

Review Form 3

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_130084
Title of the Manuscript:	Research and Development of an Experimental Device for Military Communication Using Binary Amplitude Shift Keying
Type of the Article	Original Research Article

PART 1: Comments

	Reviewer’s comment	Author’s Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	<p>The importance of the research titled "Research and Development of an Experimental Device for Military Communication Using Binary Amplitude Shift Keying" can be highlighted in the following ways:</p> <p>Enhanced Communication Security: Developing an experimental device utilizing Binary Amplitude Shift Keying (BASK) can contribute to more secure military communication, minimizing the risk of signal interception or jamming by adversaries.</p> <p>Improved Signal Efficiency: BASK is known for its efficiency in transmitting data over a limited bandwidth, which is crucial in military operations where bandwidth and speed are often constrained.</p> <p>Adaptability to Harsh Environments: This research has the potential to design communication systems that are more robust and reliable in challenging environments, such as on the battlefield, where traditional communication methods may fail.</p>	We appreciate the reviewer's comments highlighting the importance of the manuscript. These points—enhanced communication security, improved signal efficiency, and adaptability to harsh environments—are well-aligned with the manuscript's objectives. While these aspects are already addressed in the discussion and conclusion, we have ensured their clarity and prominence in the revised manuscript. Changes have been highlighted for review.
Is the title of the article suitable? (If not please suggest an alternative title)	The title is good. If he modifies in this way, it will sound more “Development of an Experimental Military Communication Device Using Binary Amplitude Shift Keying”	Thank you for the suggestion regarding the title. To better emphasize the focus on constructing the experimental device for educational and research purposes, we have revised the title to "Construction of an Experimental Device for Military Communication Using Binary Amplitude Shift Keying." This title highlights the practical and applied nature of the study while aligning with its primary objective.

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Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	<p>Yes, it will be better if modify in this way “Aims: To address the core requirement for military communication systems—ensuring "timely, accurate, confidential, and secure" communication—this study aims to overcome the limitations of traditional amplitude modulation (AM) methods by developing a modern experimental device using Binary Amplitude Shift Keying (BASK) modulation.</p> <p>Study Design: Traditional military communication systems rely on AM modulation due to its simplicity and ease of implementation. However, AM is susceptible to noise, suitable only for long-wave transmissions (e.g., AM radio), and struggles to integrate with modern technologies like 4G and 5G. To address these challenges, this study explores the mathematical foundation and system design of BASK modulation and demodulation.</p> <p>Methodology: The research investigates the mathematical principles of BASK, designs the system architecture for BASK modulation and demodulation, and develops an experimental device to validate the performance of the BASK-based communication model.</p> <p>Results: The study successfully developed an experimental device that demonstrates the feasibility of using BASK modulation for military communication. The device provides a platform for practical testing and verification of the BASK model, laying the groundwork for further advancements.</p> <p>Conclusion: This research provides a foundation for modernizing military communication devices. By overcoming the limitations of traditional methods and facilitating the integration of advanced technologies, the proposed device meets the stringent requirements of military environments.</p>	Thank you for the detailed suggestions. We have revised the abstract accordingly to ensure it is more comprehensive and aligns with your recommendations. Changes have been highlighted in the manuscript.
Is the manuscript scientifically, correct? Please write here.	Yes	Thank you for your confirmation. We have reviewed the manuscript carefully, and we believe it is scientifically correct. All necessary adjustments have been made to ensure accuracy.
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Add some references	Thank you for your valuable suggestion. I have added 5 additional relevant and recent references to the manuscript, as requested. These references have been included with their original sources, and the updated references section is highlighted in the revised manuscript for your review.
Is the language/English quality of the article suitable for scholarly communications?	Yes	Thank you for your confirmation.
Optional/General comments		

PART 2:

	Reviewer’s comment	Author’s comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	