



midlands aerospace alliance

MIDLANDS

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MAGAZINE



A350 ROLLS TOWARD FIRST FLIGHT

AEROSPACE MILESTONES FOR 2013, PAGE 4



WHAT THE FUTURE HOLDS

Preview of MAA
conference 2013 – P8

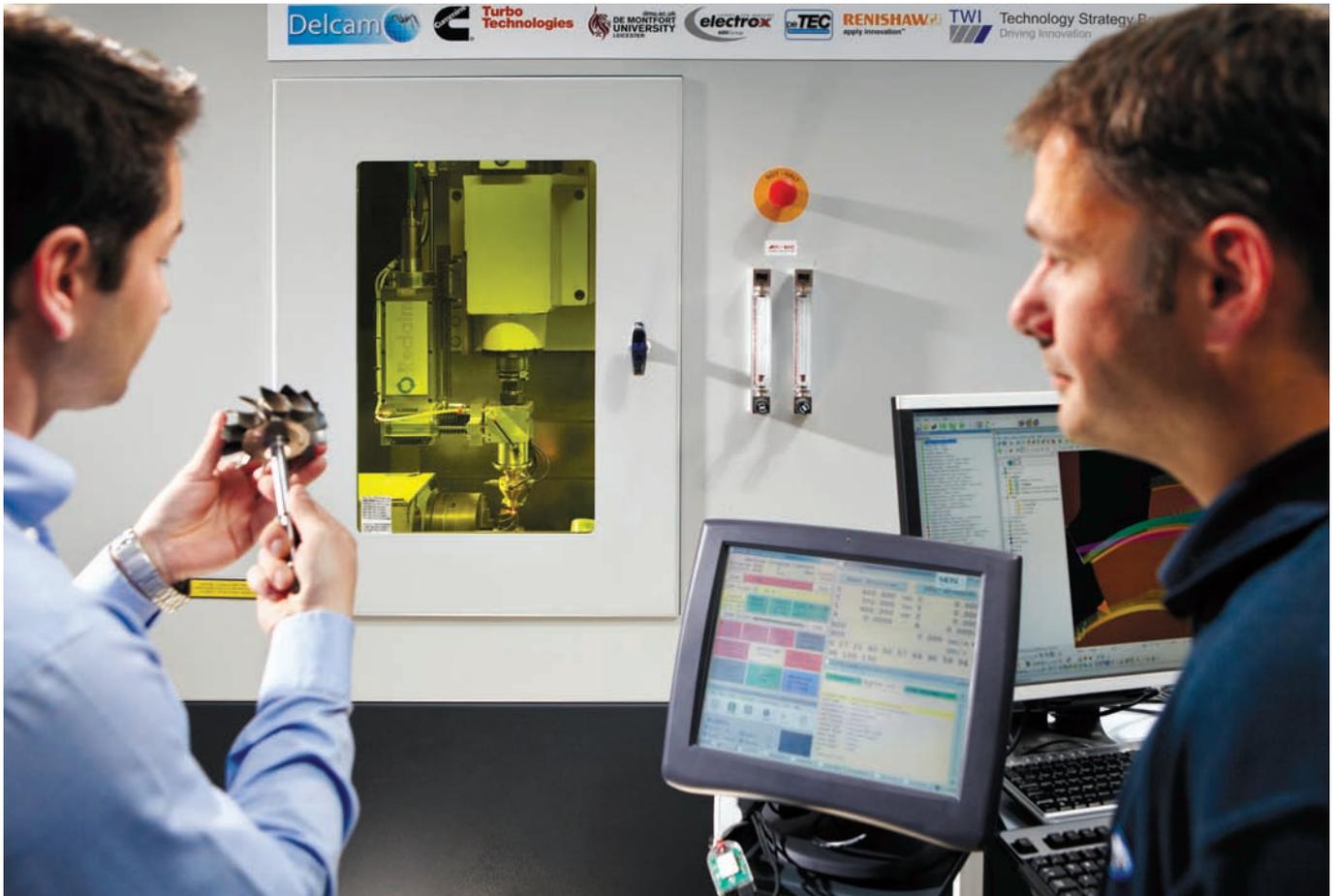
DOING BUSINESS WITH FRANCE

Midlands firms open
aerospace doors – P6



VIEW FROM WESTMINSTER

Wide support for UK
aerospace strategy – P12



The RECLAIM process is expected to improve component repair efficiency in the aerospace, defence and power industries.

MTC INNOVATION PROMISES NEW LIFE FOR WORN PARTS

↙ A revolutionary re-manufacturing process developed at the Manufacturing Technology Centre (MTC) in Coventry holds the potential of huge savings for UK industry.

The new process enables worn components such as turbine blades that otherwise would be scrapped to be re-engineered to a consistently high quality. When launched, the innovation is expected to improve the efficiency of the aerospace, defence and power industries in particular.

