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Paper Authors: **Shukhrat Rashitovich Samankulov, Yokubov Azamat Komilugli**

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TECHNOLOGY OF CREATING AND MONITORING AGRICULTURAL MAPS WITH PILOTLESS DEVICES AND DRONES

Shukhrat Rashitovich Samankulov
teacher of Samarkand state architectural and civil engineering institute,
Yokubov Azamat Komilugli
student of Samarkand state architectural and civil engineering institute

ABSTRACT: Drones without a plot are employed in a variety of industries around the country. Security agencies utilize pilotless drones in a variety of applications, including agriculture, energy, construction, and territorial security. Aircraft employ pilotless drone functions to track surveys, plan and monitor trails, collect data, and regulate commentary and optimization. It can be used to control the use of chemicals on plants in agricultural production and to treat them with them. Ground communication mock-ups, video surveillance, and construction monitoring should also be utilised.

KEYWORDS AND EXPRESSIONS: Pilotless drones, drones, theodolite, electrical tacheometers, soil monitoring, contour, optimization.

Introduction

To produce things, agriculture requires land, water, labor, and material resources. One of the most important concerns in the implementation of the action strategy created in the republic in the context of the implementation of the action strategy is the effective use of these resources. The deployment of sophisticated pilotless aerial vehicles and drones is therefore critical for the efficient and regular monitoring of agricultural resources. Drones are employed in a variety of industries.

Agriculture, energy, construction, and law enforcement are among the applications for pilotless aerial vehicles. Drone functions for research, mapping, monitoring, and tracking are merged with the latest technologies for data collecting, monitoring, interpretation, and optimization employing energy-dependent technologies. It can be used in agriculture to provide chemicals to crops, track the consumption of agricultural gear, and monitor their intended usage. Surface communication facility design, photography, and construction site monitoring.

When the drone follows a predetermined course, it calculates the station's return and departure based on the floor or seat size. Both points are in motion while the drone is controlled manually. Takeoff, landing, and steering are all controlled by one hand. The drone is controlled with your other hand, which moves up and down, left and right.

We'll have a georeferenced three-dimensional point cloud, a digital terrain model, the remaining contours of the mine vector maps, georeferenced orthogonal images, topographic maps, and contour photos after we analyze data from drones at defined sites.

Drones can also be used to monitor and manage agricultural land. The drone can be controlled automatically or manually from a station by first travelling to a specific spot. We put the drone in flying mode, attach the station antennae, and locate the office on the screen using automatic control. The drone will automatically get the command and begin flying after we have determined the points on the route and communicated the information to it.

When the drone flies a pre-programmed route, it calculates the return and retracement based on the size of the floor or station. Both points are in motion while the drone is controlled manually. Takeoff, landing, and steering are all controlled by one hand. Control the drone with your other hand by moving it up and down, left and right.

Data can be copied from the control system to the stations by connecting the data to a flash drive or directly to a computer when processing data from a specific place. Contouring and organized georeferend, topographic mapping, and contour plotting using new software installed on computer equipment. It can also be used to make site maps for building. A station will be put up at the construction site to take images and collect data, and the drone will be launched along a path determined by the control system. After the drone has been launched, the operator can stand at the station and zoom in or out. We use computer technology to process the obtained data after the photographing of the selected site is completed. Pix4Drapper software, which is installed on one's computer, was used to redesign the image. The photos will be displayed in chronological sequence. A 3D georeferend point cloud, a digital terrain model, an encoded micro vector display, and a contour picture screen all show computer-generated data.

FOTOMOD and PANORAMA software can also be used to produce topographic layouts, as well as to design (correct) crop fields using photographs captured for monitoring purposes.

Work is being done to develop accounts for the calculation of land parcels by contour as a result of the creation (updating) of electronic digital maps.

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