

A large jet engine is mounted on the wing of an aircraft in a factory. The engine is white with a large black fan. The background shows the yellow overhead cranes and lights of the factory.

# AEROSPACE PROFILE

FOR SOUTH HAMPSHIRE AND THE ISLE OF WIGHT

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**This document serves as a profile of the Aerospace sector for South Hampshire and Isle of Wight. Its purpose is to inform and provide key information on all aspects of the sector for a range of different audiences: local workers, existing businesses in the area, new businesses and start-ups, prospective workers, and potential businesses and investors wishing to relocate to the area.**

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## **SOUTH HAMPSHIRE AND THE ISLE OF WIGHT**

South Hampshire and the Isle of Wight (Solent LEP area) have the potential to deliver sustainable economic growth for the UK economy. The strategy for growth is based on the need to make the best use of our outstanding assets of highly-skilled people, world-class businesses, land for development and world leading higher education establishments.

Since 2008 the area has witnessed strong private sector jobs growth driven by the development of more knowledge based industries and high value advanced manufacturing.

In the period to 2026 the area will capitalise on its strengths and through collaboration, commit to creating greater levels of wealth creation through additional private sector growth. In addition to current trends the Solent Local Enterprise Partnership is planning to create 10,000 new jobs, contributing to GVA growth of 2.1% which equates to an extra £1bn of economic value.

### **Key Facts:**

1. A total population of 1.5 million (2011) of which 63% are of working age
2. Local GVA £23.7 billion, supporting 485,000 (Full Time Equivalent) jobs
3. Part of the wider South East regional economy valued at £187 billion (GVA, 2010)
4. 50,000 businesses (VAT registered stock)
5. Strategic sectors include - Marine, Aerospace, Defence-related industries, Advanced Manufacturing, Transport and Logistics
6. Leading companies include – IBM, BAE Systems, EADS Astrium, Boeing, Lockheed Martin, Zurich, Lloyds Register Group, Skandia, QinetiQ, Carnival UK and B&Q
7. 7 out of the top 10 global aerospace companies operate from the area
8. Southampton Airport services 43 European destination and 1.76 million passengers
9. The Port of Southampton is one of the largest in the UK, providing £1.2bn of local output per annum
10. The area has a number of strategic employment sites with over 110 hectares of land for development
11. The Solent Enterprise Zone now has in place a £27m infrastructure package to enable the delivery of 800 jobs by 2015
12. The University of Southampton is one of only 19 UK universities to be ranked among the top 100 in the world
13. The area is home to the universities of Southampton, Portsmouth, Winchester and Southampton Solent University
14. 55,000 students are educated in the area, a higher proportion than for the South East or Great Britain
15. 32% of the working age population hold higher level qualifications (degree level or higher)

## **THE SOLENT LOCAL ENTERPRISE PARTNERSHIP (LEP) ([www.solentlep.org.uk](http://www.solentlep.org.uk))**

The Solent Local Enterprise Partnership (LEP) was formed after the Government offered local areas the opportunity to take control of their future economic development. It is a locally-owned partnership between businesses and local authorities and plays a central role in determining local economic priorities and undertaking activities to drive economic growth and the creation of local jobs.

‘Our vision is to create an environment which will better facilitate growth and private sector investment in the Solent area, allow businesses to grow, become more profitable, greener and enable new businesses to form and prosper’.

## 1.0 INTRODUCTION

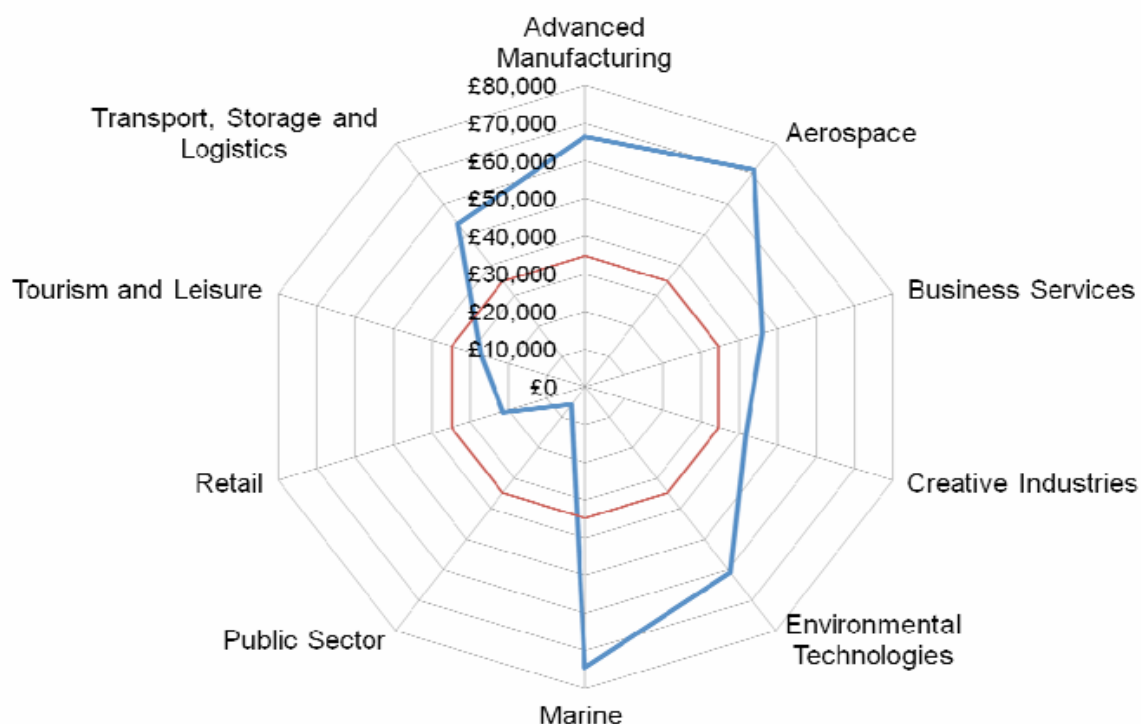
The UK has the largest aerospace manufacturing market in Europe and is second only to the United States globally. This successful, vibrant sector is also characterised by high-value, high technology engineering and service industries. UK aerospace is also quite resilient with an ability to at least maintain revenues even in the current global recession.

- The UK has a 17% share of the global aerospace market
- Supporting over 100,000 direct & 220,000 indirect jobs
- The sector generated £24.2bn (2011) with 75% being export generated
- 2600 UK companies are involved in the aerospace activities

A characteristic of the wider aerospace and defence sector is the requirement for a broad range of high value skills and disciplines, particularly engineers and research scientist. Demand for skills makes the UK one of the most attractive locations with its internationally recognised and well respected higher education system. The well established partnerships between the world's major aerospace companies and UK based research capabilities is perhaps one reason why the UK aerospace industry is the home of many pioneering aerospace technologies.

Across the different regions various hubs of activity within the aerospace sector can be identified. In the North West BAE Systems has a strong presence, the South West is home to Airbus UK and the East Midlands is home to Rolls-Royce.

Seven of the top ten global aerospace companies have a presence in the South Hampshire and Isle of Wight sub-region supported by a very strong and diverse advanced manufacturing sector. This is particularly so with regard to aerospace and marine sectors both of which generate more the £70,000 of GVA per worker. (See below for comparison with other sectors)



Source: ONS, ABI 2008

The South East of England, of which South Hampshire and the Isle of Wight is a part, is home to some of the larger national aerospace technology projects in the UK involving partners such as QinetiQ, GKN Aerospace, GE Aero-structures and Eaton. An example of this activity is the joint venture based on the Isle of Wight between GKN and Rolls Royce to develop composite fan-blades under the Environmental Lightweight Fan (ELF) programme.

There is potential for South Hampshire and the Isle of Wight to further develop its role as a critical sub-region of the aerospace industry given the world class assets and key companies based here. The area also has strong links with other key sub-regional centres focused in and around Farnborough.

## 2.0 AEROSPACE - SECTOR DEFINITION

Whilst this proposition focuses on the Aerospace sector it is important to recognise the linkages between the Aerospace and Defence sectors. In many large western economies these sectors are closely linked.

