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 (R part in the manuscript. his/her feedback here)
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:	,
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.	
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.	
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.	
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"	
	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: 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. 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. 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.

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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.	 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. 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. 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. 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. 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. 	
Is the manuscript scientifically, correct? Please write here.	Yes	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Add some references	
Is the language/English quality of the article suitable for scholarly communications?	Yes	
Optional/General comments		

<u>PART 2:</u>

	Reviewer's comment	Author's comment (if a highlight that part in the write his/her feedback her
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	

Reviewer Details:

Name:	Belay Sitotaw Goshu
Department, University & Country	Dire Dawa University, Ethiopia

f agreed with reviewer, correct the manuscript and ne manuscript. It is mandatory that authors should t here)