“There is no doubt that this technology – a world first for the MTC and its partners – will transform the whole process of

“This technology – a world first – will transform the whole process of re-manufacturing.”

re-manufacturing,” said MTC operations director Leigh Carnes.

Called RECLAIM, the process combines laser cladding, automated inspection and high-speed machining in a single, fully integrated re-manufacturing cell.

As well as repairing damaged and worn parts, the system can be used to manufacture new complex metal parts,

upgrade obsolete parts and reconfigure standard parts for low-volume applications.

Development work is being carried out under the auspices of the Technology Strategy Board, which contributed more than half of the million-pound-plus research and development costs.

Patents are being filed and a marketing company formed while MTC engineers and their collaborative partners put the final touches to the technology.



www.the-mtc.org

TRENT DEALS LANDED IN JAPAN

Midlands-based Rolls-Royce has signed a contract with Japan's Skymark Airlines worth £620m, at list prices, to supply and support Trent 900 engines to power six Airbus A380 aircraft. The aircraft are expected to enter service in 2014.

Skymark has also signed a letter of intent for Trent 700 engines to power up to 10 leased Airbus A330s. They will be the first A330s in Skymark's fleet and will also enter into service in 2014.

Skymark is a new customer for Rolls-Royce and the only carrier in Japan to select both the Trent 900 and Trent 700.



KMF maintenance engineer Glynn Preston joins the young team from Our Lady and St Werburgh's Catholic Primary School around its 'rolling chassis'.

YOUNGSTERS IN THE DRIVER'S SEAT

INITIATIVE SEEKS TO RAISE INTEREST AMONG CHILDREN IN PURSUING A CAREER IN INDUSTRIAL ENGINEERING

MAA member KMF is hoping to inspire the next generation of engineers by turning teams of 9-11 year olds into racing car constructors.

The Newcastle-under-Lyme sub-contract sheet metal specialist is funding and supporting local Year 6 pupils to build electric cars as part of the IET Formula Goblin Project organised by the Greenpower Education Trust.

It is also funding Formula 24 kits for groups of 11-16 year olds.

KMF sees the project as an extension of its Young Engineer of the Year Awards. "We're hoping to encourage even younger students

to consider engineering as a career option," says managing director Gareth Higgins.

The firm buys the car kits which participating schools then assemble in its apprentice workshop, with support from KMF staff. Pupils design their own bodywork.

Training Centre manager Jenny Conlon says KMF hopes to help a number of schools to take part in this Greenpower challenge.

The first participants plan to test their creations in races against other UK schools during 2013.

 www.kmf.co.uk

NEWS

ON THE WEB

CLICK THROUGH TO THE MAA WEBSITE FOR CURRENT NEWS ON MEMBERS' ACTIVITIES:

→ Derby-based Paul Fabrications adds key structures capabilities to new owner AGC Aerospace & Defense.

→ Winbro Group Technologies acquires flexible grinding centre (FGC) technology.

→ Atlas Composites introduces composite processing control in its manufacturing facility, in partnership with ASC Process Systems.

→ MAA member TEC successfully completes its 100th SC21 engagement and diagnostic with UK aerospace and defence suppliers.

→ Boeing 787 capacity is being built into a new Monarch Aircraft Engineering MRO facility at Birmingham airport.



www.midlandsaerospace.org.uk/news

GLOBAL MARKETS POWER DELCAM RECORD

Birmingham-based Delcam set a one-month record in December 2012 for orders of software licences and maintenance contracts. Orders increased by more than 10% over the December 2011 figure, completing a record quarter to end the year.

The growth came from the company's established markets in the automotive and aerospace industries as well as newer markets, such as the dental sector.

International sales, notably through offices and agents in Beijing, Philadelphia, Italy and Korea, were significantly improved.

Meanwhile, 2012 was the best year yet for Delcam UK since it became a separate division of the company in 1996. Software sales were up almost 40%.

 www.delcam.com



UK general manager Steve Creron (second from left) welcomes the Olympic torch onto the Delcam stand at the manufacturing technologies exhibition, MACH 2012.

SIX TO WATCH IN 2013

Midlands Aerospace looks at six new global aircraft and engine programmes set to make the headlines this year – each with a big impact on the Midlands supply chain.



Aerospace looks to be heading for another year of solid growth in 2013, despite the continuing gloom in the global economy.

As well as the rising deliveries of existing models, attention is focused on the progress of six new programmes toward milestone events during the year.

The Midlands supply chain community is watching all six with varying degrees of vested interest. An obvious highlight is the Airbus A350 XWB, each powered by a pair of Derby-made Rolls-Royce engines and their Aero Engine Controls engine management systems.

Less obvious is the impact of GE's declining role as a regional jet engine maker – engines with little or no Midlands content – displaced by its fellow American Pratt & Whitney and its 'Purepower' geared turbofan (GTF), now specified on five new aircraft families. A number of core Midlands first-tier engine suppliers are on board the GTF, including UTAS Actuation Systems (thrust reverser actuation), UTAS Marston Aerospace and Meggitt Control Systems (both heat exchangers) and ITP Engines UK (engine modules). UTAS Actuation Systems, with its

A number of core Midlands first-tier engine suppliers are on board the Pratt & Whitney geared turbofan programme.