There are different ways of defining sectors. The aerospace and defence sector can be defined at the regional level by using a BIS sector analysis methodology using SIC 2007 Codes:

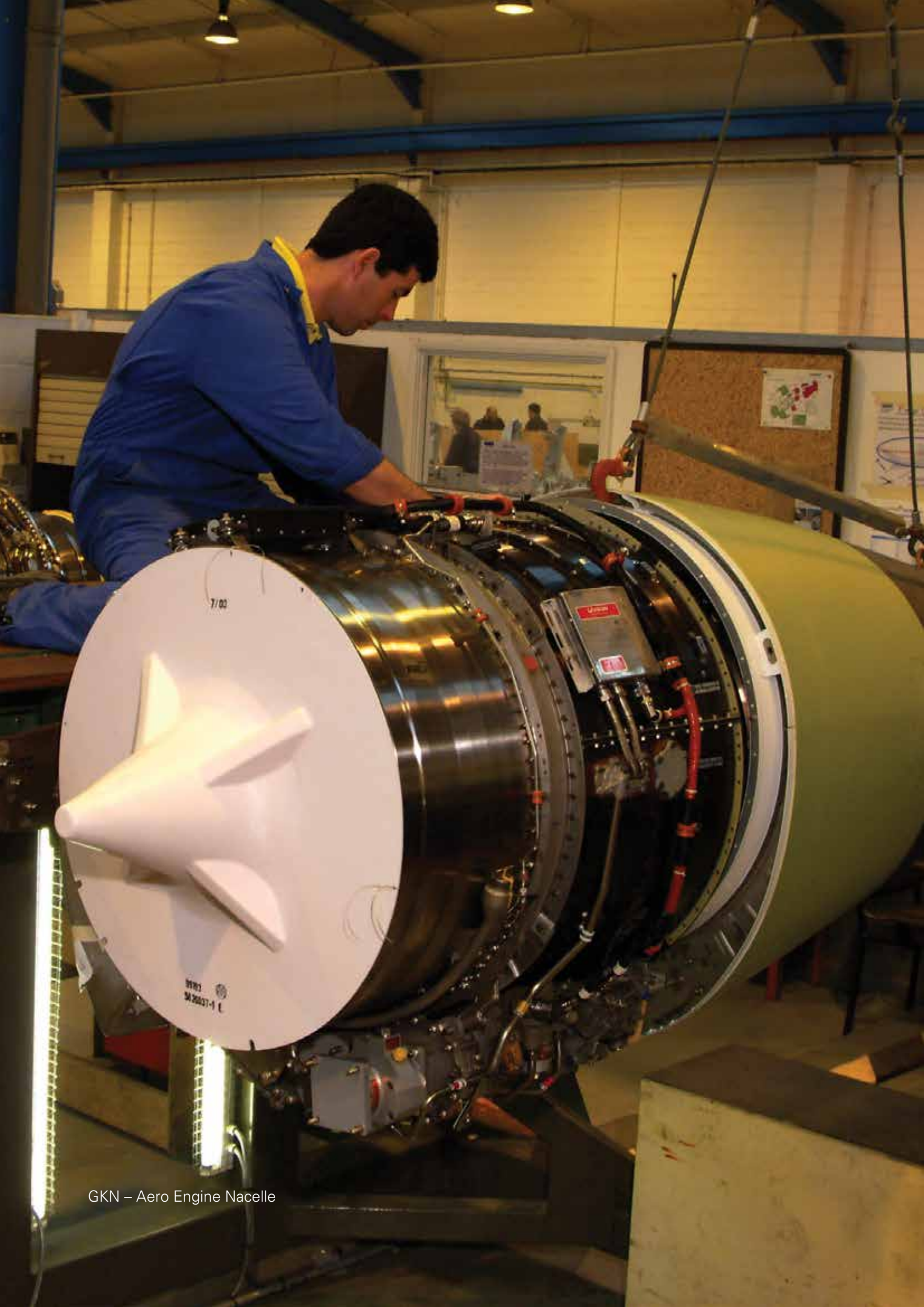
- 254: Manufacture of weapons and ammunition
- 301: Building of ships and boats
- 303: Manufacture of air and spacecraft and related machinery
- 304: Manufacture of military fighting vehicles

Region (NUTS1)	Count - Employee jobs in aerospace and defence	Proportion of total employee jobs in aerospace & defence (%)
South West	16,900	0.7
North West	30,200	1.0
East Midlands	12,600	0.7
South East	18,400	0.5

### Data notes:

1. Data used is from the Business Register Employment Survey or BRES (2010) via NOMIS
2. All data has been rounded to the nearest 100 employee jobs and as such figures may not add up because of rounding.
3. Estimates are subject to sampling errors which increase as geographic areas become smaller and industry more detailed. Please see [www.statistics.gov.uk](http://www.statistics.gov.uk) to gauge the magnitude of these errors.





GKN – Aero Engine Nacelle

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### 3.0 VALUE OF THE SECTOR

Using this methodology based on the aerospace and defence sector we can see that the total number employed in the sector in the South East is the second highest in the UK behind the North West. However the proportion of total employment is lower than in the East Midlands or the South West, which is in part accounted for by the greater diversity of the economy in the South East.

To obtain a more focussed view aerospace jobs can be classified under just two headings:

3030: manufacture of air and spacecraft

3316: repair and maintenance of aircraft and spacecraft.

Employee numbers in these two sectors are often added together to form the total of aerospace jobs in an area however this approach is also subject to misrepresentation.

Other engineering, manufacturing, IT and service companies classified elsewhere within the SIC will doubtless undertake varying degrees of related sub-contracted work for the aerospace sector. Total employment in the aerospace sector is therefore likely to be understated. Classification changes and the outsourcing of certain functions within the industry over the years mean that there will be some incompatibilities between the various forms of the SIC past and present.

It is also important to mention that the official Standard Industrial Classification (SIC, 2007) definition of the aerospace industry is not market-based and in many respects under-states the importance of the sector as a core generator of jobs. For more than a decade, many large and medium-sized aerospace companies have out-sourced non-core services, previously undertaken in-house. Activities ranging from information technology and technical design, testing and documentation to industrial cleaning, catering, security and logistics, and all previously part of the “aerospace” job headcount, are now classified elsewhere despite remaining aerospace related services.

Similarly Primes such as Rolls Royce and BAE Systems have greatly boosted the amount of direct aerospace work that is sub-contracted through the supply chain. Jobs under this process are often classified under non-aerospace activity headings such as “treatment and coating of metals” or “general mechanical engineering” which includes many sub-contract precision engineers. It is estimated that there are an additional indirect 2.2 jobs for every employee allocated directly to the aerospace sector.

To counter some of these issues the analysis in this report focuses more directly on the aerospace and space sectors. The aerospace sector in South Hampshire and Isle of Wight is more diverse than most and so we have used an expanded methodology using the following SIC 2007 Codes at the sub-regional level.

- 3030: Manufacture of air & spacecraft plus related machinery
- 3040: Manufacture of military fighting vehicles
- 3316: Repair, maintenance of aircraft & spacecraft
- 5223: Service activities incidental to air transportation
- 6130: Satellite telecommunications activities
- 7735: Renting & leasing of air transport equipment

2008	Turnover (£ billion)	*GVA (£ billion)	GVA per employee (£)
Aerospace	22.4	8.5	76,100
UK Economy	3,096	915	35,500
Aerospace *R&D	Expenditure (£ billion)		
	1.7		

**Source: ABI 2008, ONS 2010. \*BERD 2008, (R&D). \*GVA (Gross Value Added) measures the contribution to the economy of each individual producer, industry or sector in the United Kingdom.**

From 2007 to 2008 turnover increased by £3 billion, GVA has increased by £0.9 billion and GVA per employee by £4,900 for the aerospace sector.

### 3.1 THE VALUE OF THE AEROSPACE SECTOR IN THE SOUTH EAST

The South East combines broad aerospace & defence capabilities with highly-specialised technical skills, established university R&D opportunities and the necessary critical infrastructure to make not just a successful sector, but a thriving regional cluster.

- Over 1,000 aerospace and defence businesses, including large, multinational primes and niche, technically-advanced suppliers generated a value (GVA) of £3.1bn.
- A high-tech research intensive economy supported by 24 universities and a regional R&D spend of £3.4 billion
- A highly educated workforce of 4.3m with over 93,000 aerospace and defence specialists
- The UK's leading business aviation airport at Farnborough, as well as three international airports; Heathrow, Gatwick and Southampton

From Homeland Security to Civil Aviation; from Defence to Space the region offers market opportunities for cutting-edge companies of all sizes and at all stages of the supply chain. We can demonstrate clear strengths across a wide range of sub-sectors such as the manufacture and design of airborne structures, composite components, computer systems, simulation technology and software.

At the sub-regional level we can identify two distinct clusters. Distinct aerospace and defence clusters have formed in the adjoining counties of Surrey, Hampshire and Berkshire. Another large cluster, comprised of many industry giants, continues to flourish around Portsmouth and Southampton, with GKN Aerospace's world-leading Composite Research Centre close by on the Isle of Wight.

Farnborough is central to both and is internationally renowned for its biannual aviation event. Across the Solent and Enterprise M3 Enterprise Partnerships there is a unique cluster of multinational aerospace firms with pioneering technologies.

The GVA generated per employee in the Aerospace sector is £71,200, significantly above the average GVA per employee across the whole economy of £34,800. GVA per worker has increased by 34% over the period 1998 to 2008, increasing from £53,200 to £71,200.





GKN – Aero Structures, Isle of Wight

## 4.0 AEROSPACE EMPLOYMENT AND BUSINESS UNITS

We can examine employment and the number of business units in the aerospace sector at the local and sub-regional levels. We can also look at these measures across the city regions of Southampton and Portsmouth.

The following data highlights the considerable cluster of aerospace activity in the area spanning Hampshire, Surrey and Berkshire across the Solent and Enterprise M3 Local Partnership areas.

