

“The UK aerospace industry is another important part of our advanced manufacturing sector, contributing towards our goal of rebalancing the economy.”
Scoping Document

The Aerospace Industry



and the Growth of Aviation

This short paper looks at whether the continuing success of the UK aerospace industry is dependent on the growth of aviation in this country.

The Aerospace Industry and the Growth of Aviation

Background

The scoping document makes the following points about the UK aerospace industry:

“The UK aerospace industry is another important part of our advanced manufacturing sector, contributing towards our goal of rebalancing the economy. The UK has the second biggest aerospace industry in the world in terms of turnover, and it is one of only a few countries involved in the design, development, manufacture and maintenance of the full range of aircraft products. The sector has an annual turnover of over £20 billion, of which 70 per cent is exported, and provides access to growing markets such as China. It directly employs over 100,000 highly skilled workers and generates an estimated 130,000 jobs indirectly. Over 40 per cent of employees are educated to degree level, with productivity levels (GVA per employee over £76,000) significantly higher than elsewhere in the economy, including within engineering industries. The sector invests heavily in research and development - £1.7 billion in 2009 - and plays a key role in developing world-leading engine and wing technology used in the production of new aircraft with reduced emissions and noise. The manufacturers and engineers involved in aircraft assembly and maintenance also have an important role in fostering specialist skills and knowledge in the UK. Apprentices account for three per cent of the UK aerospace industry workforce, something the Government is keen to develop further”.

Whilst this may be true, it is of only limited relevance to the main issues addressed within the scoping document, namely the extent to which further expansion of UK airport capacity is desirable. This paper examines the companies identified in the document as major UK aerospace employers, and the extent to which demand for their products is dependent on UK based commercial aviation.

BAE systems

BAE Systems is the UK's largest manufacturing based employer and engineering company, with 39,000 employees and around 9,000 UK businesses in its supply chain. In addition to the UK it also has operations in the US, Saudi Arabia, South Africa, Australia and India.

However, very little of this appears to be due to civil aviation. Its website (<http://www.baesystems.com/WorldwideLocations/UK/ManufacturingintheUK/index.htm>) lists the major products of its UK manufacturing operations as:

- Queen Elizabeth Class Aircraft Carrier
- Astute Class (submarines)
- F-35 Lightning II (military aircraft)
- Mission Systems (highly complex electronic integrated systems)
- Munitions
- Type 45 destroyer (military ships)
- Typhoon (military aircraft)

This suggests that (with the possible exception of some applications of mission systems), none of British Aerospace's UK manufacturing is for civil aviation, but rather it is for military uses.

Rolls Royce

For Rolls Royce, civil aerospace accounted for £4.9bn or 45% of its (underlying) revenues in 2010. However, only a portion of this is manufactured in the UK. Its accounts say that ‘We now manage about one third of our revenue from Singapore, a further third from North America and the balance from the United Kingdom and Europe’. It has a network of offices and manufacturing facilities in 50 countries. It has 39,800 employees of which c20,000 appear to work in the UK. This is down from c30,000 in 2000 as the company has increased the proportion of its business based overseas. (http://www.rolls-royce.com/Images/corporate_presentation_tcm92-27470.pdf)

Neither is it dependent on UK airlines: Rolls Royce has customers in 120 countries around the world.

It is also worth making the point that, even with no increase in flights by UK airlines, Rolls Royce sales to them would still benefit from the shift over time to upgrade existing fleets to meet new operating and environmental requirements. Moreover, over the next 20 years, it forecasts a market opportunity of \$800bn from sales of new equipment and nearly as much (\$600bn) from services such as maintenance of existing engines.

Airbus

British Aerospace used to have a 20% share in Airbus but this was sold in 2006 and Airbus is now jointly owned by non-UK companies. Thus any purchases of (either Airbus or Boeing) planes by UK airlines would be expected to be negative for the UK’s balance of payments.

On its website <http://www.airbus.com/tools/customers-operators-list/> Airbus lists 392 airline customers of which only 7 (BMI, British Airways, Easyjet, First Choice/Thomson, Monarch, MyTravel/Thomas Cook and Virgin Atlantic) appear to be UK based airlines still flying from the UK.

Boeing

An American company, its website says that it only employs around 1000 people in the UK. It is not on the list in the scoping document of aerospace companies represented in its Aerospace Growth Partnership forum.

Conclusion

The UK’s aerospace industry is very global, with customers and manufacturing around the world. A sizeable portion of this is dedicated to producing military aircraft and parts rather than supplying civil aviation markets. For example, BAE Systems, our largest engineering employer has almost no exposure to civil aviation in its UK manufacturing operations.

Where the UK’s aerospace industry does serve civil aviation markets, it is far more dependent on expansion in overseas aviation than in UK airports or airlines. In fact the long term value of sterling is likely to have more influence on the UK’s aerospace manufacturing base than the growth rate of our domestic airlines.

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