

# A country's defence depends on industry as well as its armed services

There is substantial joint working between the defence industries, the Commanders of the armed forces and the government. With technology playing an ever more important role problems are analysed and resolved by manufacturers of equipment and programmers of software. As we enter the era of cyber warfare more of the combatants are civilian computer experts, or service personnel with special training turning up at an office or command centre well away from the adversaries.

It was always the case that to win a war the country fighting it had to produce sufficient weaponry, make available plenty of supplies to fighting personnel, and innovate to outwit enemy weapons and defences. In the two world wars of the last century large amounts of the country's production capacity had to be made over to war work to support the fighting personnel. The UK had to be much more self sufficient in food for home supplies, given the attempt of the Germans to sink inbound products coming by sea.

The UK in the second world war achieved amazing results at gearing the economy to war output. At the peak the country was manufacturing over 26,000 planes a year, and replacing millions of tonnes of sunk shipping. The navy was expanded massively from its peacetime lows. It added 553 new ships to the 332 that started the war, including 58 new aircraft carriers. There was a constant flow of innovations, from the world's first code cracking computer through jet planes to mobile harbours, bridges and an oil pipeline.

Today the UK needs to review its strategic capability to manufacture planes, ships and munitions. We trust there will not be another terrifying global scale war of the big powers, but even for interventions in lesser conflicts a country may not be able to pursue the course it wishes if it is dependent on imported weapons or components. Mr Trump is demanding that the USA keeps the ability to produce all the steel it needs for military and other domestic purposes as a strategic industry. He is also keen to protect US intellectual property and the security of US communications systems as the best protection against cyber attack. It is time the UK was more insistent that UK weapons, tanks and naval ships of all kinds are made in the UK, and that we have the necessary capability to make the components for them.