The first flight-test A350 XWB rolls across the tarmac at Toulouse for further ground testing.

high-lift wing devices, has a part to play on all four of the 2013 milestone aircraft – and that helps explain the Wolverhampton company's growth in recent years.

In December, Airbus's first A350 XWB destined for flight test was rolled from the main assembly hall in Toulouse, where it had undergone a successful electrical power-on of its entire fuselage and wings, to begin several weeks of comprehensive functional system testing. Airbus says further production and certification/development tests will follow before the aircraft is painted and its two Rolls-Royce Trent engines are installed in preparation for the aircraft's first flight in mid-2013.

Airbus has 582 firm orders and 202 options for the A350, the majority for the mid-sized 300-seat -900 variant. Launch customer Qatar Airways is expected to take delivery of its first example in the first half of 2014.

Bombardier describes the CSeries as the "only 100% newly designed aircraft" aimed

at the market for longer-range 100-149 seat aircraft. The Montreal-based airframer has orders and options for 392 aircraft.

Final assembly of its first flight-test example, the small CS100 variant, is proceeding at the company's plant in Mirabel, Quebec, in preparation for first flight at the end of June. Entry into service with launch customer Lufthansa is planned for mid-2014, while the larger CS300 which will enter service later in 2014.

Meanwhile, the Mitsubishi Regional Jet (MRJ) which was to have flown in the second quarter of 2012, is now scheduled for first flight in the last quarter of 2013. Mitsubishi Aircraft explained the delay by saying it needed to "confirm respective fabrication processes" and "provide sufficient time for technical studies". The knock-on effect on entry into service means launch customer All Nippon Airways will receive its first aircraft in mid-2015. Latest figures show Mitsubishi has



The A400M enters service with the French air force in the second quarter of 2013.



First flight of the CSeries is scheduled for the end of June. Entry into service with launch customer Lufthansa is expected in mid-2014.

Bombardier describes the CSeries jetliner as the 'only 100% newly designed aircraft' for its market.



Final assembly of the first PW1100G engine, the model that will power the A320neo.

Future issues of Midlands Aerospace will look in depth at how Midlands suppliers are winning business on global aircraft programmes.

The Airbus Military A400M programme paved the way for other aircraft in the extensive use of carbon fibre composites.

165 firm orders for the MRJ and 160 options. MRJ engine supplier Pratt & Whitney (P&W) has rescheduled development of the aircraft's PW1200G version of the 'Purepower' GTF to make best use of the delay. Development was originally running alongside the PW1500G version for the Bombardier CSeries, but has been rescheduled to follow that larger engine, benefiting from the cumulative experience of P&W's engineers.

The GTF is an important engine for the Midlands with a number of the region's first-tier suppliers providing their specialist technologies to the American engine-maker.

P&W launched the GTF programme in 2008, claiming the new engine design would be 10-15% more fuel efficient than engines used at the time on regional and single-aisle jets. Since then, five aircraft makers – Airbus (A320neo), Brazil's Embraer and Irkut of Russia alongside Bombardier and Mitsubishi Aircraft – have selected six variants of the GTF for major twinjet programmes.

By last autumn, the engine family had undergone more than 3,700 hours and 11,000 cycles of full testing and the PW1500G was nearing certification. Final versions are expected to be in full production this year.

Just pipping these big civil airliner milestones, another programme marking a big event this year is the Airbus Military A400M Atlas airlifter, which is expected to enter service with the French air force in the second quarter of the year.

Conceived 10 years ago and flown for the first time in 2008, the A400M programme paved the way for other aircraft – among them the Boeing 787, CSeries and A350 – in the extensive use of carbon fibre composites. Airbus developed many new assembly processes for the Atlas programme which were then adapted for the A350.

PROGRAMME	FIRM ORDERS (DEC 2012)	2013 MILESTONES
Airbus A400M	174	Service entry (France) Q2 2013
Airbus A350 WXB	582	First flight Q2 2013
Rolls-Royce Trent XWB engine	582 Airbus A350 twinjets	First flight on test aircraft mid-year
Bombardier CSeries	148	First flight June 2013
P&W 'Purepower' GTF engine	148 (Bombardier CSeries) 176 (Mitsubishi MRJ) 574 (A320neo)	First flight on test aircraft (CSeries, MRJ)
Mitsubishi Regional Jet (MRJ)	165	First flight late 2013



ENTENTE COMMERCIAL

FRANCE IS A MARKET OF GREAT POTENTIAL FOR UK AEROSPACE SUPPLIERS BUT IS OFTEN THOUGHT OF AS CLOSED TO IMPORTS. UKTI'S ALASTAIR ROBERTS OFFERS ADVICE ON HOW TO WIN WORK.

