

FLOIS / Talon Strike Project

....Sharing information on the front line

Recent operations have prompted UK Forces to look for ever more efficient ways of sharing information with allies. In the heat of the battle, getting the right information, to the right person, at the right time can mean the difference between life and death - staying one step ahead of the enemy and avoiding 'friendly fire' when the fog of war closes in.

It was against the background of an increasingly high operational tempo in Afghanistan that the MOD and the US Department of Defense initiated the *Future Land Operations Interoperability Study*. Using the setting of a US-based exercise called OMNI FUSION, a representative UK brigade staff operated US equipment, whilst examining the inter-staff processes needed to conduct combat operations on a coalition basis. Analysis of the exchanges demonstrated the scale of the challenge posed by US and UK Forces using different systems, technologies and procedures. It highlighted an urgent need to draw on the broadest expertise and technologies from across defence in order to achieve a step-change in command and control capability.



The ensuing Niteworks project was undertaken by a team of MOD, Dstl and industry staff, using the actual systems that were likely to be deployed on operations between 2010 and 2015. An infrastructure was put together and used at the UK Coalition Warrior Interoperability Demonstration (CWID) and then at the US Exercise OMNI FUSION in 2009. The latter saw troops from 12 UK Mechanised Brigade fly over to the USA to take part, where their responses to a range of scenarios that could be encountered on coalition operations were tested.



The next priority was to lay down the command and control architecture for the culminating event, Exercise TALON STRIKE. In the UK, Niteworks worked with the Command and Control Development Centre (C2DC) at the Land Warfare Centre to build a Concept Capability Demonstrator. This enabled the development of a suite of systems, based on the technologies that were due to be used by each nation in the near future but integrated together to facilitate the efficient passage of electronic information.

The project culminated in a distributed joint exercise in May 2010 involving over 600 UK and US personnel, with the Niteworks team embedded alongside them to provide infrastructure and operational analysis support. The exercise used an Afghanistan-based scenario to explore interoperability issues, identify capability gaps and inform potential solutions.

With warfighters separated by 5000 miles and up to seven time zones, Exercise TALON STRIKE represented a huge technological and logistical feat. It marked the first ever distributed experimentation and training event involving a detailed level of command and control integration jointly undertaken by UK and US Forces.

The Niteworks Talon Strike project provided valuable lessons on how practical UK-US command and control system interoperability can be achieved in the Afghanistan theatre of operations. By developing systems that allow better visibility of troops, equipment, information and decisions, there is an opportunity for driving real improvements in the way that coalition operations are conducted including, crucially, reducing the risk of blue-on-blue incidents.



The project offers potential benefits for learning and training: establishing and demonstrating such links enables pre-deployment experience of relevant systems, and how they can be expected to work together. Applying these principles will aid more effective collaboration between UK and US Forces on operations and allow remote, mission rehearsal exercises to be held in advance of deployments.