EUROPEAN JOURNAL OF LIFE SAFETY AND STABILITY (EJLSS)
ISSN 2660-9630
www.ejlss.indexedresearch.org Volume 9, 2021 ||

The Use of Advanced Technologies in the Performance of Geoinformatic Work

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Abstract: *This article provides information on the use of advanced technologies in the performance of Geodetic and geoinformatic work, as well as the advantages of this software.*

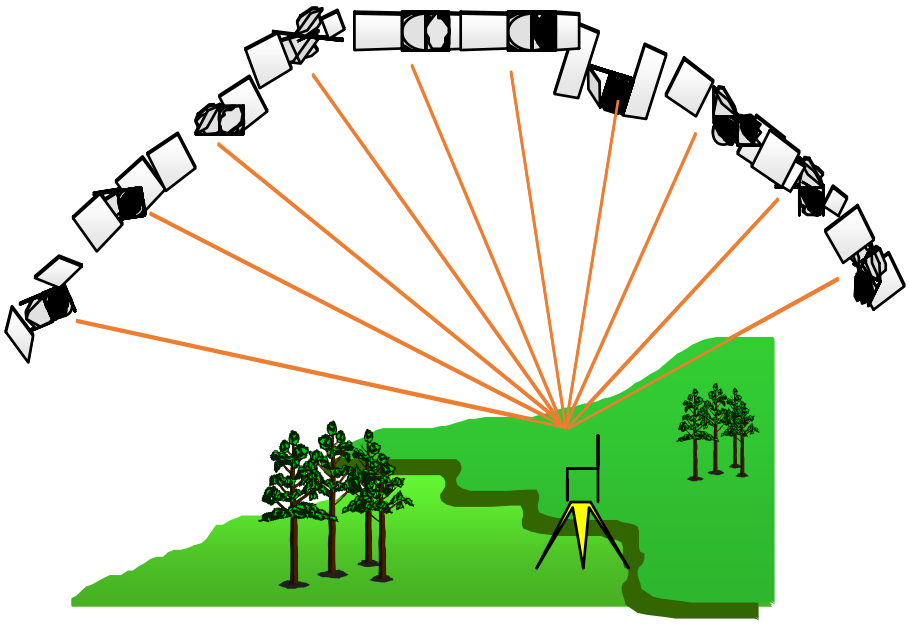
Key words: *Field, GPS, reciever, application, technology, topography.*

Date of Submission: 05-10-2021 ***Date Of Acceptance: 13-11-2021***

In the implementation of the state policy carried out by the government on the further acceleration and development of the production of objects of cultural heritage of the Republic of Uzbekistan, state Geodetic and geoinformatic works within the framework of modern demand are of great importance. Therefore, a number of modern technologies and technologies within the framework of demand are entering our republic through investment by investors.

Modern optical electronic devices, together with electronic digital nivelir GPS receivers, are manufactured by leading Geodetic devices manufacturing firms in the world.

The receivers are mainly produced by the United States, Europe, Russia and China, making them commercially available for the purposes of national economy, Geodesy, cartography and transport navigation. To date, several generations of receivers, namely ProMark, Ashtech, Leica, Sokia and Trimble, have been using a number of duties in the fields of Geodesy and cartography by Public Enterprises and private commercial enterprises. So far, since



1-расм. GPS приёмникнинг сунъий йўлдошлари.

the receivers used in the field of national economy are mainly one and two frequencies, since they are in a unit of measurement of centimeters and millimeters of accuracy, it was required to bind them to the state Geodetic punches in order to further consolidate the degree of accuracy.

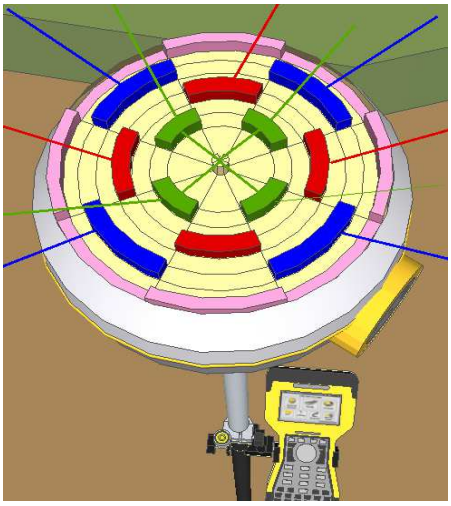
GPS receivers allow a maximum of twelve satellites to be connected and become operational when connected with at least six satellites (Figure 1). The accuracy level was 60 centimeters on average, with relief complexity, Rovus angle of the Rover antenna and Carab to the weather conditions. Geodetic and geoinformatic work, which is done in order to increase the level of accuracy, requires additional time and additional intellectual capacity of the specialist. And this means that at least three mature qualified specialists for Geodetic work to be done for the purpose of drawing up the plan of the 3 hectare of land area with an average complexity of 1:500 in mass.GPS took work for 1 day and GPS required an additional day to link the data obtained in the receivers to the state Geodetic We have now further improved the SS receivers, while the level of accuracy and the mature skilled staff are found to be comfortable and efficient from the ground up. GNSS receivers perform Geodetic and geoinformatic work that is done in order to increase the accuracy level automatically. For Geodetic work to be done for the purpose of drawing up a plan of the territory in the 1:500 scale with a land area of 3 hectares with an average complexity, at least two mature qualified specialists work for 0.5 days and no additional time is required to connect them to the state Geodetic items.[2]

Through Table 1 in the following, you will have more complete information about satellites.

