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PROBLEMS OF USING UNMANNED AERIAL VEHICLE FOR DELIVERY OF CARGO WITHIN THE CITY

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Introduction.To date, there is a rapid spread of the use of unmanned aerial vehicles (UAV). In particular, we can note the development of the use of UAV in the transportation of goods, which in turn necessitates the study of the peculiarities of the use of this type of transport.

Research methods. An analytical method was used to substantiate research into the problems of using unmanned aerial vehicles.

Results. At the moment, UAV have certain engineering limitations related to the weight of the cargo they carry. Mostly UAV deliver goods weighing no more than 1.5 kg, until the optimal mechanism for transferring UAV cargo to humans is developed. In small towns and villages, UAV can drop a parcel into the recipient's yard. In megacities, where most people live in apartment buildings, this process is much more complicated. UAV, as an option, can deliver parcels not to apartments, but to special cabinets equipped with facial recognition. But developing such software costs a lot of money. At what the recipient is much more convenient to order the courier under a door, than to go to such case.

There are also a number of problems associated with the use of UAV, such as cargo storage (what to do if the cargo is lost), safety of drones, dependence on weather conditions. Also, UAV can intercept and steal along with the goods.

Conclusion. Thus, the idea of using UAV for transport purposes looks very promising, but only with due regard to its features. Since this is a type of transport, it is necessary to develop the necessary legal framework and transport infrastructure, to ensure the certification process.

References:

1.Степаненко Д. Ю., Мединський Д. В. Міжнародний досвід використання безпілотних літальних апаратів для доставки вантажів та аналіз існуючих методів. / Д. Ю. Степаненко, Д.В. Мединський // Інноваційні технології : матеріали наук.-техн. конф. студентів, аспірантів, докторантів та молодих учених / за заг. ред. П. В. Горінова, К. О. Бабікової, Л. М. Мельничук; ІНТЛ НАУ (м. Київ, 25-26 листоп. 2020 р.). - Київ, 2020. - С. 267-273.