

MANCHESTER AIRPORT FIRE & RESCUE SERVICE TAKES DELIVERY OF ITS NEW “FLASHOVER” TRAINING RIG

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end of its useful life rather than having to replace the whole of the unit.

This design is unique and allows fire fighters to experience the development and control of a high-energy fire with a high level of control due to the large sized vent operated by the instructor.

This unit is a carbonaceous unit – we burn a mixture of soft board sheets and pallets. This gives a realistic fire development and behaviour, however the smoke emissions have proved a problem for

some brigades who either use some form of smoke scrubber or have actually been prevented from

The new training rig has been built for the airport by Simulation TERS Ltd, who also built the recently delivered our Dual-Fuelled 747/767/MD11 ARFF Training Simulator.

vent, stable doors and a rear compartment with windows and a door. The bolted on fire box allows for replacement at the

The “Flashover” Training Rig was built to a design developed by John Taylor author of the new book ‘Smoke Burns’ (www.smokeburns.com), who has been involved in *Compartment Fire Behaviour Training (CFBT)* and research for the past 17 years and who has worked closely with Manchester Airport Fire & Rescue Service over the past 10 years.

The “Flashover” Training Rig comprises of a converted ISO steel container which has a fire box bolted to the end, a remotely operated large roof





followed by the practical sessions in the CFBT Unit. Two instructors operate inside the unit with a third (safety) outside with six “students” at a time observing and practising the techniques. Typically a burn will last about 20 minutes in which the fire fighters will observe the different stages of fire development and have the chance to apply various nozzle techniques and see how they can affect the development. They will also observe the effect that altering the airflow / ventilation has on the development and control of the fire.

Our fire fighters will undertake this training on an annual basis initially and hopefully more regularly in the future allowing us to develop the training further. It is hoped that we can offer similar courses externally allowing other brigades the opportunity to undertake this type of training should they not have the facility.

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burning such materials.

The purpose of the unit is to teach the fire fighters how fire develops, the various stages of development, the effects of airflows and ventilation on the fire and how to safely control and extinguish the fire. From this knowledge and understanding, we can develop safe and effective SOP's for fighting fires in compartments.

This type of training has been historically aimed at Municipal Brigades rather than Airports – however it can easily be seen that we could potentially face the worst possible compartment fire in an aluminium tube full of plastics, wiring, compressed gases surrounded by flammable liquid and with several hundred people huddled inside – something which building regulations would not permit.

Our instructors undertake a period of development acquiring a suitable level of expertise prior to attending an instructor course in Sweden – the world-renowned

experts in the field. The instructors are required to revalidate this qualification regularly to maintain their competency and keep up with current developments.

Our fire fighters undergo a series of lectures and are shown classroom training aids to cover the theoretical side of the training, which is then