Any British company that can offer reliability, guaranteed quality, and competitive prices will be taken very seriously in France.

In 2011, France's aerospace industry achieved a turnover of £32bn, 77% of which was exported, making it one of the largest in the world. It grew more than 8% annually between 2004 and 2011.

French aerospace companies are keen to protect themselves against exchange-rate fluctuations, and they favour geographical proximity. On both counts, the UK supply chain is in a good position.

GIFAS, the French aerospace trade association, identifies five areas of growth:

- Aerodynamics and intelligent materials;
- Improved aero-engines incorporating ceramic composites, ultra high bypass ratios;
- Extension of electric systems and actuators;



Alastair Roberts is head of UKTI aerospace operations in France.

- Data links, modular avionics and automation of flight management systems;
- ATC improvements for fuel economy.

It is easy to fall into the trap of thinking France is just too difficult a market to bother with. It may seem impenetrable, it may seem complex, it may seem sewn up and protected – in short it may seem very French. Nevertheless, it is massive; and the evidence (see case studies, opposite) shows that perseverance pays off.

 Contact: alastair.roberts@fco.gov.uk

ALASTAIR'S ADVICE

- Do negotiate deadlines.
- Don't rush. You're unlikely to get a final decision during the meeting.
- Avoid familiarity and personal small talk. Use Monsieur/Madame and their surname until invited to do otherwise.
- Some difference of opinion is good – the French appreciate a debate.
- Final decisions are usually made only by the most senior members of the business.
- Being 10-15 minutes late is generally acceptable.

BUILDING ON B2B EVENT

Following the success of 2012's special 'meet the buyer' event in Paris between French aerospace giant Safran and MAA members (pictured below), the MAA and UKTI plan to build on relationships with more such events.

"Excellent", "No time-wasting", "The best B2B event I've attended" were among comments from the 10 MAA members (including Gardner Group, see right) who between them held 50 one-to-one meetings with senior Safran Group procurement managers at the special MAA/Safran day organised with Alastair

Roberts at the British Embassy in Paris.

Safran Group companies, which include Snecma (aero engines), Aircelle (engine nacelles) and Messier-Bugatti-Dowty (landing gear, wheels and brakes) are an excellent fit as customers with the Midlands supply chain because the latter's competencies focus on aero engines and mechanical and electronic control systems.





Members make good use of the facilities on the MAA stand at the 2011 Paris airshow.

PARIS WITH THE MAA



Exhibition space on the MAA's stand at the Paris Le Bourget Airshow 2013 is filling up fast, with only a few of the 20 pods remaining.

Marketing manager Emma Burgess said previous exhibitors like Paul Fabrications (see right) have been quick to book but she has also reserved space for new MAA Paris exhibitors like Delcam (see right).

"Interest is high, particularly after our strong showing last year at Farnborough and our foray into ILA Berlin," said Emma. "Exhibiting makes good business sense and Paris has always been a highlight for MAA members seeking business in France and internationally."

The Paris international airshow at Le Bourget runs from 17-23 June. One of the largest and most prestigious global events for the aerospace industry for more than a century, the show remains a highlight in the industry's economic cycle.

It has also been a successful event for



50th INTERNATIONAL PARIS AIR SHOW LE BOURGET | 50^e SALON INTERNATIONAL DE L'AÉRONAUTIQUE ET DE L'ESPACE PARIS LE BOURGET

MAA members who pick up important appointments, leads and contacts.

Exhibiting with the MAA allows you to concentrate on marketing your business; with minimum input you can turn up to the event to be welcomed by a highly visual and professional stand that presents your brand the way you want it.



For information please contact emma.burgess@midlandsaerospace.org.uk or call 024 7643 0250.

GARDNER'S FOOTPRINT IN FRANCE

Derby-based Gardner Group gained a footprint in the important French aerospace sector when its major investor acquired the French company Group Airia SAS and its subsidiary Financière Maz'air SAS.

A new parent company, Gardner Aerospace Holdings, was created as an umbrella for the British and French groups.

Gardner chairman

Nick Sanders described the move as strategically significant for Gardner as well as "a major step in the overall consolidation of the aerospace components manufacturing sector".

"Gardner's key customers have, for some time, been looking to suppliers in the sector to create scale and recognise that common ownership is the ultimate

solution," he said. "The creation of this new Anglo-French company is a real first for the sector and is testament to the vision of both groups and their customers."

The new group has annual sales of about £100 million and more than 1,300 employees, making it one of Europe's largest independent suppliers of aerospace detail parts.

REFERENCE KNOWN BRANDS: DELCAM

Manufacturing software specialist Delcam counts France as its fourth-largest market in Europe, with clients including Messier-Bugatti and Creuzet Aéronautique.

Marketing manager Peter Dickin offers three suggestions to Midlands companies vying for French contracts:

- Appoint a good local representative;
- Localise all your marketing collateral;
- Provide internationally known or French customer references.

"The French are patriotic but not fundamentally different to most nationalities we work with," he says.

