



TYPES OF UNMANNED AERIAL VEHICLES

Maxamatov Sanjar Erkin o'g'li

Doctoral student of the Faculty of "Radio and Mobile Communication"
of Tashkent University of Information Technologies named after
Muhammad al-Khorazmi

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Introduction:

The development of network technologies in recent years is now increasing interest in multi-purpose unmanned aerial vehicles yani drone per day. Let us give a brief overview of the application of drones in various fields.

Unmanned aerial vehicles (UAVs) are always distinguished by having very different attributes compared to other aerial vehicles. One of them, being potentially smaller than any other vehicle with the same target mission, was considered as an excellent opportunity to develop high-performance vehicles in which unmanned aerial vehicles are the main investors in the military and defense, industry.

Unmanned aerial vehicles are a new technology, the development of this unmanned aerial vehicle under the name drone and their current significance. An overview of the goals and objectives of this project is also provided.

The main characteristics of drones. Drones have existed for many years, they are used for several purposes and are used in many areas. However, recently, the extensibility of drones has been increasing, and their application has increased the number of users in different areas.

Unmanned aerial vehicles "Drone" are any remotely controlled unmanned aerial vehicles.

Drones are among the emerging devices in electronics and robotics. We will analyze how they work and their main characteristics, their application in different areas, the types of drones and the future of drones.

How do drones work and what are their main characteristics? Drones or unmanned aerial vehicles are made of a variety of lightweight materials to maintain their balance in the air during takeoff and to perform the maneuver and reduce weight. They can be equipped with a variety of additional equipment, such as cameras, GPS-controlled, unmanned aerial vehicle positioning systems such as yani (GPS), navigation systems, sensors, and various other unmanned software and hardware uses.

Drones can have different shapes, sizes and different functions. Most of today's models can be launched manually, and they can be controlled using a remote control or an android phone, tablet.

The highlight of these unmanned aerial vehicles is their excellent flying ability. Drones have extremely stable flight.

When it comes to commercial drones for entertainment, they have a short control distance and can fly for a few minutes. In contrast, the perfect drones used in military or mapping can travel in the air for hours and are controlled from a long distance. Military

drones are often the most perfect and are actually a major source of innovation in drone technology.

Unmanned aerial vehicle programs. Drones are used in many areas, they have a lot of capabilities. For this reason, today there are a lot of application areas and the use of drones is increasing all over the world. Technologies continue to develop, and the use of these drones is increasing.

Micro drones in particular began to be widely used today due to their small size and convenience.

The main directions of using drones: search and Rescue-are very useful when searching and rescuing drones in memory. For example, they are used in firefighting to determine the amount of certain gases in the air using special measuring equipment. Drones can safely enter areas that are often inaccessible to humans.

Security-most officials use drones to protect people in various emergencies. The example helps coordinate various security operations and can preserve evidence.

Inspections-many systems such as power lines, wind turbines and pipelines can be inspected by drones. It can avoid problems and security problems with sending a person to check.

Surveillance drones allow recording and tracking from the sky, so they are suitable for monitoring public events, protests or any suspicious events without hearing or seeing them. A great tool for the police to track a large area with a top-flying camera!

Unmanned aerial vehicles are of great help in research work, observing various phenomena from the sky in nature or in a certain environment. For example, drones are used for archaeological excavations, nuclear accidents yani (measuring air pollution), glacier monitoring, volcanic eruption monitoring, and other problem purposes such as mumin.

Geodesy and GIS (mapping) – with multi-spectrum cameras and laser scanners, drones are able to create high-quality maps. Therefore, they can be used for purposes in various fields, including remote Geodesy and mapping, accurate photo capture, and agriculture, among others.

Depending on the weight of the cargo using an unmanned interceptor, it also serves in the delivery of all types of light cargo. Cargo can be transported safely, environmentally friendly and quickly by air.

<https://www.mydronelab.com/blog/delivery-drones.html>

In addition to the main areas of application, drones are used in engineering, construction and pre-construction work, aviation, maritime, (residential, as well as commercial), insurance, utilities, mining, Meteorology and other direction areas. Today, many government agencies, private companies and other institutions have their own personal drones.

Drones are very easy to control and do not need to have any drivers or pilots to control them. People around the world enjoy flying drones. Even racing competitions are held on the drone.

Nano and mini drones: it may seem impossible to classify drones, as there are many different models with different characteristics, sizes and prices. The most popular way to classify them is by size.

The smallest drones, they can be divided into two groups: Nano and Mini drones.

Nano drones are the smallest and they usually have the same dimensions as insects. Mini drones, on the other hand, can reach up to 50 cm in length and have more powerful electric motors and advanced features than Nano drones.

In general, models of both categories are used by the military in espionage and smaller tasks, since they can easily maneuver and reach distant places. On the other hand, there are several models on the market that are available to ordinary consumers. They have a very small radius, from 1 to 3 km, and they cannot fly for more than 10-20 minutes. For surveillance purposes, these should be drones.

Short-range models. They can fly up to 150 km and more than 11 hours.

With drones, the middle range is. These drones can have a range of 650 km and are commonly used in weather forecasting.

Drones with the longest radius. Drones in this group can fly up to 30,000 feet. above sea level and they can stay in the air for more than 36 hours. The main purpose of these drones is to achieve long distances. Drones look stylish today and have features that can be used for many applications, their versatility.

Drones are very popular these days and they have countless applications. Today, drones are still used for transporting cargo to remote locations, monitoring, and many other useful tasks. In the future, we can see drones that can do it faster and more efficiently. Perhaps we can see drones that perform some useful tasks for drones that we cannot even imagine today.

There are many theories as to what drones will be capable of in the future. At the moment, Amazon is testing the Amazon Prime Air Service. This means that when you order a package, it will be delivered to you in less than 30 minutes instead of a few days.

Currently, the characteristics of drones are also updated. For example, future drones will have better cameras and more storage space. On the other hand, some of them can record at night, so they can be used by the military.

Materials used in the production of drones are also modified. We can expect to see lighter materials that are stronger than those used today. Future drones, which are then connected to efficient electric motors, fly longer and can reach higher speeds.

Later military programs include surveillance, even more so than today. Very small drones will cross the enemy line and gain valuable information about the enemy army. In the end, they can collect all the information necessary for the army, so spies and spy satellites will not need. For more information on this interesting topic, I propose to take a look at the link provided

<https://www.mydronelab.com/blog/drone-trends.html>

Conclusion

We can see the drone types and many of their control software today and in the future. As drones continue to develop, they can be used and controlled using different functions. Drones are very popular these days and they have countless applications. Today, drones are still used for transporting cargo to remote locations, monitoring, and many other useful tasks. In the future, we can see drones that can do it faster and more efficiently. Perhaps we can see drones that perform some useful tasks for drones that we cannot even imagine today.

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