I.F.F. (Identification Friend or Foe) System

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Acronyms & Pre-Requisite Information

- INCLUDE MORE ABBREVIATIONS HERE

1 Introduction

2 Design

2.1 Overview

Friendly Interrogator System

Friendly Target System

2.2 Simulations and Calculations

Accuracy can be captured by the likelihood of Type I and Type II errors for the system. That is, we can define a Type I error as incorrectly identifying something as friendly, when in fact it was either an inanimate object (or worse) an enemy. A Type II error, then, would mean that the system failed to mark a friendly target as friendly. Type I errors should be greatly mitigated by the encryption system; that is, if an acknowledgment is received and valid, it is impossible that the acknowledgment occurred due to chance. The sources of Type II errors, then, would be a glitches in either the interrogator circuit or the acknowledgment broadcasting circuit. A Type II error, however, could happen for a number reasons; including the laser being interrupted before its identification could be transmitted to the photo-receiver. I don't know where this belongs but might be useful

3 Requirements and Verification

3.1 Functional Requirements

3.2 Testing & Verification

4 Tolerance Analysis

5 Cost & Schedule

5.1 Schedule

5.2 Cost

5.3 Labor

6 Safety & Ethical Considerations

7 Conclusion

References