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## ADS FOR PROVIDING SENSING, RESEARCH AND MONITORING OF SPACE OBJECTS (PLANETS, ARTIFICIAL OBJECTS, ASTEROIDS, ETC.)

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The problems of this research are low probing capabilities of space objects and insufficient interest of younger generation in the problems of space exploration. At the moment, remote sensing is used to collect and record data about all the geographical shells of the Earth and even about the entire Solar System.

Earth research materials obtained from space are widely used in all Earth sciences. Satellite imagery is used in research aimed at studying natural resources, dynamics of natural phenomena, and environmental protection tasks.

Thus, the methods of studying the Earth from space are considered high-tech with a new approach to obtaining and recognizing measurement results.

The purpose of this work is to familiarize with the provision of sensing, research and monitoring of space objects (planets, artificial objects, asteroids, etc.), to create mock-ups and remote sensing satellite itself using improvised materials, to popularize the topic of sensing among students.

To implement this task, an experimental installation was developed and installed, based on a Chinese flashlight with dry fuel, a GO-PRO camera and binding elements, shown in Figure 1,2.



*Fig. 1*

*Fig. 2*

The experimental set-up allows you to receive the information component of the probing signal, namely photographs, when a signal is sent from a smartphone, via a connected application, when the created elementary «satellite» reaches the required height [1; 2].

### References

1. Modern problems of remote sensing of the Earth from space: Physical bases, methods and technologies for monitoring environment, potentially dangerous objects and phenomena. Moscow: Polygraphservis, 2004. P. 431–436.
2. Tsarev V.A. Korovin V.P. Non-contact measurement methods in oceanology. St. Petersburg: Publishing House of RSHU, 2005. 184 p.