

## **Australian invention virtual reality fire-fighting system is first of its kind in the world.**

**The FLAIM Trainer™ is a VR system designed to train firefighters. Maxon motor Australia and Dr Karl Walter-Braun tested the FLAIM Trainer at maxon's Sydney premises. Maxon DC motors are part of the haptic feedback technology creating a realistic kick-back when the fire hose is "turned on".**

Creating real time scenarios to train firefighters is dangerous, expensive, difficult to reproduce, time consuming and not environmentally friendly. But these are necessary to prepare firefighters for the situations they face. To mitigate the risk of these factors, Dr James Mullins, a volunteer fire fighter and a fundamental part of the team within the Institute for Intelligent Systems Research and Innovation (IISRI) at Deakin University, developed the FLAIM Trainer™. This world first invention is an immersive Virtual Reality (VR) system comprising of 14kgs of breathing apparatus including a head mounted VR headset, personal protective clothing with heat generation components, a hose-line with branch/ nozzle and a patented haptics feedback system. Incorporated in the FLAIM Trainer™ is hitoe, a wearable, bio-sensing nano-fibre vest which tracks electrocardiogram readings and transmits these signals to provide real time fitness analysis of the wearer during the exercise. This intimate feedback of the wearer's reaction to the unstable environment widens the applications reach across emergency services, disaster training, upskilling and education options.

Maxon motor Australia have been working with Dr Mullins to develop the haptic feedback system. Two maxon DC motors are used in the FLAIM Trainer™ system. The DC motors are a compact size providing high power and low torpidity. At their annual board meeting, Dr Karl Walter-Braun and Sales Director Felix Herger from maxon HQ in Switzerland, along with Australian Managing Director Brett Motum and new R&D Robotics Software Integration expert at maxon Australia, Dr Carlos Bacigalupo, got to trial the system with a visit from Dr Mullins. Also fortunate to try out the equipment were some local Berowra NSW Fire Brigade and RFS members. The impressive technology got the thumbs up with the benefit of the system instantaneously recognised by those who've experienced on the ground real life situations that the FLAIM Trainer™ simulates. The system is garnering global accolades cementing Australia as a real player in the haptics arena.

For more information on the FLAIM Trainer™ visit the website <https://www.flaimsystems.com/> or for information on the DC motors in the application call maxon motor Australia tel. +61 2 9457 7477.

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The media release is available on the internet at: [www.maxonmotor.com.au](http://www.maxonmotor.com.au)



*Dr Karl-Walter Braun tests the  
FLAIM Trainer™ © maxon motor*



*Sales Director Felix Herger and  
Dr Mullins with the FLAIM  
Trainer™ © maxon motor*



*Sales Director Felix Herger and  
Dr Mullins with the FLAIM  
Trainer™ © maxon motor*



*Australian Managing Director Brett  
Motum with the FLAIM Trainer™  
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