receiver is an optional unit and used as a fallback. A search algorithm for the most extended landmark by which UAV can be followed by and implemented flight correction.

The relevance of the work lies in the fact that correlation-extreme navigation system is the most advanced information processing systems that allow managing the movement of an object along a predetermined path. The principle of operation is based on a comparison CENS image the Earth's surface or set of guidelines – the current image with a reference image, obtained earlier. As a source, carrying information about the position of the object relative to the navigation of the observed area of the earth surface, can serve as a natural relief field. So far, unmanned aerial vehicles (UAVs) are the efficient means of intelligence and civilian use. Then dead reckoning is the main system, which runs on the board of INS and has a problem that with time accumulate an error if it is not corrected. Also SNS is the most common variant of INS correction and recognition by ICAO and conforms to it requirements, but SNS is not satisfied by the fact that the satellite signal receiving is not reliable, not always available, as well as important for military operations that GPS and GLONASS are the property of other countries. That is why it has been offered an alternative variant of correction using CENS. The principle of operation of CENS is processing of successive frames received by the camera or radar. Considering the INS correction algorithm for linear landmark is the task to allocate a linear guide with the help of visual image processing. The dead reckoning method is based on