Good local representation and support is important. Look for a French agent who will provide good, sector-specific translation capabilities.

If you don't have customer references in France, the best ones to offer are international companies such as Airbus and Rolls-Royce or those like Messier-Dowty with French ownership.

"The French have a high regard for intellectual property," says Peter, "which is a benefit of doing business there."

DEFINE TARGETS AND FOCUS: PAUL FABS

Paul Fabrications took the strategic decision to get approved by France's leading Safran Group, specifically engine-maker Snecma. Business Development manager Kevin Dexter said it took some time finding the right contact. Alastair Roberts, UKTI's aerospace expert in France, provided key assistance, he said. "The UKTI country experts provide a cost effective solution that you can rely on."

KEVIN'S TOP TIPS:

- 1 Define your strategy: focus on specific targets. Don't try the shotgun approach.
- 2 Use UKTI assistance and build up a good relationship with them.
- 3 Understand differences in French law, specifically export / import regulations regarding military work if that is your business.
- 4 Be patient (but persistent) as other issues may be foremost in your target's mind.
- 5 If your target company doesn't have English-speaking suppliers, ensure your presentation material is translated into French, and that you know what it means.

AEROSPACE FUTURES, A



The Midlands Aerospace Alliance organised 21 meetings for members last year, on subjects as varied as new technologies, new market opportunities and how to improve productivity in the supply chain. But the MAA annual conference on 20 February will be a first for us: an all-day conference designed to give our member companies the knowledge they need to plan for the future.

We are therefore looking forward to welcoming some of our industry's top leaders and best analysts as keynote speakers at the prestigious Rolls-Royce Learning and Career Development Centre in Derby on 20 February. We are delighted that several of our member companies have agreed to sponsor the conference. And the agenda allows us to share the thinking of MAA directors and the MAA team itself with our member companies. It looks like an exciting day.

I very much look forward to meeting you there.

Clive Snowdon

Chairman
Midlands Aerospace Alliance

Agenda

08.00 - 09.00	Registration, refreshments and networking
MORNING	Aerospace futures
	Keynote presentations on what the future holds for aerospace supply chain companies: → Pernille Boisen, Chief Procurement Officer, Rolls-Royce. → Marcus Bryson, Chief Executive Officer, GKN Aerospace.
	Refreshments and networking
	Your Big Questions discussed
	Ask the questions you need answered at this roundtable on supply chain trends, featuring industry keynote speakers and Midlands aerospace industry experts.
	Lunch and networking
AFTERNOON	Get your company ready for the future
	The MAA experts who work in-depth with aerospace companies on a day-to-day basis give you their top tips for success.
	Aerospace forecasts
	Forecasting the short and medium term with distinguished industry analysts: → Clive Lewis of Achieving the Difference. → David Hygate of TeamSAI. → Richard Aboulafia of Teal Consulting Group.
	Q & A for the analysts
	Ask your questions about where the industry is going to our expert analyst panel.
16.00	Conference close and networking



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AEROSPACE FORECASTS

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sector, providing engines for applications ranging in scale from the smallest of helicopters to the giant of the skies, the Airbus A380. As the second-largest provider of defence aero-engine products

and services, Rolls-Royce powers aircraft in all sectors: transport, combat, reconnaissance, training, helicopters and unmanned aerial vehicles. Rolls-Royce employs 40,000 people around the world.

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Paul Fabrications designs and manufactures complex, high precision, fabricated and machined parts and assemblies for the aerospace, industrial power and nuclear power industries. We are now part of a global enterprise, AGC Aerospace & Defense, which offers a broad array of innovative products and specialised services. Paul Fabrications proudly supports the Midlands Aerospace Alliance as a Silver Sponsor of the 2013 MAA Conference.



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THE MAA CONFERENCE 2013

OUR KEYNOTE SPEAKERS

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Rolls-Royce future vision

Understanding Rolls-Royce thinking about key trends in the global aerospace industry is critically important for UK suppliers looking to maintain or extend relationships with the Derby engine-maker.

Conference delegates will be listening closely to Pernille Boisen, Chief Procurement Officer of Rolls-Royce, when she offers a Rolls-Royce view on the long-term implications for UK aerospace suppliers of developments in the industry.

Boisen will analyse what growth in the Middle East and Asia means for UK supply opportunities, and how Rolls-Royce sees the industry managing the current rapid increase in production volumes.

UK suppliers will be looking for clues as to the key strategic assets they need to develop – such as management capability,



Pernille Boisen, Chief Procurement Officer, Rolls-Royce.

access to new technology, sub-tier supply chain management – and how they should set about doing so to play their part in the supply chains of the future.

Boisen joined Rolls-Royce in 2010 as executive vice-president – Indirect Purchasing after eight years with Novo Nordisk in Denmark. She has also held significant purchasing, finance and business development roles within Carlsberg Breweries and the Danish Broadcasting Corporation.

