

NOTIFICATION

USI-CAS ESSAY COMPETITION 2026

THEME: MANNED- UNMANNED TEAMING: REIMAGINING AIR DOMINANCE FOR FUTURE CONFLICTS

General

1. The USI-Chief of Air Staff (CAS) Annual Essay Competition seeks to stimulate **rigorous analysis** and **original thought** on the evolving **character of air power** by examining **Manned-Unmanned Teaming (MUM-T)** as a defining element of **future air dominance**. As **air warfare** enters an era shaped by **autonomous systems**, **artificial intelligence**, and **network-centric operations**, the integration of **crewed combat aircraft** with **unmanned platforms** enables the fusion of **human judgment**, **accountability**, and **adaptability** with the **persistence**, **scalability**, and **risk tolerance** of machines. This **human-machine synergy** enhances **distributed sensing**, **survivability**, **decision-making speed**, and the **flexible application of air power** across **contested** and **data-dense battlespaces**. Reimagining **air dominance** through **manned-unmanned teaming** therefore demands not only **technological innovation**, but also **doctrinal evolution**, **organisational adaptation**, and a critical reassessment of **command**, **control**, and **trust** in **human-machine collaboration**.

Objective of the Competition

2. The competition aims to:

- (a) **Institutionalise an Annual Essay Competition** under the aegis of the **United Service Institution of India** to promote **sustained intellectual engagement** with **MUM-T** and its implications for **future air dominance** and **national security**.
- (b) Encourage **rigorous analysis** and **original thinking** on the **operational**, **doctrinal**, and **strategic dimensions** of integrating **manned and unmanned air platforms** across the **spectrum of conflict**.
- (c) Foster a culture of **professional military education** and **scholarly inquiry** among **serving officers** on the **evolving character of air power** in **technology-intensive battle spaces**.
- (d) Bridge **operational experience** and **strategic theory** by examining **command-and-control models**, **decision-making frameworks**, and **human-machine interaction** in **manned-unmanned teaming** concepts.
- (e) Promote **informed debate** on the role of **emerging technologies**—such as **Artificial Intelligence**, **autonomy**, **secure data links**, and **network-centric systems**—in enabling **effective and responsible manned-unmanned teaming**, while reaffirming the primacy of **human judgment**, **ethical conduct**, and **command responsibility**.
- (f) Contribute to **policy- and doctrine-relevant discourse** by generating **research-based insights** that can inform **future force structure**, **capability development**, and **employment concepts** for the **Indian Air Force** and **joint services**.

Background and Context

3. **The character of air warfare** is undergoing a **fundamental transformation**, driven by rapid advances in **unmanned systems, artificial intelligence, data fusion, and network-centric operations**. Traditional notions of **air dominance**—centred on **manned platforms** achieving **control of the air**—are increasingly being complemented by **unmanned aerial systems** operating alongside **crewed aircraft**. This shift has been clearly illustrated in **recent conflicts**, most notably the **Russia–Ukraine War**, where **unmanned platforms** have played a **critical role** across the **air, land, and maritime domains**, and in **Operation Sindoor**, which demonstrated the value of **precision, integration, and controlled escalation** in **modern air campaigns**. This evolving paradigm, commonly referred to as **Manned–Unmanned Teaming (MUM-T)** has emerged as a **critical enabler of future air power**.

4. **Recent operational experience** underscores the growing relevance of **unmanned systems** for **intelligence, surveillance, reconnaissance, electronic warfare, strike, decoy, and attrition roles**. When **effectively integrated** with **manned aircraft**, these platforms enhance **situational awareness**, extend **operational reach**, improve **survivability**, and enable **faster, more informed decision-making** in **contested environments**. At the same time, the employment of **MUM-T** raises significant **doctrinal, technological, ethical, and command-and-control challenges** that must be addressed if **air forces** are to retain **decisive advantage** in **high-intensity and hybrid conflicts**.

5. Against this backdrop, the **essay competition** invites participants to **critically examine** how **manned–unmanned teaming**, informed by **lessons from the Russia–Ukraine War and Operation Sindoor**, can **reshape air dominance** in **future conflicts**, with particular attention to implications for **doctrine, force structure, capability development, and joint operations**.

