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USE DRONES TO DELIVER GOODS

Rashchynkin V.S., student
Moroz I.G., student
Scientific supervisor – Slesaryonok E.V., senior lecturer
English language department №1
Belarusian National University of Technology
Minsk, Republic of Belarus

Drones are unmanned vehicles capable of performing a wide range of tasks, including cargo delivery. This is a promising trend that is attracting the attention of both government and commercial organisations. Transporting goods using drones has a number of advantages, including saving time and money, accessibility to places with limited access, and reduced environmental impact [1].

The use of unmanned aerial vehicles (drones) for cargo delivery is one of the most promising trends in the modern world. Drones, controlled autonomously or along predetermined routes using GPS and other sensors, are capable of transporting a variety of goods over various distances. Pizza, medicine, clothing, and even books can all be delivered by drones, providing a logistics chain in a faster and more efficient way. Drone delivery has several advantages over traditional delivery methods. Firstly, speed. Drones are immune to traffic, traffic, and other obstacles, allowing them to deliver goods faster. Amazon, for example, claims to be able to deliver orders weighing up to 2.5kg in 30 minutes or even faster. Secondly, cost-effectiveness. Drone delivery can significantly reduce costs due to lower energy consumption compared to ground transport. Drones do not require drivers, couriers and other staff, which also helps to reduce costs. In addition, the use of drones can simplify the logistics chain by reducing the number of intermediaries. Experts' estimates show that the last mile cost of delivering a shipment weighing no more than 2kg using drones is about $0.1, while ground delivery of the same shipment costs between $2 and $82.The third advantage of drone delivery is environmental friendliness. The use of drones reduces the emission of carbon dioxide and other harmful substances into the atmosphere. Drones run on electricity or renewable energy sources, unlike ground transport that consumes petrol or diesel. In addition, drones gen-

erate less noise as they fly at low altitude and are small in size and weight compared to cars and other modes of transport [2].

Finally, drone delivery has social relevance. It can significantly improve people's quality of life, especially in remote and developing regions without well-developed infrastructure. Drones can deliver life-saving goods such as medicines, vaccines, food and water to places where they are most needed. Drones can also be useful in rescue operations, searching for missing people and other emergency situations.

Despite the promising potential of drone delivery, this method has faced a number of problems and challenges that need to be addressed and regulated. For example, the legislation of most countries does not provide for a clear legal status and regulation of drone delivery. Issues of remote control, flights without a human on board, safety and liability for possible accidents and incidents require special rules and standards to be developed and implemented taking into account the interests of all stakeholders: manufacturers, operators, consumers, authorities and the public [3].

Therefore, the potential for drone cargo delivery is promising, but it necessitates additional investigation, the establishment of legal frameworks and benchmarks, and the conquering of imminent obstacles in order to seamlessly incorporate this approach into a contemporary logistics apparatus [4].

References

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