## AN ERGONOMIC AND FUNCTIONAL APPRAISAL OF AVIATION FIREFIGHTERS: SPECIALIST CAPABILITIES OF AERODROME EMERGENCY RESPONDERS

UNE EVALUATION ERGONOMIQUE ET FONCTIONNELLE DES POMPIER DE L'AVIATION: LES COMPETENCES SPECIALISEES DES INTERVENANTS D'URGENCE EN AERODROME

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Introduction: The Fleet Air Arm (FAA) recognises a need to maintain focus on "total aviation safety" as part of the Duty Holder construct. As such, RNAS Culdrose offers phase 2 training for all FAA aerodrome rescue fire-fighters (ARFF).

Background: These assets are trained in the School of Flight Deck Operations (SFDO) and subject to significant ergonomic and functional challenge given the loads and systems of work - including mobile platforms for the management of aviation fuel fires. Thus the trained service person should remain medically fit to assume a fully deployable (MFD) state. This is codified in terms of the Joint Medical Employment Standard (JMES). The JMES informs Command without divulging sensitive medical information. However if a medical condition causes function incapacity then JMES is "downgraded" and the Defence Medical Service works to rehabilitate the fire-fighter to ensure a return to full capability. Once rehabilitated the fire-fighter will be upgraded and expected to return to full firefighting duties. At present there is no system to prove capability in this highly specialist occupational environment, where fire-fighting equipment is at variance to that used in HM Warships. Thus, in order to demonstrate a safe and effective return to full operational capability there is need for a functional assessment with high fidelity to the aviation rescue environment.

Summary: This paper shows a full analysis of the key training elements in order to furnish a biodynamic assessment of ARFF assets. Operational and strategic recommendations were made to yield demonstrable evidence of fitness for use in returning the injured firefighter to full deployed capability. This evidence will be of significant utility to managers making a decision on whether it is safe to return a trained ARFF to a high risk work environment.