### 4.1 AEROSPACE EMPLOYEES

Area	Aerospace employees (2010)	Aerospace as a % of total employment
Portsmouth City Region	5,400	2.1
Isle of Wight	1,600	3.3
Southampton City Region	1,500	0.5
Solent LEP	9,800	1.5
Enterprise M3	4,500	0.6
South East	22,700	0.6
Great Britain	153,700	0.6

43% of all the aerospace employees working in the South East of England are based in the Solent Local Enterprise Partnership area. 63% of all aerospace employees work in the adjoining Solent and Enterprise M3 Local Enterprise Partnership (LEP) areas.

**Data notes:**

1. Data used is from the Business Register Employment Survey or BRES (2010) via NOMIS
2. All data has been rounded to the nearest 100 employee jobs and as such figures may not add up because of rounding.
3. Estimates are subject to sampling errors which increase as geographic areas become smaller and industry more detailed. Please see [www.statistics.gov.uk](http://www.statistics.gov.uk) to gauge the magnitude of these errors.

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## 4.2 AEROSPACE BUSINESS UNITS

Area	Aerospace Business Units (2008)
Portsmouth, Isle of Wight and Southampton	100
Solent LEP	100
Enterprise M3	100
South East	500
Great Britain	2,300

In 2008 44% of all the aerospace business units in the South East of England were located in the adjoining Solent and Enterprise M3 Local Enterprise Partnership (LEP) areas.

84% of the aerospace business units in the Solent LEP area have less than 50 employees, with 7% having between 50-199 and 9% employing 200 or more.

**Data notes:**

1. Data used is from the Annual Business Inquiry (2008) workplace analysis (SIC 2007) via NOMIS
2. Estimates are subject to sampling errors which increase as geographic areas become smaller and industry more detailed. Please see [www.statistics.gov.uk](http://www.statistics.gov.uk) to gauge the magnitude of these errors.

## 4.3 AEROSPACE INDUSTRY LOCATION QUOTIENTS

A Location Quotient (LQ) can be used to quantify how “concentrated” or “clustered” an industry is in a region compared to a larger geographic area, like Great Britain for example.

An industry LQ is calculated by comparing the sector share of sub-regional employment with its share of national employment. Based on the data below, aerospace employment on the Isle of Wight is nearly six times more concentrated than at the GB level. Alternatively we can see that aerospace employment is less concentrated in the Southampton City Region.

### Aerospace Employment – Location Quotient (2010)

	Sector Employment	Total Employment	LQ
Portsmouth City Region	5,400	252,200	3.64
Isle of Wight	1,600	47,600	5.64
Southampton City Region	1,500	282,200	0.88
Solent LEP	9,800	650,900	2.55
South East	22,700	3,701,900	1.04
Great Britain (GB)	153,700	26,082,100	1

#### Data notes:

1. Data used is from the Business Register Employment Survey or BRES (2010) via NOMIS
2. All data has been rounded to the nearest 100 employee jobs and as such figures may not add up because of rounding.
3. Estimates are subject to sampling errors which increase as geographic areas become smaller and industry more detailed. Please see [www.statistics.gov.uk](http://www.statistics.gov.uk) to gauge the magnitude of these errors.

Location quotients can also be used to calculate the sector share of business units sub-regionally with the number of aerospace business units nationally. Based on the data below, aerospace businesses on the Isle of Wight are nearly three times more concentrated than at the GB level.

### Aerospace Businesses – Location Quotient (2008)

	LQ
Portsmouth City Region	1.61
Isle of Wight	2.72
Southampton City Region	1.81
Solent LEP	1.76
South East	1.35
Great Britain	1

#### Data notes:

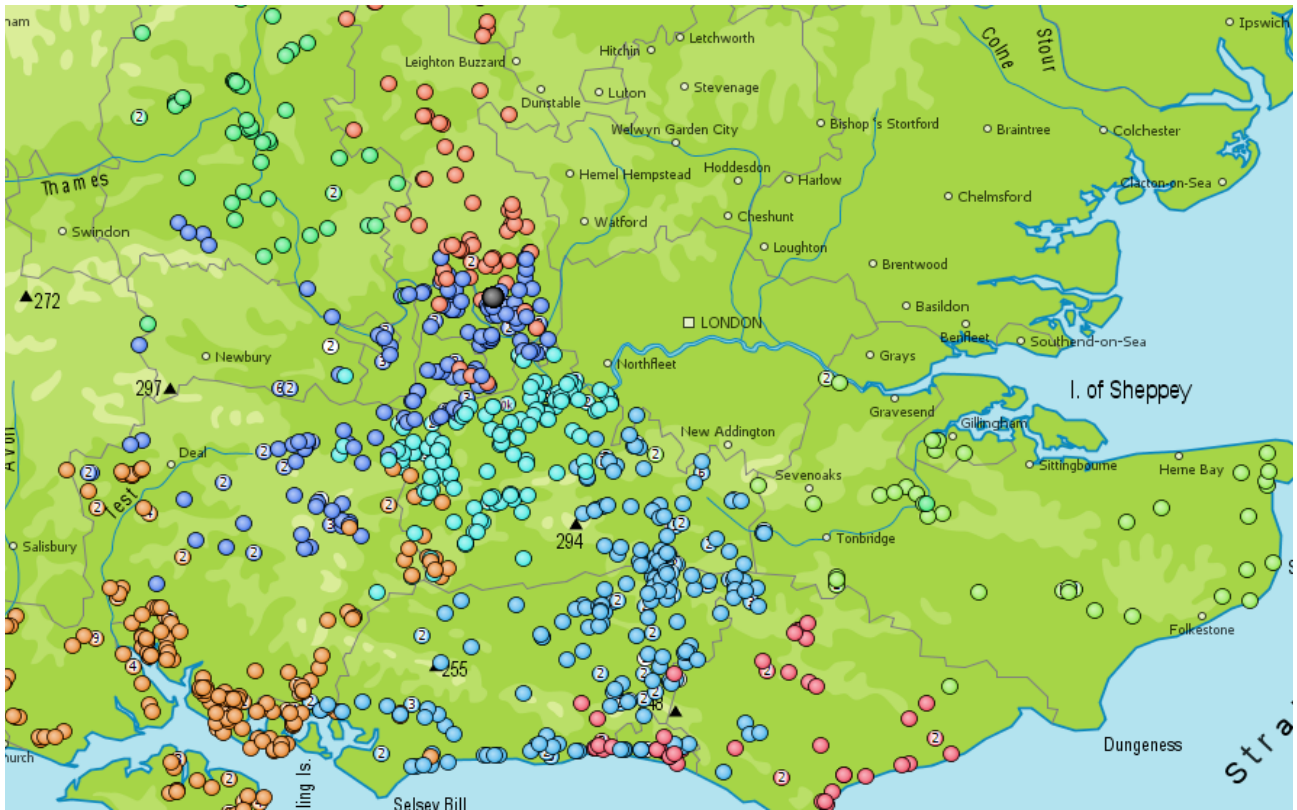
3. Data used is from the Annual Business Inquiry (2008) workplace analysis (SIC 2007) via NOMIS
4. Estimates are subject to sampling errors which increase as geographic areas become smaller and industry more detailed. Please see [www.statistics.gov.uk](http://www.statistics.gov.uk) to gauge the magnitude of these errors.





GKN – Engine Cowling, Isle of Wight

## 5.0 LOCATION OF AEROSPACE BUSINESSES



Source: Farnborough Aerospace Consortium (FAC)

The map offers a further insight into the different clusters of aerospace business units across the South East. Farnborough Aerospace Consortium has identified three clear clusters of aerospace activity around Gatwick in the east, South Hampshire and Isle of Wight in the south and around Farnborough at the heart of the region.

Farnborough Aerospace Consortium itself has a strong network of 250 paying members with a broad membership of major companies and many others, right across the supply chain.



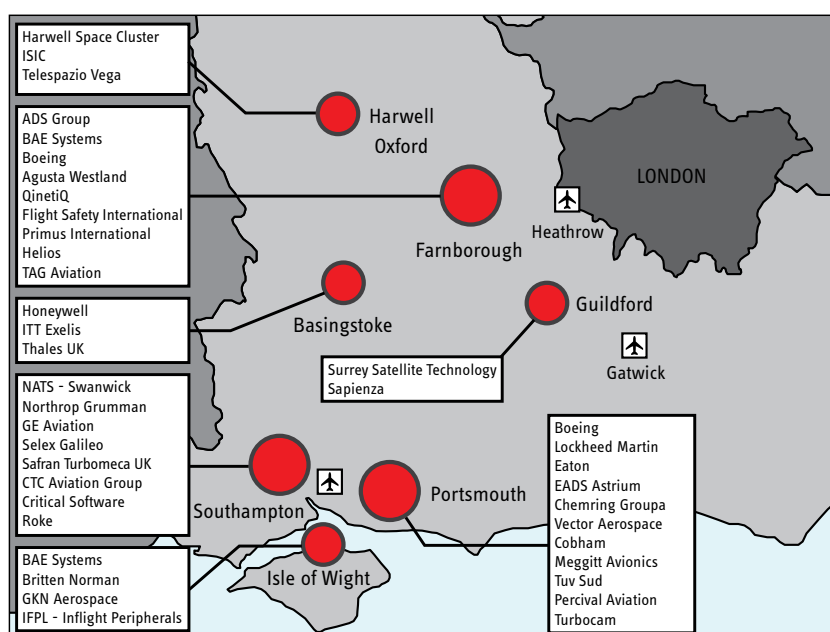


Britten – Norman – Islander

## 6.0 REGIONAL COMPETITIVE ADVANTAGES - AEROSPACE

The Solent LEP or South Hampshire area is a part of the wider South East of England economic region (SE). The South East (SE) is one of the most dynamic and successful regional economies in the UK.