1-table Satellites

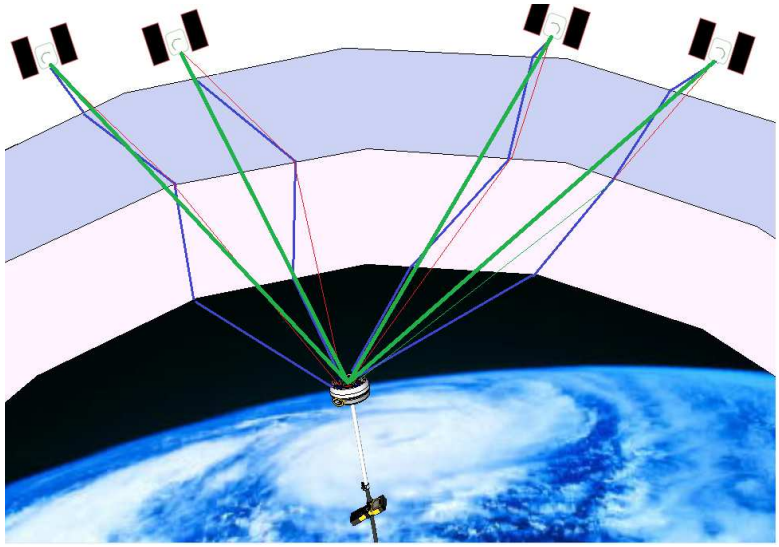
Satellite System name	Office	Year of launch	Total number of satellites	Satellites are working in the current state	Orbit Height
GPS	USA	1994	24	24	20,200 km
GLONASS	Russia Federation	2010	24	24	19,100 km
GALILEO	Europe	2014	27	3	23,600 km
Compass	China	2000	31	10	36,000 km
Michibiki	Japan	2010	1	1	35,800 km

Based on the information provided in the table of satellites,



2-расм. GNSS

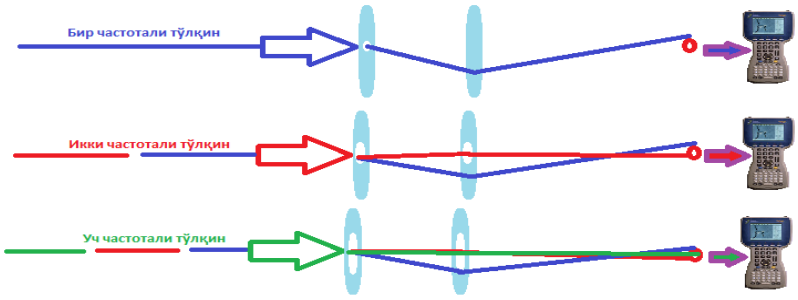
we can think of the receivers running on the GNSS



system. The receivers working

3-расм. GNSS сунъий йўлдошлар билан боғланиши

in the GNSS (Figure 2) system are listed in the table allows to work on all systems of existing satellites. That is, if we take the receivers that work in the system GPS, then in the territory of our republic it is possible to connect a maximum of 12 to 24 satellites and work only in the system GPS. GNSS system is developed at frequency II and III, it is possible to connect with a receivers without interference in orbit(Figure 3) satellite. That is, if we take the receivers that work in the system GPS, then in the territory of our republic it is possible to connect a maximum of 12 to 24 satellites and work only in the system GPS. GNSS system is developed at frequency II and III, it is possible to connect with a receivers without interference in orbit(Figure 3) satellite.



(GPS, GLONASS, GALILEO, COMPASS)

4-расм. Тўлқин узинликлари

5-расм. Пилотниклар

connects with. In addition, the information that comes from the fact that the receivers working in the GNSS system have reached the receivers without errors and attempts from the orbit, the number of foxes that the satellite sends, is determined by an error of 2-5 millimeters. It analyzes the waves that come with other obstacles or errors, without receiving them with the help of special blocks, only the data of the correct waves are obtained.(Picture 4)

Based on the experience of world, the world's leading countries are now carrying out the work on the creation of a topographic plan that reproduces the values of the national economy with the help of software belonging to the family of geographic information systems with the help of GPS receivers and laser scanners [1](Figure 5

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