Aim of the Essay

6. The aim of the essay competition is to stimulate informed and original analysis on how **manned–unmanned teaming** can reshape **air dominance** in future conflicts, while balancing **technological integration** with **human judgment, ethical responsibility, and effective command and control**. **Suggested Approach and Essay Structure**.

7. Participants may adopt their own analytical framework; however, the following **indicative structure** may be useful:

- (a) Introduction.
- (b) Evolution of Air Dominance and the Emergence of MUM-T.
- (c) Operational Roles and Advantages of Manned–Unmanned Teaming.
- (d) Challenges and Limitations.
- (e) Implications for Doctrine, Organisation, and Capability Development.
- (f) Relevance for India and Future Conflicts.
- (g) Conclusion.

Expected Outcomes

8. Essays should demonstrate **clarity of thought, analytical depth, and originality**. Participants are encouraged to move beyond descriptive narratives and engage critically with emerging concepts, drawing upon doctrinal sources, contemporary case studies, and strategic reasoning. Well-argued perspectives that balance technological optimism with operational realism will be particularly valued.

Conclusion

9. The theme of manned–unmanned teaming lies at the **intersection of technology, strategy, and human decision-making**. By engaging with this topic, participants contribute to an important debate on how air power will be conceptualised, organised, and employed in future conflicts. The competition offers an **opportunity to shape thinking on air dominance at a time when the nature of warfare itself is being redefined**.

Rules and Regulations

10. The competition is **open to all commissioned officers of the Armed Forces of India**.

11. Each essay submitted must be an **original work authored by a single individual**. **Joint authorship is not permitted**. **Proper citation of all sources is mandatory** and must follow the **prescribed format**. Any entry found guilty of **plagiarism** will be **disqualified**, and **disciplinary action may be recommended**, where applicable.

12. Essays must be written in **English** and must be **between 3000 to 4000 words, excluding endnotes**. The **total word count must be clearly mentioned in brackets** at the end of the essay. Entries that **exceed the word limit** or **fail to specify the word count** are **liable to rejection**.

13. The manuscript must be **typed, double-spaced, and printed on one side of the paper only**. The essay should be **logically structured** and organised with clearly defined **Group, Paragraph, and Sub-paragraph headings**. It must include an **Abstract of approximately 150 words**, followed by an **Introduction** and a **Conclusion**. The use of **proper endnotes is compulsory**, and essays **lacking them will not be evaluated**.

14. **Three hard copies** of the essay must be submitted along with a **soft copy sent by email**. Essays will be **evaluated only after receipt of both hard and soft copies**, as this is essential for **plagiarism checks**. Hard copies must be addressed to the **Director General, United Service Institution of India, Rao Tula Ram Marg, Post Bag No. 8, Vasant Vihar PO, New Delhi – 110 057**. The soft copy must be emailed to **cpl.essays@usiofindia.org** The **submission deadline** for both hard and soft copies is **15 September 2026**. **Late submissions will not be accepted**.

15. All hard copy submissions must remain **strictly anonymous**. **No identifying details of the author** should appear anywhere in the essay or the covering letter. Each participant must select a **MOTTO (not exceeding ten words)** and type it on the **first page of all copies** of the essay. A **sealed envelope** must accompany the submission, containing a sheet with the **MOTTO, personal number (where applicable), rank, name, date of commission and unit address (as applicable), email address, and contact number**, along with a **brief curriculum vitae of approximately 80 words**. **Only the MOTTO should be written on the outside of the envelope**. These envelopes will be **opened during the USI Council meeting**

after the judges' decision. Any violation of the anonymity requirement will result in rejection.

16. For the soft copy submission, the **subject line of the email must be the selected MOTTO**. The body of the email should contain only the line: *“My entry for the USI-CAS Essay Competition is attached.”* **No signature block or additional text** should be included.

17. The essays will be evaluated by a **panel of three judges nominated by the United Service Institution of India**. Assessment will be based on **originality and freshness of insights, depth of understanding of the subject, logical development and coherence of thought, quality of language and expression, correct and consistent use of footnotes and bibliography, and suitability of the essay, in whole or in part, for publication**. The **decision of the judges shall be final**.

18. The judges may recommend a **First Prize**, comprising a **Gold Medal**, a **cash award of ₹45,000**, a **certificate**, as well as a **Runner-up Prize** carrying a **cash award of ₹30,000** and a **certificate**. Both winners will get a **gratis Life Membership of the United Service Institution of India**. The **results of the winning essays will be published in the USI Journal and the USI website**. The articles will also be published in the USI Journal, if recommended by the evaluators..

