## IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 10, May 2023

## **Design and Development of Tethered Drone**

Rushikesh L. Dusane<sup>1</sup>, Bhavesh M. Chaudhari<sup>2</sup>, Rushikesh U. Kandale<sup>3</sup>,

Prathamesh S. Badekar<sup>4</sup>, Dr. Nilesh Alone<sup>5</sup> Students, Department of Mechanical Engineering<sup>1,2,3,4</sup> Faculty, Department of Mechanical Engineering<sup>5</sup> SPM'S Jayawantrao Sawant College of Engineering, Pune, India

**Abstract:** This research paper provides an overview of tethered drones and their potential applications. The paper focuses on the technical aspects of tethered drones, including their design, control systems, and power supply. Additionally, the paper discusses the advantages and limitations of tethered drones over traditional unmanned aerial vehicles (UAVs). The research conducted indicates that tethered drones have a range of applications in fields such as aerial surveillance, emergency response, and telecommunications.

Keywords: Tether, Surveillance, Power, Aerial;

## REFERENCES

[1]"Design and development of a tethered drone for aerial monitoring" by F. C. Lombardo, F. L. Panatela, A. Paoli, and E. Mucchi. This paper discusses the design and development of a tethered drone for monitoring air pollution.

[2] "Tethered drone systems for persistent aerial surveillance" by P. Berman, K. Kim, and J. Pippin. This paper provides an overview of tethered drone systems for persistent aerial surveillance.

[3] "Design and development of a tethered drone for disaster management" by H. K. Kim, C. W. Kim, and J. W. Choi. This paper discusses the design and development of a tethered drone for disaster management.

[4]"Development of a tethered drone system for environmental monitoring" by Y. Huang, L. Ma, and X. Chen. This paper presents the design and development of a tethered drone system for environmental monitoring.

[5] "Tethered drone technology: State of the art and future perspectives" by R. Berman, M. Chomski, and O. Amrani. This paper provides an overview of tethered drone technology and its current state of the art, as well as future perspectives.

[6] How drone are used in optimal security. https://www.scylla.ai/how-drones-are-used-to-optimize-physical-security/

[7] MaintMaster. 2020. Swedish Sea Rescue Society - Reference Maintmaster CMMS Software.

[online] Available at: [Accessed 23 August 2020].

[8] Reisinger, D., 2020. 5 Best Drones For Beginners. [online] Forbes. Available at: [Accessed 23 August 2020

[9]ciencedirect.com. 2020. Mechanical Design - An Overview | Sciencedirect Topics. [online] Available at: [Accessed 23 August 2020].

