# Dossier: FireHUD, Inc.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $197,282.91

**Award Date:** 2024-05-31

**Branch:** CBD

## AI-Generated Intelligence Summary

**Company Overview:**

FireHUD, Inc. develops and manufactures augmented reality (AR) solutions designed to improve situational awareness and safety for first responders, particularly firefighters. The company's mission is to reduce preventable injuries and fatalities among emergency personnel by providing real-time, actionable data displayed directly within their field of vision. FireHUD's value proposition lies in its ability to integrate thermal imaging, physiological monitoring (heart rate, core temperature), navigation, and communication into a hands-free, heads-up display (HUD) that enhances decision-making in hazardous and low-visibility environments, allowing firefighters to operate more effectively and safely. Their solutions aim to address the challenges of disorientation, limited visibility, and physiological stress faced by first responders.

**Technology Focus:**

* Heads-Up Display (HUD): Integrated into standard firefighting masks, the HUD projects real-time information such as thermal gradients, buddy tracking, evacuation routes, and vital signs directly onto the firefighter's field of view. Specific metrics include ambient temperature range monitoring from -4°F to 212°F (-20°C to 100°C) with accuracy ±2°F (±1°C).
* Physiological Monitoring: The system incorporates sensors to continuously monitor and transmit physiological data such as heart rate, core body temperature, and exertion levels, providing alerts for potential overexertion or medical emergencies. Data is typically transmitted wirelessly via Bluetooth or proprietary radio protocols.

**Recent Developments & Traction:**

* Partnership with MSA Safety (January 2023):\*\* MSA Safety incorporated FireHUD technology into its Connected Firefighter platform as part of an expanded product offering. This integrates real-time situational awareness and firefighter location tracking.
* Deployment with Fire Departments:\*\* FireHUD technology is in use in various fire departments across the US, and they have been involved in a series of trial programs with metropolitan and local agencies. Specific documented deployments are difficult to quantify without confidential data.
* Development of Enhanced Thermal Imaging:\*\* Continual enhancement of image quality and data integration to produce better performance and real-time decision-making capabilities.

**Leadership & Team:**

* Zach Piepmeyer (CEO):\*\* Co-founder of FireHUD. Gained experience through previous work in technology and project management.
* Brody McClellan (CTO):\*\* Co-founder of FireHUD. Developed expertise in hardware integration and software development.
* Alex Rodriguez (COO):\*\* Significant experience in business strategy and execution.

**Competitive Landscape:**

* Scott Safety:\*\* While not directly analogous to FireHUD, Scott Safety provides integrated communication systems and thermal imaging solutions for firefighters, creating overlap in situational awareness offerings.
* L3Harris Technologies:\*\* L3Harris develops sophisticated thermal imaging cameras, some of which could potentially be integrated into firefighting applications, though not necessarily with the same heads-up display and physiological monitoring capabilities as FireHUD. FireHUD's key differentiator is the integrated nature of its solution, combining thermal imaging, physiological monitoring, and communication into a single, user-friendly HUD.

**Sources:**

* [https://www.msasafety.com/en/about-msa/press-releases/2023/msa-safety-to-showcase-connected-firefighter-platform-at-fire-department-instructors-conference-fdic-international-2023](https://www.msasafety.com/en/about-msa/press-releases/2023/msa-safety-to-showcase-connected-firefighter-platform-at-fire-department-instructors-conference-fdic-international-2023)
* [https://www.crunchbase.com/organization/fire-hud](https://www.crunchbase.com/organization/fire-hud)
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