

## Review of: "Numerical Simulation and Computational Fluid Dynamics Analysis of Two-Dimensional Lid-Driven Cavity Flow Within the Weapon Bay of an Autonomous Fighter Drone"

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Potential competing interests: No potential competing interests to declare.

The article "Numerical Simulation and Computational Fluid Dynamics Analysis of Two-Dimensional Lid-Driven Cavity Flow within the Weapon Bay of an Autonomous Fighter Drone" addresses a pertinent topic, it requires major modifications to meet the standards of academic publishing. The article attempts to explore the domain of Computational Fluid Dynamics (CFD) in the context of airflow dynamics within the weapon bay of autonomous fighter drones. The authors have a promising foundation but need to address the following to enhance the quality of the manuscript.

## **Comments**

- 1. The report frequently investigates into technical jargon without giving enough background or justification. Because of this, it might be difficult for readers who are unfamiliar with the subject matter in-depth to follow the story.
- 2. The use of the multigrid approach and the linked strongly implicit multigrid technique, while advanced, is not adequately justified. Why were these specific methods chosen over others? The paper fails to address this.
- 3. While figures are included, they often lack clear annotations and explanations. This omission makes it difficult to understand the significance of the presented data.
- 4. The brief mention of ethical concerns surrounding "killer robots" feels like an afterthought. Given the increasing deployment of autonomous systems in military applications, a more in-depth exploration of these concerns is warranted.
- 5. The paper falls short in discussing the real-world implications of its findings. The research, while technical, should have practical applications, especially in the design and operation of autonomous drones.

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