- The South East regional economy is valued at £187 billion (GVA - 2010)
- Over 500 aerospace businesses, including large, multinational primes and niche, technically-advanced suppliers. Across aerospace and defence it is thought the South East has nearly 1,000 business units.
- A high-tech research intensive economy supported by 24 universities and a regional R&D spend of £3.4 billion
- A highly educated workforce of 4.3m with over 93,000 aerospace and defence specialists
- The UK's leading business aviation airport at Farnborough, as well as three international airports; London Heathrow, London Gatwick and Southampton
- An excellent motorway network and high speed rail access to London and Continental Europe.



Seven of the top ten global aerospace companies have a presence in South Hampshire and Isle of Wight including:

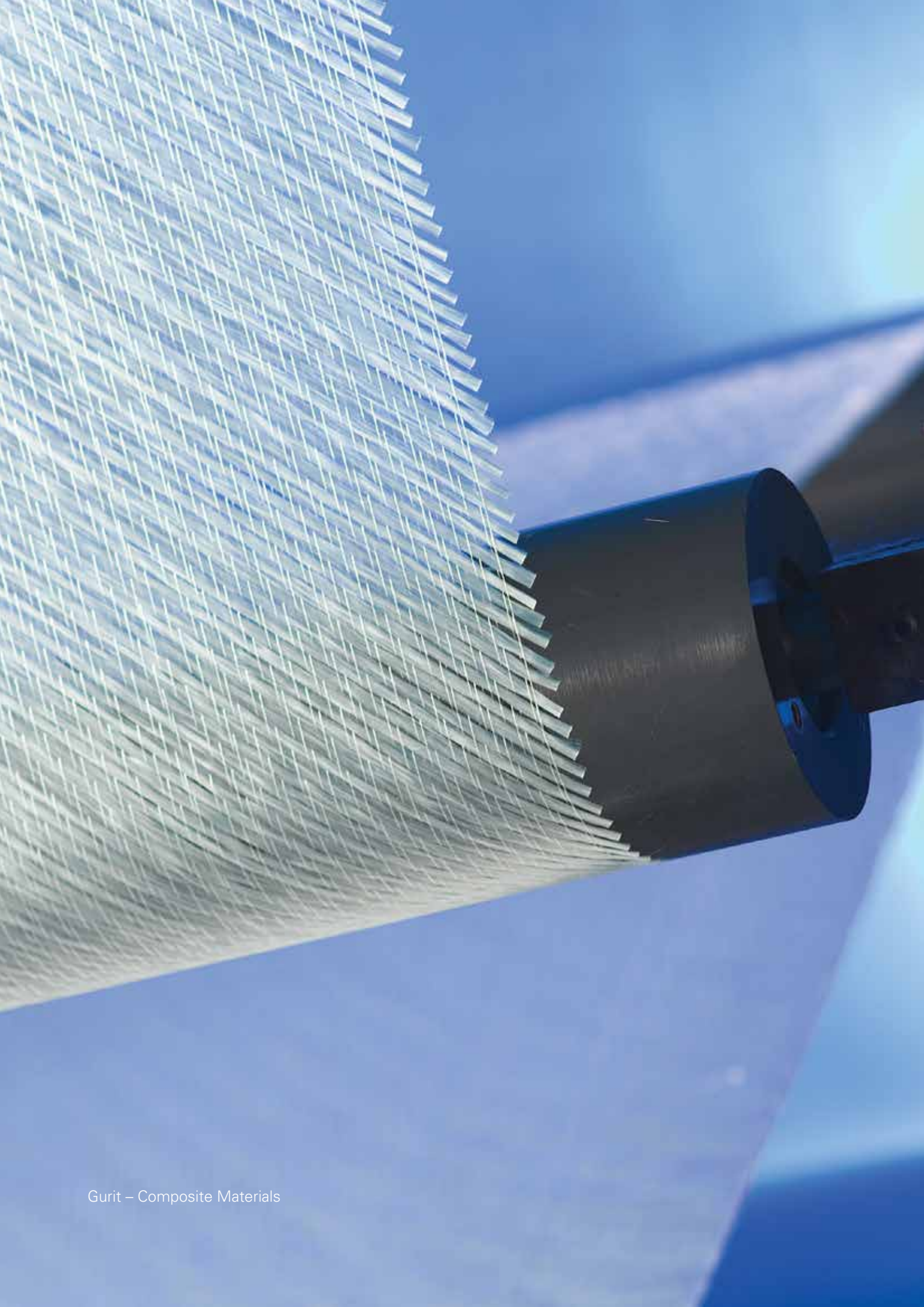
- EADS (Europe) - Astrium & Paradigm Services Limited
- Boeing (USA) - Boeing Integrated Defence Systems
- Lockheed Martin (USA) - LMUK Integrated Systems & Information Systems
- Northrop Grumman (USA) - Northrop Grumman Mission Systems Europe
- BAE Systems (UK) - Global Combat Systems, Radar manufacturing
- United Technologies (USA) – Sikorsky, Composite Technology & UTC
- Finmeccanica (Italy) - SELEX Galileo

Of the top thirty global aerospace companies fifteen are represented in the north and south Hampshire including: GE Aviation (USA), Safran (France), L-3 Communications (USA), Honeywell International (USA) and UTC Aerospace Systems – Goodrich (USA).

Upper-tier aerospace companies need to have confidence in the quality of UK suppliers if the UK is to feature strongly in future original equipment manufacturer (OEM) sourcing decisions.

Collaboration and alignment between suppliers and top tier companies is also needed, including greater risk-sharing. A mix of coordination, collaboration, clustering and/or consolidation is required across the UK supply chain.





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## 7.0 MARKET OPPORTUNITIES

The global market outlook for aerospace presents some major opportunities for UK based aerospace companies.

Fuelled by population rises, increasing urbanisation, greater market access and economic growth (especially in emerging nations), as well as environmentally efficient technologies, the global civil aerospace market is entering a period of unparalleled demand.

Strong performance by the civil sector helped to offset a difficult year for the defence aerospace industry which has been buffeted by on-going austerity measures as many governments have been forced to cut defence expenditure and prioritise deficit reduction plans.

‘UK Aerospace revenue totalled £24.2bn in 2011, representing a 4.7% increase over the previous year. However, real growth of civil aerospace revenue increased by 5.1% over 2010 whilst defence aerospace, in a difficult year, produced limited growth. In addition, real growth of civil aerospace exports was up a commendable 13% over 2010 whilst defence aerospace exports were also up by 5% over the previous year.’ Robin Southwell (Chief Executive, EADS UK)

The product groups in which South Hampshire and the Isle of Wight are in a strong position include:

- Advanced wing components, design and integration (composites)
- Advanced aero-engines components (composites)
- Advanced rotor blade design (composites)
- Advanced aero-engine fan blades and fan-cases (composite)
- Space systems, payloads and satellites
- Earth-space communication systems
- Avionics and electronic systems
- Advanced information and communications systems
- Systems integration
- Global combat and radar systems
- Integrated power management systems
- In-flight entertainment systems
- Tactical communication and surveillance systems
- Flight simulation, full service airline and pilot training
- Helicopter MRO
- Military aircraft test and evaluation
- Unmanned Aerial Vehicles (UAV)
- Autonomous learning, networks and systems
- Aero acoustics and vibration (Airbus Aircraft Noise Technology Centre)
- Aircraft interiors
- Mechanical and aeronautical engineering
- Computational engineering and design (Rolls Royce Technology Centre)
- Advanced aerospace engineering
- Air traffic control services (civil & military)

The use of composite materials is wide spread across South Hampshire and Isle of Wight by a wide variety of aerospace, defence, marine and transport companies. The sub-region has a real specialism in this area and so as demand for more fuel efficient aircraft grows, at a forecast annual average rate of 7% over the next decade, we are well placed.

An example of activity in this area is the GKN Aerospace Composites Research Centre on the Isle of Wight. This state-of-the-art research facility for advanced composites manufacturing is part of the National Composites Network and is therefore technical resource available to the wider aerospace industry.

South Hampshire and Isle of Wight also has strengths in satellite applications (Earth observation, communications, navigation and positioning) and in space science instrumentation.

