

FLAIM

Every Skill Honed for When It Counts

Mixed reality training systems for high-stakes defence operations

FLAIM equips defence forces with realistic, high-fidelity mixed reality training systems that replicate the intensity and complexity of real-world operations, from naval damage control and aviation rescue firefighting to counter-mine and explosive hazard awareness. FLAIM enables mission readiness through safe, repeatable and scalable training solutions that build skill, confidence, and operational effectiveness.



Firefighter training



EOD training



Fire extinguisher training

Damage Control

Train for High-Risk Shipboard Fire Emergencies - Anywhere, Anytime

FLAIM delivers mixed reality training solutions that prepare teams for complex damage control scenarios, including electrical (Class C) fires with unmatched realism.

Using mixed reality, trainees are immersed in high-stakes, enclosed shipboard fire scenarios that replicate real-world emergencies without the risk, cost, or logistics of live-fire exercises. Whether onboard or in a portable containerised unit, FLAIM's technology accelerates learning and improves retention through interactive, repeatable sequences and performance feedback.

Capabilities:

- Multi-threat simulation: fire, smoke, water ingress, electrical failure
- Portable, on-demand deployment on or off ship
- Mixed reality environments mapped to actual ship layouts
- Scenarios built for both individual and coordinated team response

The following scenario demonstrates team-based training across three key naval roles: Damage Control Officer (DCO), Rapid Responder and Electrical Technician, focusing on procedural accuracy, communication under pressure and safe CO₂ extinguisher deployment on electrical panel fires



FLAIM FTS

MR Firefighter Training System for Damage Control

FLAIM FTS is a portable, high-fidelity training system designed to build firefighting readiness in naval damage control teams. Using immersive mixed reality, it enables trainees to experience shipboard fire emergencies with full sensory engagement, without exposing them to live-fire hazards.

From flashover events to compartment fires and electrical hazards, FLAIM FTS simulates realistic environments where crews can practice tactical response, communication, and fire suppression procedures safely and repeatedly.

Realistic Shipboard Fire Scenarios

Train in simulated engine rooms, berthing spaces, and confined compartments mapped to actual ship architecture.

Safe, Repeatable, On-Demand Training

Deliver training without risk, travel, or live-fire logistics - set up in under 10 minutes, on base or at sea.

Full Firefighting PPE & Hose Handling

Crews train with real equipment including a breathing apparatus and weighted hose reel for full-body muscle memory.

Scenario-Based Team Drills

Coordinate team responses with role-based training: attack team leader, nozzle operator, boundary cooling, and support crew.

Key Capabilities

- Mixed reality firefighter training aligned to real naval firefighting doctrine
- Smoke, fire, heat, visibility, and dynamic fire behaviour
- Real hose handling with active resistance and water flow simulation
- Individual or team-based scenarios including fire attack, containment, and boundary cooling
- Easily transported in two Pelican cases – train anywhere, anytime



Learn more



“VR Training like FLAIM offers a clear advantage for staff health and safety, and the environment whilst maintaining a high level of training realism”

Laurent Costa
 Manager - safety and damage control training
 Ecole Navale, Marine Nationale



FLAIM EOD

MR EOD Training System

FLAIM EOD integrates industry-standard mine detection equipment with fully immersive virtual reality, featuring high-fidelity virtual mine clearance and explosive hazard training scenarios in a compact, portable system for on-demand training, anytime, anywhere, in an indoor environment.

Originally developed for the Australian Defence Force to train with the Minelab F3, the system is agile and can be incorporated with any demining equipment to support global defence and humanitarian organisations. It enables training across any land-based terrain and environment.

By embedding haptic feedback into industry standard mine detection equipment, FLAIM EOD offers a kinaesthetic, feels-real training experience in a safe environment. Its 'reps and sets' approach helps trainees build procedural muscle memory and tactical skills, complementing traditional counter-IED field training

Realistic Immersion

Build situational awareness by replicating real-world tasks and environments.

Performance Insights

Track biometric and performance data in real time via FLAIM's cloud platform.

Customisable Scenarios

Tailor training to mission needs with specific environments and threat sets.

Safe & Low Cost

Eliminate live-fire risks, logistics, and admin overhead.

Portable & Rapidly Deployable

Set up in 10 minutes, train in barracks or deployed locations.

Sustainable

Reduce travel and emissions with on-demand training.

What our customers had to say

85%

report increased confidence in mine sweeping post-training

88%

rate it as very or extremely effective for real-life preparation

100%

of trainers & trainees found the visual After-Action-Reviews helpful

Learn more



"Most of the devices missed during a search operations are from a swinging technique that isn't analysed properly resulting in the threat area not being fully searched, and the overlap between searchers. This system enables this to be trained well, analysed and become muscle memory."

