Commercial Drone (UAV) with Refrigeration System

Heeresh Mistry

OmS Automation heeresh.mistry@outlook.com

Abstract – Drone services are future technologies in the world, that's why we developed a designed Commercial Drone that will be the first drone that has an inbuilt refrigeration system with a range from -15 degree Celsius to +25 degree Celsius with lifting capacity up to 200kgs and flying time up to 6 hrs on 45-75 km per hour travel time.

Key Words: Commercial Drone, Drone, Refrigerated Drone, Transport Drone, AI, Artificial Intelligence

1. INTRODUCTION

In the current scenario, everything is slowly going or shifting to the latest technologies and advanced engineering with AI systems to make easier life and fast service to serve better. And our government is also providing different support to develop new technologies in our country, well drone is common in our life for surveillance and photography, etc. now we developed and designed a new type of drone according to the requirement and the future of drone, which has inbuilt refrigeration system, artificial intelligence, navigation intelligence, able to travel up to 6 hrs. flying time on 45-75 km/h speed with the capacity of lifting capacity of 200kg material and storage area temperature will be between -15 degree Celsius to +25 degree Celsius which can be set as per the requirement of material or product.

This drone may be used for Human Organ Transport, Blood Cells, Vaccines, medicine, Semi-cooked Food, etc. even this drone may be used for different types of applications because it has temperature controlled own inbuilt refrigeration system and the major valid point it can lift up to 200 kg material in 4'X4' (16 Sq. ft.) area. with the flying time of 8-10 hrs. on continue mode.

2. Body of Paper

In our country transportation is the backbone of the country, if it will supply late delivery then it hit on the whole chain, and due to long distance, Nero streets, congested traffic system, and higher quantities of vehicles on the road. Transportation is a major technical issue for us meanwhile if any person required an organ due to any accident or natural disease that time if the donor is far away and is ready to donate but lac of transportation his organ can't donate to the required person. But now with this drone technology donor's organ can be directly delivered to a required person without any hassle and trouble of traffic and long road curves because this will travel on air in a diagonal form that's why it will cover more km in a short time period.

This technology is the future technology that will be made easier life for every person and might be used in different fields with new technological developments in different areas of work, now we must accept the new featured technologies with a warm welcome, the world needs technical growth.

Sr. No.	Characteristics	Capacities/Parameters
1	Flyting Loading	Upto 200 Kgs
	Capacity	
2	Flying Time	Upto 8 hrs
3	Flying Speed in km	Upto 65 km/hr
4	Flying Height in	Upto 1000 Feet
	Feet	
5	Features & Facilities	Temperature
		Control
		Emergency
		Landing
		AI System
		GPS Navigation
		Live Monitoring
		➤ 2-Way
		Communication
		System
6	Useful for	Medical
		Defense
		➤ Food &
		Beverages
		Frozen Foods
		Pharma
		Local Transport
7	Туре	Hybrid

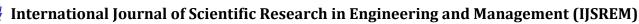
3. CONCLUSIONS

The conclusion of this paper is technology is growing faster in day-to-day life, and transportation is a major part of daily life, that's why we faced and observed lots of challenges in daily life, then after we find a new innovative concept after lots of failures in designs and technologies, we were working on that project since last 2 years and finally, we got our design which we want to dedicate to our nation to serve better to our civilians, it may save lots of lives in the medical field.

ACKNOWLEDGEMENT

We had taken lots of effort and challenges for this project, and that was impossible without the support and guidance of our family, friends, and mentors and we would like to thank them for this great support.

© 2023, IJSREM | <u>www.ijsrem.com</u> DOI: 10.55041/IJSREM19946 | Page 1



Volume: 07 Issue: 04 | April - 2023 | Impact Factor: 8.176 | ISSN: 2582-3930

REFERENCES

- Tice, Brian P. (Spring 1991). "Unmanned Aerial Vehicles The Force Multiplier of the 1990s". Airpower Journal.
 Archived from the original on 24 July 2009. Retrieved 6 June 2013. When used, UAVs should generally perform missions characterized by the three Ds: dull, dirty, and dangerous.
- "Minimum requirements related to technical performance for IMT-2020 radio interface(s)". www.itu.int. Archived from the original on 6 August 2020. Retrieved 8 October 20203. van Leeuwen, J. (ed.): Computer Science Today. Recent Trends and Developments. Lecture Notes in Computer Science, Vol. 1000. Springer-Verlag, Berlin Heidelberg New York (1995)
- 3. "What is unmanned traffic management?". Airbus. Airbus. Archived from the original on 8 February 2021. Retrieved 28 January 2021.

BIOGRAPHIES



Name: Heeresh Mistry
Working Experience: I'm working
in Robotics & Automation
engineering since last 21 years.

© 2023, IJSREM | <u>www.ijsrem.com</u> DOI: 10.55041/IJSREM19946 | Page 2