Implications of AGP

Government has committed itself to working in the closest partnership with industry seen in the UK since the 1970s, through the Aerospace Growth Partnership (AGP).

The AGP is led on the business side by Marcus Bryson, President and Chief Executive GKN Aerospace, and on the government side by business secretary Vince Cable and business minister Michael Fallon.

Marcus is superbly positioned to explain how he sees the new political landscape and its implications for the UK aerospace industry:

→ What will the emerging policy environment mean in practice for aerospace businesses?



Marcus Bryson, President and CEO, GKN Aerospace.

→ How will a successful AGP affect decision-making – investing in the UK especially – by the global aerospace primes and systems suppliers?

→ Just as importantly, what will it mean for the supply chain and how are suppliers expected to benefit from it?

→ What challenges do UK aerospace companies, large and small, need to address if they are to take full advantage of the opportunities the AGP framework offers?

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The industry's view of future opportunities



Each year, the ADS Export Focus Group produces a UK Aerospace International Strategy which identifies major opportunities for UK Aerospace in international markets and recommends how these opportunities should be approached.

Clive Lewis, managing partner of Achieving the Difference, provided data

analysis and facilitation of the strategy development. He will be giving conference delegates a preview of the strategy before its launch at UKTI's Exchange event in April.

The 2013 strategy will for the first time include opportunities for Maintenance, Repair and Overhaul (MRO) and Military Upgrade programmes, thanks to data contributed by ICF SH&E and

Flightglobal respectively.

Although existing/traditional aerospace markets will remain important for UK industry, Lewis says the 2013 strategy will reveal how high-growth markets such as China, India and Brazil will drive global civil aerospace growth, and how significant military upgrade opportunities are spread through the USA,



Clive Lewis, managing partner, Achieving the Difference.

Europe, Russia, Middle East and Asia.

Testing times ahead



With a massive backlog of aircraft due to be delivered over the next 8-10 years and a growing body of new product development, the aerospace supply chain is set for some testing times.

Added to this is the continuing growth of low-cost carriers, increasing numbers of aircraft retirements and a growing appetite for operating leases rather than outright ownership. All of these issues combine to change the market dynamics for suppliers.

David Hygate is director Europe of TeamSAI, an aviation consultancy specialising in strategic forecasting and analysis, and technical outsourcing and



David Hygate, director Europe, TeamSAI.

process improvement.

Each year TeamSAI produces a global forecast covering all aspects of the commercial MRO business – aircraft, engines and components. David will be sharing the current 10-year outlook together with a look at some of the more near-term critical issues for suppliers.

'Finance drives forecasting'



The forecasting industry has been transformed over the last decade because industrialists at every level have become "prisoners of third-party finance", says Richard Aboulafia, senior analyst with the Teal Group.

As a chief executive, "you might not feel you have a use for a forecast, but you're beholden to someone who demands it."

Internal and external finance personnel are "passionately concerned" with the next three years, he says. On the other hand, supply chain companies looking at a new programme launch will be more interested in the 20-year market forecast for that class of aircraft, setting long-term



Richard Aboulafia, vice-president, Teal Group.

planning and short-term financial considerations on a potential collision course.

He welcomes the opportunity to give supply chain companies an outline of future scenarios. "My objective is to try and tell them what programmes to get on, what kind of future they're likely to face."

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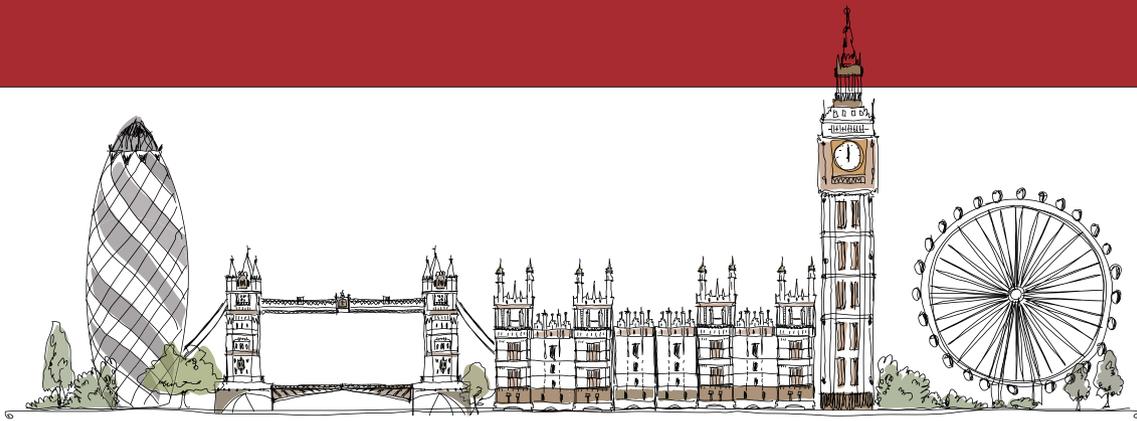


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VIEW FROM WESTMINSTER

“We must all work together to secure the future of the British aerospace industry”

*Why the Aerospace Growth Partnership points the way to the future,
by Emma Reynolds MP (Wolverhampton North East).*



The UK's aerospace industry is tremendously successful. It is an industry that we should be incredibly proud of. It is the largest aerospace industry in Europe, and globally we are second only to the US. In addition, huge growth in aerospace is expected, particularly in the commercial sector.

