

Identify Friend or Foe

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ABSTRACT:

Friendly fire is a major problem in warfare. This project seeks to mitigate risk associated with the friendly fire hazard by making American soldiers more identifiable to each other, while not making them more conspicuous to the enemy. Possible solutions rely on thermal and infrared imaging as a means to detect both passive and active beacons. Some design considerations include: size, weight, ergonomics, compatibility with uniforms and gear, compatibility with imaging devices, energy consumption, thermal and infrared characteristics of the environment. The scope of this project is restricted to dismount-dismount interactions and assumes limited visibility conditions.

KEYWORDS: IFF, Thermal Imaging, Night Vision, Friendly Fire, Thermal Beacon, Infrared Beacon

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