Defence Science and Technology Laboratory

Sam Burden

I was part of the Training and Transformative Technologies team in the Defence and Security Analysis Division of Dstl. During my placement I was involved with a wide variety of projects covering many areas in defence. Below are some of the key projects and tasks I was involved with:

Immersive Technology

- Holding key capability demonstrations to high ranking stakeholders in the Army, Navy and Air Force using state-of-the-art technology, including virtual reality (VR) and augmented reality (AR);
- Research into the use of AR for helicopter maintenance training, which will be drawn upon for future trials;
- Trial planning for novel delivery methods for fire safety training;
- Offsite visits to the Policing and Security expo 2020 and missile system manufacturer MBDA.

Game Engine Technologies

- Research into the use of game engines to represent the future operating environment;
- Testing and documenting their ability to simulate weather and megacities;
- Reviewing outputs from commercial partners.

Other Projects

- Air signatures modelling;
- Disinformation recording, supporting future analysis work;
- Supporting management of secure facilities (DSA store room, KITE lab, Submarine Command lab).

Submarines

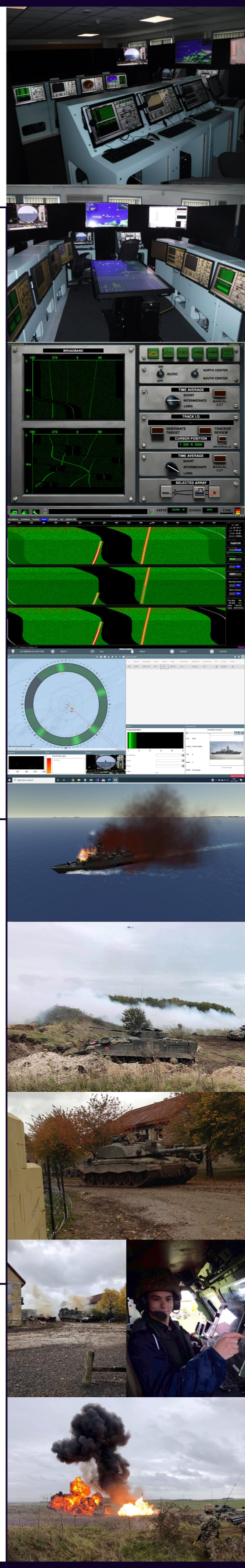
- Testing and trials of novel human machine interfaces;
- Investigation of experimental working practices and technologies for submarine command teams;
- Supporting the research for the next generation of submarines;
- Collaborative working across a multitude of organisations including BAE Systems, The Royal Navy, and the University of Southampton.
- Providing tools and technology for use in NATO Exercise Dynamic Mongoose

Warrior Infantry Fighting Vehicle

- Multiple liaisons with Defence Equipment and Support, Warrior operators and maintainers to offer support to the platform uplift;
- Analysis of the existing training extracted from documentation;
- Offsite meetings at various locations including Army HQ, Bovington Camp and MOD Lyneham.

Other opportunities

- Army Combat Power Demonstration 2019;
- Lunchtime technical talks;
- New starter’s conference with the CEO of Dstl;
- Visits to Porton Down for lectures and showcases.



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