Despite the vitality and success of the British aerospace industry, we must not be complacent about its future. The global competition that the British aerospace industry faces today is more fierce than ever before. The competition it will face in the years to come will be of a different scale and magnitude to previous years.

Continuity of government policy towards UK aerospace is therefore imperative. We need cross-party agreement about the strategic importance of the industry and about the government's role in supporting it. Although two and a half years seems a long time in politics, it is a short time scale for the aerospace industry. It is important to the industry that it receives ongoing support from whichever party – or parties – happens to win the next election in 2015.

Some of the steps this government has already taken have been positive, and I especially welcome the Aerospace Growth Partnership, which provides an excellent framework for cooperation between the government and the industry.



As Labour MP for Wolverhampton North East, Emma Reynolds has a cluster of important Midlands aerospace companies, including UTC Actuation Systems and UTC Marston Aerospace, in her constituency and another – Moog Aircraft Group – on the border. She re-established the All Party Parliamentary Group (APPG) on aerospace and chairs the group. She is also Shadow Minister for Europe.

I have had positive feedback from industry representatives and the Midlands Aerospace Alliance about the AGP and welcome the announcement that the government is providing £60 million to fund a new world-class centre in the UK for aerodynamics.

Unfortunately, there is reason to believe that other countries, including those in our own neighbourhood, have been much more astute and generous in supporting aerospace R&D. So we need to continue to work hard together to ensure that our

competitors do not simply out-compete us if their governments give them far greater support for essential R&D.

Another issue that aerospace companies in my constituency and representatives of the industry always raise when I meet them is that of skills. Given the existing shortage of engineers, technicians and skilled workers and the sheer growth of the industry, there may well be a cliff edge in five years' time. Moreover, engineering graduates unfortunately do not always go into engineering jobs. There is a real concern in the aerospace industry that it will not be able to maintain its global position if more engineers are not attracted to it in the years to come.

The big names, such as Airbus, do not have trouble finding apprentices. However, further down the supply chain, it is often difficult to attract apprentices and a sufficient number of skilled workers.

We must not be complacent about the future of the British aerospace industry. Although we should continue to celebrate its successes, we must be alive to the growing and fierce global competition that it faces today and in the future. Again, I want to stress that cross-party support for the industry and long-term continuity are incredibly important, given that it is such a long-term industry.



www.emmareynolds.org.uk

THE MAA IN NUMB3R5



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MEMBERS ON MAA BOARD OR WORKING GROUPS

 Numbers can give us great insights into our organisations. Handled with care, they are indispensable management tools. How does the Midlands Aerospace Alliance stack up? We don't possess a databank of aerospace organisations to benchmark the MAA. But the MAA's raw statistics are revealing themselves.

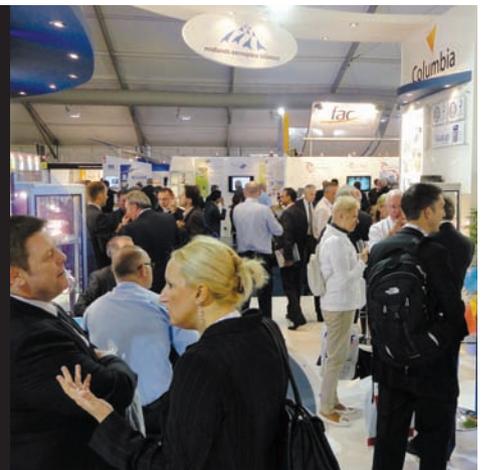
More than one in four MAA members have exhibited with the body at an aerospace trade show. In fact, of 36 regional or national aerospace organisations at Farnborough 2012, the MAA came second measured by number of companies on its stand.

Now try some quick calculations yourself with numbers on this page. Fully one in six members helps the MAA as a director or through a working group. Is this why the MAA is so lean – with only five staff? Or is it thanks to some impressive database technology, as revealed by the website statistics? There's always room for improvement but someone seems to be doing something right.

 To learn more about the MAA, visit www.midlandsaerospace.org.uk

16,402
visits to MAA website per year

81
DIFFERENT EXHIBITORS ON MAA STANDS AT INTERNATIONAL AIRSHOWS OVER PAST DECADE



85,644 **MAA WEBSITE PAGES VIEWED PER YEAR**

>1,000
PARTICIPANTS AT MAA EVENTS IN 2012

5 MAA full-time-equivalent staff



21
MAA events held in 2012

295 MAA MEMBER ORGANISATIONS

PROFILE

VIEW FROM THE BOARDROOM

“You have to change to get a new outcome”

MAA board member Annette Rothwell, vice-president Supply Chain at Aero Engine Controls, finds common ground between automotive and aerospace.