Non-disclosed Defence Training Instructor



FLAIM FTS

MR Firefighter Training System for Aviation Rescue Fire Fighting (ARFF)

FLAIM FTS supports the development of immersive training capability for ARFF operations, enabling emergency response teams to safely prepare for the wide range of high-risk aviation fire scenarios they may face, without the cost or risk of live-fire training. Increase training repetitions for complex emergencies that are difficult, dangerous, or expensive to replicate live.

FLAIM FTS helps aviation emergency responders stay prepared for the most dangerous moments because when lives are on the line, training shouldn't be limited.

High-frequency Low-Risk Training

Realistic simulation of ARFF emergencies with physics-based flame behaviour without exposing trainees to hazardous fumes and material.

Build crew and command readiness

Practice team-based responses and incident command roles in a safe, scalable, and repeatable mixed reality environment.

Complement live-fire training

Use immersive training to build confidence, procedural knowledge, and coordination before stepping into high-risk live exercises.

Objective Learning Outcomes

Capture objective performance data, review trainee actions, and guide development with After Action Review tools.

Train anytime, anywhere

FLAIM FTS is portable, quick to deploy, and requires minimal setup.

"This trainer allows firefighters to fight fires in a virtual controlled environment that detects whether agent is applied correctly to extinguish fires... The trainer mimics the heat a firefighter feels and presents a multitude of fire scenarios, to include building and aircraft fires."

David Eblin
Installation Fire Chief
US Air Force

Learn more



FLAIM FEX

MR Fire Extinguisher Training System

FLAIM FEX is a portable, mixed reality fire safety training system designed to give defence personnel the skills and confidence to respond effectively to incipient fire emergencies. It allows trainees to experience realistic fire scenarios — from equipment fires in maintenance bays to galley flare-ups or hangar incidents — without the risks, costs, or logistics of live-fire extinguisher drills.

Relevant, Mission-Specific Scenarios

Train for the fire hazards most likely to occur in Navy, Air Force, and Army environments — including engine bays, vehicle depots, aircraft hangars, ship compartments, and fuel storage areas.

Safe, Repeatable, On-Demand Training

Deliver fire extinguisher training anywhere — onboard, in hangars, workshops, or remote bases — without live flames, emissions, or water damage.

Authentic Equipment & Tactile Feedback

Train with an industry-standard fire extinguisher retrofitted with sensors, haptic feedback, and physics-based fire behaviour for a feels-real experience.

Scenario Variety & Skill Retention

Switch between Class A, B, C, and electrical fire types, practice extinguisher selection, and build muscle memory through frequent, short training sessions.

Performance Tracking & Reporting

Automatically capture trainee performance data, including reaction time, extinguisher use, and accuracy, to support competency frameworks and audit readiness.



Learn more



Bespoke training solutions

FLAIM develops tailored immersive training solutions for its customers in Defence, leveraging its expertise in fire science and software development. FLAIM work closely with Defence stakeholders to co-design mission-specific training systems that support force preparation and capability development, from virtual and augmented reality to integrated haptic feedback. FLAIM's solutions are flexible, scalable, and built for its customers' unique training requirements.

About FLAIM

FLAIM creates immersive mixed-reality (MR) training systems to aid first responders, defence teams, and high-risk industry workers to prepare more effectively and confidently for real-world emergencies and life-threatening situations.

Discriminators

- Fully immersive mixed reality training systems that enable Defence, emergency service and industrial workforces to prepare for high-risk incidents
- Proprietary fire physics engine that replicates real fire and suppressant behaviour to reproduce high-pressure training environments
- After-Action-Reviews powered by FLAIM Capture - Learning Performance and Analytics System
- Compact, portable and on-demand product configuration to deliver workplace training with significant savings on training and logistics
- Embedded kinaesthetic feedback creates a 'feels-real' training experience
- Trusted and deployed to 400 customers in over 45 countries supporting Defence, emergency services, and industrial workforces
- Australian designed, patented and developed solutions that meet quality and Australian Sovereign Capability requirements
- Technical support with an online 24-7 support ticketing system
- In-country local support partners in United States, United Kingdom, Europe, Middle East and South East Asia

Accreditations and Awards

- ISO 9001:2015
- Defence Industry Security Program (Australian Department of Defence)
- 2022 Unity Government & Aerospace Creator Awards
- 2022 Community Achievement Awards
- 2020 Geelong Business Excellence Awards
- 2019 Governor of Victoria Export Awards
- 2019 iAwards Startup of the Year
- 2019 Fire Protection Industry Awards

Trusted by



Customers

400+

Systems deployed

1,000+

Countries

49+

Languages

28

Immersive scenarios

180+

FLAIM

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When split-second decisions can make
the difference between life and death



Scan to learn more

Get in touch

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