19. The **copyright of all submitted essays shall vest with the United Service Institution of India and the Indian Air Force**.

20. For any **queries or clarifications**, participants may contact the **Director, Centre for Publications & Library** at cpl.essays@usiofindia.org

Style Sheet

21. **General.**

(a) **Font style** should be **Arial, Font Size – 12 (Font Size – 10 for endnotes)**, with **double spacing** throughout the text.

(b) All **diagrams, charts, and graphs** should be referred to as **‘Figure’, ‘Table’, or ‘Graph’** and must be **consecutively numbered**. **Tables** should carry **only essential data** and must **complement the text**, not repeat it. Each should have a **short title**, a **figure/table number**, and the **source mentioned at the bottom**.

(c) The essay should be structured using **Group, Paragraph, and Sub-paragraph headings** to enhance readability. **Introduction and Conclusion as Group Headings are mandatory**. The essay must also include an **Abstract of approximately 150–200 words**, placed **before the Introduction**.

(d) **English (UK) or English (India)** spellings must be used consistently throughout the essay.

(e) **Dates** should be written beginning with the **day**, followed by the **month**, and then the **year** (e.g., **11 Sep 2014**). Only the **first three letters of the month** should be used (e.g., **Jan, Feb, Sep**).

(f) There should be **no paragraph numbering**. **Bullets** may be used where required. **Underlining is not permitted** anywhere in the text.

- (g) **Numbers** should be written in **words up to nine**, and in **numerals from 10 onwards** (e.g., *two, four, nine; then 10, 11, 12*).
- (h) The term **'per cent'** must be used instead of **%** or **percent**.
- (i) **Acronyms and abbreviations** must be written in **full at first mention**, followed by the **abbreviation in brackets**. Thereafter, only the **abbreviated form** should be used. **Do not create an acronym** if the word appears **only once** in the text.
- (j) Any **text written in a language other than English** should be written in **italics**, with the **meaning provided in brackets** alongside.
- (k) While referring to **currency**, use the following formats:
 - (i) **INR 2,000 cr** (not *2000 crores of rupees*)
 - (ii) **USD 8.5 mn** (not *8.5 million dollars*)
 - (iii) Currency abbreviations must follow this standard: **Million – mn, Billion – bn, Crores – cr**.
- (l) For **emphasis**, words should be placed within **single quotation marks only at first mention**. If the emphasis involves **two words**, both should begin with **capital letters**. If it involves **more than two words**, **only the first word should be capitalised**.
- (m) **Statements by another person** should be enclosed within **double quotation marks**. **Punctuation marks** should appear **inside the quotation marks**, while the **full stop** should be placed **outside**.

22. End Notes.

- (a) Authors are encouraged to provide **complete bibliographic details** of all **books, articles, journals, and other sources** cited, as **endnotes**. This should include the **full name of the author, title of the book or article, journal name** (for articles), **issue details**, and **page numbers**. In addition to endnotes, a **bibliography may be included**, if desired. The use of **Wikipedia** as a reference must be **avoided**.
- (b) When referring to a **book**, follow the format below:
 - (i) **Lt Gen CK Kapur**, *Chinese Military Modernisation*, (New Delhi: **Manas Publications, 2003**), **17–18**.
 - (ii) When referring to a **journal article**, follow the format below:
 - (iii) **Lt Cdr Neeraj Malhotra**, "Pratap Singh of the Indian Legion", *The Journal of the United Service Institution of India*, **Vol. CXXXIV, No. 556, p. 283**.
- (c) When referring to a **website**, follow the format below:

"Escalation Control in a Nuclear Environment", *Report of a Seminar organised by the Institute of Peace and Conflict Studies on 17 Nov 2004 at New Delhi. Available at: www.ipcs.org. Accessed on: 08 Feb 2005.*
- (d) If **two successive citations** refer to the **same source**, use **ibid**.
- (e) If a source is cited again **after intervening references**, use the **author's name followed by 'op. cit.'**, for example: **Imran Khan, op. cit.**
- (f) **Avoid use of Wikipedia as a reference.**

23. The style sheet available at <https://www.usiofin.dia.org/publications.php?category=7> can also be referred to.