Aerospace services, including maintenance, repair and overhaul (MRO), data management and systems integration are other key capabilities, along with the areas particular strength in high-tech research and development.





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## 8.0 WORLD CLASS RESEARCH, EVALUATION AND KNOWLEDGE ASSETS

‘UK Universities are some of the best in the world by any measure and are an integral part of the skills and innovation supply chain to International business. Business-University interaction forms a rich landscape of activity which includes the education of highly skilled graduates, applied research in advanced technologies, bespoke collaborative degree programmes, ‘science’ park developments, enterprise education, support for entrepreneurs, industry-sector foundation degrees, higher-level apprenticeships, collaborative research and in-company development of skills for all employees. Close collaboration, partnership and understanding are needed to ensure that this part of the supply chain is sustainable, resilient and has the quality and strength to survive and grow.’

**Mr Allan E. Cook CBE**  
**Chairman of Atkins and SELEX Galileo**



[www.southampton.ac.uk/aerospace](http://www.southampton.ac.uk/aerospace)

The University of Southampton has established a world-leading reputation for education and research in all areas of the aerospace industry ranging from aerodynamics and aero acoustics to aircraft noise and vibration.

In light of this broad spectrum of expertise the University has just launched a new aerospace sector team - Aerospace Southampton. Aerospace Southampton will expand the University's involvement in the sector and broaden research collaborations with key players, such as BAE Systems, EADS and the Ministry of Defence.

In addition industry executives from leading commercial and industry organisations will support Aerospace Southampton through a new advisory board.

"The creation of Aerospace Southampton will build on our global reputation and excellent links with industry will help us to maximise future opportunities for our research." (Don Spalinger - Director of Research and Innovation Services)

A number of world-renowned research groups and facilities which support aerospace-related projects are based at the University of Southampton including:

- Southampton Wind Tunnels ([www.windtunnel.soton.ac.uk](http://www.windtunnel.soton.ac.uk))
- The Institute of Sound and Vibration Research ([www.isvr.co.uk](http://www.isvr.co.uk))
- The Airbus Aircraft Noise Technology Centre ([www.southampton.ac.uk/antc/](http://www.southampton.ac.uk/antc/))
- The Rolls-Royce University Technology Centres ([www.southampton.ac.uk/ses/research/centres](http://www.southampton.ac.uk/ses/research/centres))

The four key areas of activity at the University are as follows:

- Civil Aviation and Aeronautics
- Space and Astronautics
- Defence Science and Technology
- Cyber Security

Aerospace industry project partners include:

- Airbus
- BAE Systems
- Boeing
- Bombardier
- British Airways
- Defence Science and Technology Laboratory (DSTL)
- QinetiQ
- Rolls-Royce
- Thales Alenia Space

The University of Portsmouth has over 23,000 students and of those over 3,000 are overseas students.

The University is very research-active and as part of the national Research Assessment Exercise (RAE 2008) on average 40% of the research undertaken was rated internationally excellent or world-leading. 78% of all research was internationally recognised. Research areas include Mechanical, Aeronautical and Manufacturing Engineering.

The University's Faculty of Technology has various centres of research excellence however two of the key centres are based in the School of Engineering.

The School of Engineering has 50 members of academic staff, 40 research staff and is well equipped with some of the start-of-the-art experimental and computational facilities.

Centres of Excellence including:

- Mechanical Behaviour of Materials (MBM) Laboratory
- Regional Centre for Manufacturing and Innovation (RCMI)

Across the centres of research excellence research and knowledge transfer activities are then split into two divisions:

Intelligent and Networked Systems, including -

- Mobile and Fixed Earth-Space Communication
- Active Noise Control
- Embedded and Distributed Autonomous Intelligent Systems

Mechanical Engineering, including -

- Aerospace Materials ([www.port.ac.uk/research/mbm/aerospace/](http://www.port.ac.uk/research/mbm/aerospace/))
- Manufacturing Engineering
- Polymers and Composites ([www.port.ac.uk/research/composites/](http://www.port.ac.uk/research/composites/))

The University has over 30 years of experience of working with a wide range of internationally recognised aerospace businesses, including:

- Rolls Royce
- the US Air Force
- MOD
- QinetiQ
- EADS - Astrium
- Westland Aerostructures

The School of Engineering is also home to the Regional Centre for Manufacturing and Innovation (RCMI) which offers expertise in various areas including:

- Rapid prototyping
- Rapid tooling
- Composites and materials performance
- Computer Aided Design and Analysis
- Manufacturing processes and strategy



[www.qinetiq.com](http://www.qinetiq.com)

QinetiQ is a multinational defence technology company headquartered in Farnborough, Hampshire.

The company formed from the privatised part of the former UK government agency, Defence Evaluation and Research Agency (DERA) in 2001. Since its formation it has made numerous acquisitions, primarily United States-based companies.

QinetiQ is one of the top 10 largest UK employers of science and engineering graduates and has expertise in the aerospace, defence and security sectors.

Technical, engineering and software-enabled services provided to customers include:

- Test & Evaluation
- Aerospace Engineering
- Technical and Information Services
- Facility Management and Range Design
- Training

QinetiQ has been working with Aerospace customers for decades particularly in supporting customers to deploy new technologies in both the military and civil arenas.

Current areas of work include:

- Using simulation to support your decision making and training
- Designing and integrating avionics systems for every requirement
- Providing airworthiness support, analysis, testing and solutions
- Offering a fully-managed Unmanned Aerial Vehicle service
- Developing ground-breaking acoustic solutions for aerospace

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## MOD BOSCOMBE DOWN

[www.raf.mod.uk/organisation/boscombedown.cfm](http://www.raf.mod.uk/organisation/boscombedown.cfm)

QinetiQ also operates and manages the near-by MOD aircraft testing site at Boscombe Down, Wiltshire. The site was formerly known as RAF Boscombe Down and since 1939 has evaluated aircraft for the British armed forces.

Today Boscombe Down is the tri-service home of military aircraft Test & Evaluation. Some of the units on-site include:

### **Air Warfare Centre (AWC)**

A tri-service organization dedicated to the Test and Evaluation of military air systems. Working in collaboration with QinetiQ, AWC Boscombe Down ensures that the aircraft and airborne weapon systems operated by the UK's Armed Forces are safe and effective in role.

### **Empire Test Pilots' School (ETPS)**

Trains and delivers world class flight test professionals in order to support the Test and Evaluation requirements of the UK MOD and other foreign governments and civil organisations.

### **Fast Jet Test Squadron (FJTS)**

Conducts all aspects of Test and Evaluation in support of current and future 1 Group platforms, their associated equipment and weapon systems and Defence advanced research programmes.

### **Rotary Wing Test and Evaluation Squadron (RWTS)**

Conducts all aspects of Test and Evaluation in support of current and future rotary wing platforms, their associated equipment, weapon systems and Defence related advanced research programmes.

### **Southampton University Air Squadron (SUAS)**

Formed in 1941 under the Oxford Wing to provide pre-service training to 'air minded' undergraduates destined for the RAF. Membership comprises students studying a variety of subjects with the common theme of academic achievement.





[www.nats.co.uk/](http://www.nats.co.uk/)

NATS provides air traffic navigation services to aircraft flying through UK controlled airspace and at several UK and international airports.

NATS has been a driving force in the aviation industry since the organisation was started as National Air Traffic Control Services (NATCS) in 1962. NATS is an undoubted market leader in a market for air traffic management services is changing in response to the long-term growth in aviation.

NATS has a vision: "To be the acknowledged global leader in innovative air traffic solutions and airport performance."

NATS has expertise and the resource to work with clients worldwide. The organisations pivotal role in the development of UK air traffic has enabled it to create a proven range of products and services.

Services are now grouped into six distinct areas.

- Airports – innovative ATC and airport optimisation services
- Airspace – safe and efficient en route services
- Consultancy – a window to the range of services and capabilities we can offer
- Defence – joint and integrated civil and military air traffic control services
- Engineering – efficient delivery of technology and infrastructure projects
- Information - helping move from people-based to data-based operations

## **8.1 CASE STUDY – THE ALADDIN PROJECT ([WWW.ALADDINPROJECT.ORG](http://WWW.ALADDINPROJECT.ORG))**

ALADDIN was a multi-million pound multi-disciplinary research project funded by a BAE Systems and the Engineering and Physical Sciences Research Council (EPSRC). It involved a leading research group from the University of Southampton, School of Electronics and Computer Science.

The project, the title of which stands for Autonomous Learning Agents for Decentralised Data and Information Networks, topped the aerospace and defence category at the 2011 The Engineer - Technology & Innovation Awards.

A team of researchers from BAE and the universities of Southampton, Oxford, Bristol and Imperial College London spent five years developing a series new data collection and processing algorithms that allow different computer systems to co-ordinate their actions without a central authority.

BAE Systems is now in a position to integrate the technology to improve the effectiveness and efficiency of a range of applications. One such example is to create new systems to enable the cooperative control of Unmanned Aerial Vehicles (UAV's).

"To have competitive products and capabilities for future global markets we need to initiate the research now, with the best academics."

