UK Air Power and the Defence Aerospace Industry in the Whole Force era

Air Marshal Sir Baz North KCB OBE MA FRAeS RAF
Deputy Commander Capability and Air Member for Personnel & Capability, Royal Air Force

The Sir Sydney Camm Lecture 2015
Royal Aeronautical Society, 8th June
Prosperity

Big numbers…UK defence industry’s value to the economy

Source: Delivering Growth: Implementing the strategic vision for the UK Defence Sector 2014
Three key questions

• Where are we now and where are we going?

• What are the challenges that we must overcome?

• How might we do that?
Air power...an inherently time-compressed business
Afghanistan

250,000 sq miles: comparable with France or Texas

UK air power – one core role over a 6 month period (source: AWC)

UK air power...making a Theatre-wide, Campaign contribution
Recapitalisation

New, upgraded, expanded and in-development fleets
Approach

People: ‘a Whole Force…acting together as one.’

Output: ‘working alongside industry & researchers to enhance capability and support exports.’

Equipment: ‘all capabilities relevant to the future operating environment.’

Reputation: ‘value for money.’

Source: RAF Command Plan 2014

Air power & Industry…a unique opportunity to lead the way
Returning to contingency?

UK air power will need to ‘transition in contact’ towards FF2020
National challenges

A Strong Britain in an Age of Uncertainty: The National Security Strategy

Building Stability Overseas Strategy

Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review

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International Defence Engagement Strategy

"we need to draw together, and use, all the instruments of national power, so that the sum of the British effort is much bigger than its component parts." UK National Security Strategy 2010

International Defence Engagement is the means by which we use our defence assets and activities short of combat operations to achieve influence.

UK air power & Industry have a key delivery role
Defence’s challenges

Strategic context: June 2014

Implications for Defence: due 2015

‘Greater complexity, diversity and uncertainty…’
UK engineering

Britain is great at engineering

Engineering turnover grew 6.7% to £1.17 trillion over the 12 months to March 2013...which is 24.9% of all UK turnover.

5.4 million people are employed across 576,440 enterprises.

...but we need many more engineers

Engineering employers are projected to need 1.82 million people with engineering skills from 2012-2022.

This means we will need double the number of engineering apprentices and graduates entering the industry.

Filling the demand for new engineering jobs will generate an additional £27 billion per year from 2022 for the UK economy - equivalent to building 1,800 schools or 110 hospitals.

Source: Engineering UK 2015 - The state of engineering

Whether STEM or STEAM, the UK’s skills shortage is acute
Defence Growth Partnership (DGP)

‘A strategic partnership…to secure the future of the UK aerospace industry for the next 20 years and beyond.’
Defence Growth Partnership (DGP)

‘Up and running but strategic patience will be required …’
Players

MOD-facing, UK capability focus with industry-supporting

Industry-facing, export-led focus with government supporting

‘Can be entirely complementary – not competing – entities.’
Team Complex Weapons

‘...commonality, modularity and re-use to give better value for money’
Air-ISTAR Optimisation Study

‘There are a number of technologies which will mature around 2025 that could provide more flexible force mix options…’

HOC DC : letter from SoS Defence to Chair (Jul 2014)
‘Imagination, creativity and innovation await us.’
Synthetics

‘An opportunity to redefine the global standard in air power training.’
Sir Sydney Camm (1893-1966)

Would he have recognised our challenge? Approved?