Professor John Murphy (Head of University Partnerships, BAE Systems)



Solent Enterprise Zone at Daedulus

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## 9.0 KEY AEROSPACE ASSETS IN SOUTH HAMPSHIRE AND ISLE OF WIGHT



[www.solentez.co.uk/site/hca/home](http://www.solentez.co.uk/site/hca/home)

The Solent Enterprise Zone, Daedalus is one of 24 zones set-up nationally to support local economic and employment growth.

By 2026, it is estimated that 3,500 jobs will be created within the Enterprise Zone (700 by 2015).

The focus is on advanced manufacturing within the marine, defence and aerospace sectors. This builds on some of the existing strengths of the South Hampshire and Isle of Wight area and the local skills base.

The site is a large ex-military site between Portsmouth & Southampton at Lee-on-the-Solent. Fareham and Gosport are within 10 minutes drive and the nearest junctions of the M27 are junctions 9 and 11.

The site is around 200ha in size and the Enterprise Zone area covers 82 ha, with the remainder being an operational airfield that is being commissioned for wider business use.



[www.nats.co.uk/](http://www.nats.co.uk/)

NATS' Swanwick Centre, near Fareham in Hampshire is one of the largest and most advanced air traffic control centres in the world.

The £632m Swanwick facility controls 200,000 square miles of airspace above England and Wales, among the busiest and most complex in the world. "Safety is NATS' first and foremost priority but they also aim to provide their service in an efficient and cost-effective way," explains Richard Deakin, Chief Executive Officer, NATS. "The operation we have at the Swanwick Centre houses en route and terminal control operation rooms for the skies above Wales and much of southern England. It is the ideal positioning for our responsibility of tower and approach airport traffic services at 15 of the UK's major airports."

"NATS is also one the Hampshire's major employers with over 2500 staff based at the Swanwick Centre, our business demands high skills and the county's workforce delivers them."



[www.ctcwings.com/](http://www.ctcwings.com/)

CTC Aviation Group Limited is a global leader in aviation training and management solutions and the Group's Administration and main aircrew training facility is based at Nursling, Southampton.

The global airline industry is looking for over 45,000 pilots over the next 20 years. 'CTC Wings' is the company's flagship, integrated training programme for tomorrow's airline pilots.

This state-of-the art airline training centre at Nursling is one of the largest in Europe and completely dedicated to training airline pilots. The facility currently houses a range of resources utilised by airlines and aircrew worldwide including:

- 2 Airbus A320 Full Flight Simulators
- 1 Boeing 737NG Full Flight Simulator
- 2 Boeing 737 (-300 and -700) Flight Training Devices
- 2 Airbus VFD (Virtual Flight Decks)

The facility is equipped to support both web and computer based training as well as traditional instructor-led courses from ATPL theory through to Examiner standardisation. Additionally, the CAA has approved this facility as an ATPL theoretical knowledge Examination Centre.



## 10.0 AEROSPACE COMPANIES IN SOUTH HAMPSHIRE AND ISLE OF WIGHT

The aerospace supply chain broadly divides as follows.

The design, manufacturing and assembly function controlled by primes such as Boeing and EADS.

Primes are supported by Tier 1 suppliers who are responsible for providing them with equipments and systems such as engines, flight control systems and fuel systems. The Tier 1 market comprises players such as Rolls-Royce (engines), GE Aviation (engines), and BAE or GKN (wings) who generally have exclusive supplier contracts with OEMs.

As previously mentioned 7 out of the top 10 global aerospace companies have a presence in South Hampshire and Isle of Wight, however the depth of the industry presence runs much deeper.

 <p>www.astrium.eads.net/</p> <p>Portsmouth, Hampshire, PO3 5PU</p>	<p>As a wholly owned subsidiary of EADS, the global leader in aerospace and defence, Astrium is the leading space company in Europe and number three worldwide.</p> <p>At Portsmouth 1,400 employees are involved in the design, build and test of:</p> <ul style="list-style-type: none"> <li>- advanced payloads for mobile and military communications satellites</li> <li>- world-leading Earth observation payloads with advanced space-borne radars</li> <li>- sensors and scientific instruments</li> <li>- payloads for the Galileo navigation system satellites</li> </ul>
 <p>www.boeing.co.uk</p> <p>Boeing Integrated Defence Systems, Gosport, Hampshire, PO13 0AA</p>	<p>Boeing is a leading global aerospace company &amp; aircraft manufacturer. Capabilities also include rotorcraft, electronic systems, missiles, satellites, launch vehicles and advanced information and communication systems.</p> <ul style="list-style-type: none"> <li>- TLCS Programme</li> <li>- System integrator</li> <li>- Through-life capability management</li> <li>- Through-life technology management</li> </ul>
 <p>www.lockheedmartin.co.uk</p> <p>Langstone Technology Park, Building 7000, Havant, Hampshire PO9 1SA</p> <p>Fusion 1, Solent Business Park Whiteley, Fareham PO15 7AD</p>	<p>Lockheed Martin UK, part of the Lockheed Martin Corporation, is a leader in systems integration, working on major programmes spanning the aerospace, defence and civil sectors.</p> <ul style="list-style-type: none"> <li>- Integrated Systems</li> <li>- Information Systems and Global Services</li> </ul>

 <p>www.northropgrumman.com/uk</p> <p>Northrop Grumman Mission Systems Europe</p> <p>Leander House, Solent Business Park, Fareham, Hampshire, PO15 7AZ</p>	<p>Northrop Grumman is a leading global security company providing innovative systems, products and solutions in aerospace, electronics, information systems, and technical services.</p> <ul style="list-style-type: none"> <li>- Mission planning</li> <li>- Tactical data links</li> <li>- Battle space awareness solutions</li> <li>- Integration of complex, mission-enabling systems</li> </ul>
 <p>www.baesystems.com</p> <p>Farnborough, Hampshire, GU14 6YU Cowes, Isle of Wight, PO31 8PF Portsmouth (Airport), Hampshire, PO3 5PQ</p>	<p>BAE Systems is the UK's largest manufacturing employer and is also the biggest employer of professional engineers.</p> <ul style="list-style-type: none"> <li>- Head office, Farnborough</li> <li>- Radar programmes and manufacturing</li> <li>- Global Combat Systems</li> <li>- Manufacturing, Training Systems, Radar programmes</li> </ul>
 <p>www.geaviation.com</p> <p>Southampton, Hampshire SO31 4NF</p>	<p>GE Aviation is the world's leading producer of large and small jet engines for commercial and military aircraft.</p> <ul style="list-style-type: none"> <li>- Avionic systems</li> <li>- Mechanical systems</li> <li>- Integrated power systems</li> <li>- Integrated logistics management</li> <li>- Performance-based navigation</li> </ul>
 <p>www.selexgalileo.com</p> <p>Millbrook Industrial Estate, Southampton, Hampshire SO15 0LG Portsmouth Foundry, Portsmouth, Hampshire, PO3 5RT</p>	<p>SELEX Galileo, a Finmeccanica company, is a leader in defence electronics markets, with a distinctive strength in airborne mission critical systems.</p> <ul style="list-style-type: none"> <li>- Infrared Detectors</li> <li>- Precision Casting</li> </ul>
 <p>www.turbomeca.co.uk</p> <p>Concorde Way, Segensworth North, Fareham, Hampshire PO15 5RL</p>	<p>Safran is a world-class manufacturer of aircraft, rocket engines, propulsion systems, and aircraft equipment.</p> <p>Turbomeca produces a complete range of turbine engines for civil helicopters, and provides comprehensive support services.</p> <p>Gosport is home to the UK's leading helicopter engine repair and overhaul facility.</p> <ul style="list-style-type: none"> <li>- Helicopter Engine Repair and Overhaul</li> </ul>



 <p>www.cobham.com</p> <p>Cobham TCS Limited trading as Cobham Tactical Communications and Surveillance.</p> <p>Cobham Centre Solent, Hampshire, PO15 7AB</p>	<p>Cobham is an international company engaged in the development and delivery of leading edge aerospace and defence technology and systems.</p> <ul style="list-style-type: none"> <li>- wireless communication technologies</li> <li>- components designed for integration into robotic and airborne platforms</li> </ul>
 <p>www.meggitt-avionics.co.uk</p> <p>Fareham, Hampshire, PO15 5SH</p>	<p>Meggitt Avionics, designs and manufactures flight deck avionics, data acquisition systems, instrumentation and life support equipment.</p> <ul style="list-style-type: none"> <li>- Flight Deck Avionics</li> <li>- Data Acquisition Systems</li> <li>- Electro-mechanical Instruments</li> </ul>
 <p>www.gkn.com</p> <p>East Cowes, Isle of Wight PO32 6RA Portsmouth, Hampshire PO3 5PE</p>	<p>GKN is a global engineering group, with its technologies and products are at the heart of aircraft produced by leading global manufacturers.</p> <ul style="list-style-type: none"> <li>- Manufacture of Composite Parts</li> <li>- Fuel Systems</li> <li>- Emergency Flotation Systems</li> </ul>
 <p>www.eaton.com</p> <p>Fuel Systems Division, Fareham, Hampshire, PO14 4QA</p> <p>Power &amp; Motion Control Division, Havant, Hampshire, PO9 3QL</p>	<p>Eaton is a world leader and premier innovator in aerospace. Eaton designs, manufactures and integrates the industry's most advanced products and technologies for:</p> <ul style="list-style-type: none"> <li>- Cockpit Interface</li> <li>- Electrical Power Management</li> <li>- Engine Solutions</li> <li>- Fuel Systems</li> <li>- Hydraulic Systems</li> <li>- Motion Control</li> </ul>
 <p>www.sikorsky.com</p> <p>Composite Technology Limited Thruxton Airfield, Andover, Hampshire, SP11 8PW.</p>	<p>Sikorsky is a world leader in helicopter design, manufacture and service.</p> <p>Composite Technology Limited (CTL) is part of Helicopter Support Inc, a wholly owned subsidiary of Sikorsky Helicopters.</p> <ul style="list-style-type: none"> <li>- helicopter rotor blades repair</li> </ul>


 <p>www.vectoraerospace.com</p> <p>Vector Aerospace is an EADS (Eurocopter) Group Company</p> <p>Helicopter Services, Fareham Road, Gosport, Hampshire PO13 0AA</p>	<p>Vector Aerospace is an industry-leading provider of maintenance, repair and overhaul (MRO) services for fixed wing and rotary wing aircraft operators around the globe.</p> <ul style="list-style-type: none"> <li>- Repair</li> <li>- Maintenance</li> <li>- Refurbishment</li> <li>- Conversion / Modification</li> </ul>
 <p>www.britten-norman.com</p> <p>Bembridge Airport, Isle of Wight PO35 5PR</p> <p>Daedalus Airfield, Lee-on-the-Solent, Hampshire, PO13 9YA</p>	<p>Britten-Norman is the UK's only privately owned civil aircraft manufacturer and has produced in excess of 1,250 aircraft, the majority of which remain in daily use with some 500 companies in over 120 countries.</p> <ul style="list-style-type: none"> <li>- Manufacture and maintain the Islander and Defender short take-off and landing (STOL) aircraft.</li> </ul>
<p>www.percival-aviation.com/home/</p> <p>Percival Aviation, Fareham, PO15 5TT</p>	<p>Percival Aviation is positioned as one of the leading independently owned aircraft interiors companies in the UK. The company has become a specialist in the design, engineering and manufacture of aircraft interior products.</p>
 <p>www.ctcaviation.com</p> <p>Nursling, Southampton, Hampshire SO16 0YS</p> <p>Dibden Manor, Dibden, Southampton, Hampshire - SO45 5TD</p>	<p>CTC Aviation is the global leader for full service airline training for 50 client airlines around the world.</p> <p>CTC Aviation trains 2,000 airline pilots each year utilizing state-of-the-art Airbus and Boeing simulators, hi-tech computer and web based training facilities.</p> <ul style="list-style-type: none"> <li>- Aircrew selection &amp; supply</li> <li>- Advanced courses for experienced pilots</li> <li>- Cadet pilot training</li> <li>- Aircrew training</li> </ul>
 <p>www.portav.com</p> <p>Portsmouth Aviation, Airport Service Road, Portsmouth, Hampshire - PO3 5PF</p>	<p>Portsmouth Aviation is a multi-service manufacturing and engineering company providing a comprehensive Mechanical and Aerospace engineering design services.</p> <ul style="list-style-type: none"> <li>- Conventional &amp; CNC milling</li> <li>- Metal treatment &amp; finishing</li> <li>- Turning &amp; grinding metals</li> <li>- Computer Aided Design</li> <li>- Non-Destructive &amp; Destructive Testing</li> </ul>



 <p>www.ifpl.com</p> <p>IFPL, Newport, Isle of Wight, PO30 4JY</p>	<p>IFPL is an award winning international product development business specialising in tailored engineering solutions for the Global Inflight Entertainment (IFE) Industry.</p> <p>IFPL produces:</p> <ul style="list-style-type: none"> <li>- Audio jacks</li> <li>- Data ports</li> <li>- Docking stations</li> </ul>
 <p>www.follandaerotech.com</p> <p>Folland Aerotech, Fareham, Hampshire PO15 5SH</p>	<p>Folland Aerotech specialises in aerospace design &amp; analysis.</p> <p>Involved in some of the largest multi-national aerospace programmes in the world, heading up stress analysis &amp; design work.</p> <p>Undertakings have included:</p> <ul style="list-style-type: none"> <li>- Development of high lift components (flaps and tracks)</li> <li>- Wing skin/Stringer (CFRP)</li> <li>- Payload rocket fairings</li> <li>- Satellite structural analysis</li> </ul>

South Hampshire and Isle of Wight is also home to a number of businesses which are not solely engaged in the aerospace sector. These businesses operate across various industry sectors including aerospace.

 <p>www.tuvps.co.uk</p> <p>Head Office (Octagon House), Fareham, Hampshire, PO15 5RL</p>	<p>TÜV SÜD employs over 16,000 people across 600 locations and is one of the leading technical service companies in the world.</p> <p>TÜV SÜD Product Service is a leading international expert in providing testing, certification, training &amp; consultancy services to various industries including aerospace.</p> <p>Clients include:</p> <ul style="list-style-type: none"> <li>- Airbus</li> <li>- SAAB</li> <li>- Boeing</li> </ul>
 <p>www.turbocam.com</p> <p>Fareham, Hampshire, PO15 6JR</p>	<p>Turbocam International's specialty is machining bladed turbo-machinery parts including impellers, nozzles and turbine blades.</p> <ul style="list-style-type: none"> <li>- Supplier and manufacturer of aerospace components</li> <li>- Prototype production</li> </ul>

 <p>www.critical-software.co.uk</p> <p>Southampton Science Park, Chilworth, Southampton, SO16 7NS</p>	<p>Critical Software develops avionics software architecture and provides systems testing and certification for the civil and military aerospace industries.</p> <ul style="list-style-type: none"> <li>- Avionics Software Design</li> <li>- System Testing</li> <li>- Certification</li> </ul>
 <p>www.chemring.co.uk</p> <p>Chemring Group PLC (Head Office) Fareham, Hampshire, PO15 7AF</p>	<p>Chemring is a global group that specialises in the manufacture of energetic material products, countermeasures &amp; counter-IED solutions.</p> <p>Aerospace or defence related products:</p> <ul style="list-style-type: none"> <li>- Electronic &amp; expendable countermeasures for air systems</li> <li>- Pyrotechnics &amp; pyro-mechanisms for military &amp; space applications</li> </ul>
 <p>www.roke.co.uk</p> <p>Roke Manor Research Romsey, Hampshire, SO51 0ZN</p>	<p>Roke Manor Research is a world-class electronics engineering business providing contract research, product development &amp; manufacturing services.</p> <p>Since 2010 Roke has been a wholly owned subsidiary of the Chemring Group plc.</p> <ul style="list-style-type: none"> <li>- Military technologies</li> <li>- Transport solutions</li> <li>- Air traffic management</li> </ul>
 <p>www.waspswitches.co.uk</p> <p>WASP, Havant, Hampshire, PO9 1QY</p>	<p>Wessex Advanced Switching Products Limited (WASP) is a privately owned, specialist electronics and engineering company.</p> <p>With an extensive range of innovative products for the aerospace industry, including:</p> <ul style="list-style-type: none"> <li>- Passenger Control Units</li> <li>- Seat Control Units</li> <li>- LCD based touch screen control systems</li> </ul>
 <p>www.deltair.co.uk</p> <p>Deltair Airmotive, Waterlooville, Hampshire PO7 7XG</p>	<p>Deltair Airmotive specialises in aircraft engine and propeller overhaul or repair.</p> <p>The company has built a reputation for excellence over many years.</p>

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## 11.0 TESTIMONIALS

Richard Peckham, Business Development Director UK, EADS Astrium

"Our location in South Hampshire provides excellent communication links, being close to international ports, Southampton and Heathrow airports and the Motorway network. A further advantage is the local presence of strong Universities and Higher Education Institutes."

Ralph Seidler, Director of Manufacturing, Siemens Magnet Technology

"We have found the main advantages of being here to be the links to academic resources, the presence of other companies developing a similar technology, which has grown into a local supply chain and the good access to major transport routes (M40/ M4)."

Stan Lewry, Folland Aerotech

"It was felt a design/analysis office to suit our needs would be best located on the central South Coast of England, where the key skills are available, and at a location with ease of access to major motorways and Southampton International Airport."



Sapphire Aviation based at Solent Enterprise Zone at Daedulus



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## 12.0 AEROSPACE SECTOR SKILLS & TRAINING

SEMTA is the Sector Skills Council for the Advanced Manufacturing and Engineering sectors which includes the Aerospace sector. This organisation is responsible for the skills interests of employers in the Engineering and Science sectors which can be summarised as covering:

- Leading-edge technology industries (Aerospace, Electronics and Other engineering activities)
- Science industries (R&D in natural sciences and engineering)
- Mature engineering industries (Metals, Metal products, Mechanical equipment, Electrical equipment and parts of Other Transport Equipment)

Based on the Annual Business Inquiry 2008, there are approximately 132,000 establishments in the SEMTA footprint in the UK, employing just over 1.7 million people.

Leading-Edge Technology industries employ 47% (815,500) and Science Industries employ 6% (109,300) of the total UK footprint. In both cases the largest number of employees in these sectors is in South East England with 15% of Leading-Edge Technology industries and 28% of Science Industries employment.

### **(SEMTA - UK Sector Skills Assessment December 2010)**

The largest occupational categories within SEMTA sectors are skilled trades/craft (21%), managers (20%) and professionals (20%)

The proportion of employees in higher-skilled occupations such as managers, professionals and associate professional / technicians is higher for SEMTA sectors (52%) than all sectors in the UK (43%).

The changing qualifications profile of the SEMTA workforce is evidence of the increasing demand for higher-level skills. From 2000-2009 the overall proportion of SEMTA workforce in England with NVQ Level 4 plus qualifications increased from 29% to 36%.

For SEMTA sectors in the UK there is expected to be a net requirement for over 136,000 people with intermediate and higher level qualifications (NVQ Level 3 plus or equivalent) over the period 2010 to 2016.

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#### Recruitment, Skills & Training Needs (% of Aerospace Establishments)

- 35% recruit 16yr olds from school (25% across all sectors).
- 61% recruit 17-18yr olds from school/college (47% for all sectors).
- 62% recruit direct from University/HEI (44% for all sectors).
- 11% reported vacancies (12% for all sectors).
- 68% formally assess employee skills gaps (58% for all sectors).
- 46% have a training plan (44% for all sectors).
- 47% have a budget for training (37% for all sectors).
- 20% of establishments in the aerospace sector have staff undertaking Apprenticeships.

**Source: NESS 2009. (England Only)**

The Airbus UK apprenticeship programme includes:

- 'Undergraduate Apprenticeship' leading to a BEng (Hon) Aeronautical Engineering
- Higher Supply Chain Logistics Apprenticeship
- Craft Apprenticeship

"Employers such as Airbus recognise the value of Apprenticeships. The Airbus 'Undergraduate Apprenticeship' will allow apprentices to develop high level technical skills and knowledge, following different progression routes that link with professional accreditation. It provides an exciting alternative to traditional higher education approaches."

Lynn Tomkins, UK Operations Director, Semta

#### **'Futures Day' at the 2012 Farnborough International Airshow**

This event offered an insight into the joint commitment by the Government and aerospace industry to fund 500 Masters level degree places in aerospace engineering.

In addition 10,000 young people aged 11 to 21 from UK schools, universities and youth groups were offered an insight into what a possible future career could hold in the UK aerospace industry.

Graduates and apprentices from various companies were present so that the students could ask about how they got their jobs and what they do at work.

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## 13.0 AEROSPACE INDUSTRY SUPPORT INFRASTRUCTURE

The Aerospace Growth Partnership was set up in 2010 for government and industry to work together on ensuring the UK remains an attractive location for the sector.

The Aerospace Growth Partnership's vision is to:

- Ensure that the UK retains its position as Europe's largest aerospace manufacturer and keeps its position as second only to the US.
- Support UK companies at all levels of the supply chain to broaden and diversify their global customer base.



ADS, the UK's trade organisation advancing Aero-Space, Defence and Security industries with offices in England, Scotland, Northern Ireland, France and India. New offices are planned in China and the Middle East.

Together with its regional partners, ADS represents over 2,600 companies.

Everything that ADS does is driven by understanding the issues, opportunities and priorities of the four sectors which ADS represents:

- Aerospace
- Defence
- Security
- Space

ADS hosts' the Aerospace & Defence Knowledge Transfer Network and is a member of the Aerospace and Defence Industries Association of Europe. The Aerospace & Defence Knowledge Transfer Network has formal responsibility for developing and monitoring the delivery of National Aerospace Technology Strategy.

The regional office is based at Farnborough.



[www.fac.org.uk](http://www.fac.org.uk)

The Farnborough Aerospace Consortium (FAC) has a mission - To support the aerospace, defence, space and security sectors in order to enhance the economic return created by its members.

FAC is the Industry Trade Association for the aerospace and defence sector in the south east of England. The consortium is a Not for Profit Company Limited by Guarantee, set-up specifically to support the interests of its private sector, business membership.

The membership network is very strong with over 250 paying members with broad representation of 1st and 2nd tier companies from across the supply chain. Members include Boeing, BAE Systems, Thales, GKN, Cobham, Selex, Rockwell Collins...

The consortium is lead by a representative company Board with BAE Systems, Thales, Cobham, TUV, L3COM, Barnbrook Systems and PFW currently represented.

The consortium also boasts a well established and extensive network of national and international partnerships and as such is regarded as an established part of national aerospace industry support infrastructure with a track record for the local delivery of national strategies.



[www.semta.org.uk](http://www.semta.org.uk)

SEMTA is the Sector Skills Council for the Advanced Manufacturing and Engineering sectors which includes the Aerospace sector. SEMTA works to address skills needs with-in the Aerospace sector by providing expert support to improve performance and growth. SEMTA works directly with employers, partners and training providers to shape skills and training solutions that meet employers' needs.

The organisation works with 132,000 companies and 1.7 million-strong workforce that make up UK advanced manufacturing and engineering which includes the following sub-sectors:

- Aerospace
- Automotive
- Composites
- Electrical
- Electronics
- Renewables
- Science

SEMTA is industry led with expert knowledge of skills management and development which means the organisation is well placed to support businesses, whatever their size, to get the best return on their training investment.

SEMTA assists businesses to become more competitive via:

- Accessing funding and finding the right quality training
- Supporting strategic workforce planning
- Recruitment and training of apprentices and graduates
- Developing supply chain capability



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## 14.0 EVENTS - FARNBOROUGH INTERNATIONAL AIR-SHOW (FIA)

Farnborough International Ltd (FIL) organises the biennial trade exhibition and airshow at Farnborough which is a major global event for the aerospace, defence and space industries.

FIL also operates the Farnborough International Venue and Events centre, and act as international consultants for civil, defence and business aviation events including Bahrain International Air-show and India Aviation.

The 48th Farnborough International Airshow was officially opened by The Prime Minister, David Cameron who pledged the Government's "unstinting, unrelenting, unflagging commitment to making Britain the best place in the world for aerospace businesses to invest, design, manufacture and export."

At the event orders and commitments announced totalled US\$72 billion for 758 aircraft a 53% increase on order figures in 2010. 1506 Exhibitors from 39 countries took part with representation right across the supply-chain.

FIA 2012 in numbers:

- US\$72 billion of confirmed orders and commitments for 758 aircraft
- 109,000 trade visitors over five days
- Total number of visitors over the FIA period - 209,000
- 1506 exhibitors from 39 countries
- 126,933 sq m of exhibition space
- 21 international pavilions and eight national pavilions
- 80 military delegations from 46 countries
- 13 civil delegations from 10 countries
- 153 aircraft in static and flying displays
- On 'Futures Day' businesses hosted over 7500 young people

## 15.0 HOW WE CAN HELP

The Solent Local Enterprise Partnership (Solent LEP) and Partnership for Urban South Hampshire (PUSH) inward investment team represents the city regions of Portsmouth and Southampton and the Isle of Wight.

The team provides a comprehensive service for businesses considering relocating or expanding or investors seeking commercial development opportunities.

### **We can:**

- Identify suitable business premises or sites and arrange viewings with commercial agents
- Provide tailored information on skills, industry strengths, the local economy and living in the region
- Identify grants and funding and provide support with recruitment and training
- Organise tours showcasing the region's offer to investors and businesses
- Make introductions to local business networks and local authority contacts

We recognise that each business has individual needs and can provide tailored information to assist with your relocation and / or development decisions. Please do not hesitate to contact the inward investment team if you require further assistance or information.

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## 16.0 CONTACT DETAILS

**For more assistance, please contact the inward investment team:**

Isle of Wight	Matthew Hill Isle of Wight Council Economic Development Tel: +44 (0) 1983 821000 info@isleofwight.co.uk www.investinisleofwight.co.uk
Portsmouth City Region	Ian Bridges Portsmouth City Council Business Team Tel: +44 (0) 23 9284 1074 info@invest-in-portsmouth.co.uk www.investinportsmouth.co.uk
Southampton City Region	Jeff Walters Southampton City Council Economic Development Tel: +44 (0)23 8083 2256 info@investinsouthampton.co.uk www.investinsouthampton.co.uk

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**[www.investinisleofwight.co.uk](http://www.investinisleofwight.co.uk)**  
**[www.investinportsmouth.co.uk](http://www.investinportsmouth.co.uk)**  
**[www.investinsouthampton.co.uk](http://www.investinsouthampton.co.uk)**