Q. WAS AEROSPACE ON YOUR RADAR WHEN YOU STARTED OUT?

A. Absolutely not. I never set out to have a career in aerospace, but I love it. My first job 29 years ago was in power generation, with ABB. I had a commercial apprenticeship and did college courses in the evening. It was a big organisation, the right place to be and a really good start to my career.

I realised, after working in lots of departments over six years, that I liked procurement, especially buying – the negotiations and logistics; making sure you could get parts in on time.

I moved to GKN Composites and then into GKN Automotive, where I spent about 10 years working my way up through the procurement team to business unit lead. GKN part-owned Westland Helicopters at the time, and that's where I got into aerospace. I was with Goodrich Engine Controls when the Aero Engine Controls joint venture was set up four years ago. Now we're completely owned by Rolls-Royce.

Q. WHAT HAS INDUSTRY TAUGHT YOU THAT BUSINESS SCHOOL WOULDN'T?

A. Leadership and people skills mainly. Both are hard to learn from a textbook, and come with age and experience. The procurement function, especially in aerospace where amounts and volumes aren't huge, is all about relationship management. You don't learn that in a lecture hall.

Q. WHAT KEY LESSONS CAN AEROSPACE LEARN FROM AUTOMOTIVE?

A. Interestingly, everyone told me that



I wouldn't be able to bring my automotive background into aerospace. It's the exact opposite. I think that historically automotive has been ahead of the game in certain respects but aerospace now has a great opportunity to get the challenges of delivery, quality and cost right. It's a growing market with lots of future business opportunities, so it's a great place to be.

Q. WHO WAS YOUR MOST SIGNIFICANT INFLUENCE?

A. My automotive MD when I was young told me anything is possible, and I absolutely believe it. You need a 'can do' attitude and then it's just a matter of finding out how.

“I absolutely believe anything is possible. You need a ‘can do’ attitude and then it’s just a matter of finding out how to achieve your goal.”

Q. HOW CAN COMPANIES BENEFIT MOST FROM THEIR TRADE ASSOCIATIONS?

A. The most obvious way is by learning from each other. In aerospace you can be a customer, supplier and partner simultaneously. We're used to working with each other as competitors; we need to learn to work together to find the common objective in the most efficient manner. That's where trade associations can help.

Q. WHY IS A UK-WIDE SUPPLY CHAIN SO IMPORTANT?

A. It's really important to protect jobs and our national engineering legacy, to preserve what we have for the future. It's efficient, better for our carbon footprint, and it's good for Britain.

Q. WHERE IS YOUR CAREER TAKING YOU?

A. In the future, I would look for leadership roles with different and varied challenges, where I can continue to influence transformational change. Everything we've been through in this business in the last six years has been about making things better through change. Experience has taught me that if you want a different outcome, you have to do things differently.



www.aeroenginecontrols.com

FOR YOUR DIARY

ONLINE: WWW.MIDLANDSAEROSPACE.ORG.UK/EVENTS

CALENDAR

AEROSPACE FUTURES, AEROSPACE FORECASTS

Wednesday, 20 February
Rolls-Royce Learning
Development Centre, Derby

The first MAA annual
conference – see details
on p8-11.

AEROSPACE MATERIALS: FUTURE USE OF ADVANCED MATERIALS, METALLICS AND COMPOSITES

Tuesday, 26 February
0800-1300

Manufacturing Technology
Centre, Coventry

MAA MEMBERS MEETING

Tuesday, 12 March
1400-2000

Birmingham Airport

An introduction to the airport's
operations and plans from a
business perspective. A tour
of the airport precedes the
members meeting.

US-UK DEFENCE TRADE COOPERATION TREATY: WHAT IT MEANS FOR UK SUPPLIERS

Thursday, 14 March
0800-1300

MAA office, Coventry
(In association with the UK
Ministry of Defence and ADS)

PARIS INTERNATIONAL AIRSHOW 2013

17-21 June

Le Bourget, Paris

The world's largest event
dedicated to the aviation and
space industry.
(see story, p5)



For further
information and to
book your place at
an MAA event, please scan
the QR code or visit
www.midlandsaerospace.org.uk/events



ABOUT THE MAA...

The Midlands Aerospace Alliance (MAA) is the voice of companies in the British Midlands supplying global aerospace. Its 290 corporate members range from global aerospace players to SMEs. The MAA board comprises senior managers from Aero Engine Controls, UTAS Actuation Systems, Meggitt, Moog Aircraft Group and



Rolls-Royce, elected supply chain representatives and key regional partner bodies.

For additional copies of *Midlands Aerospace*, or to add your colleagues to the distribution database, please contact the MAA by any of the means below.

NEW MEMBERS

The MAA welcomes the following new members

AERNOVA ENGINEERING UK

Peterborough
Design and
manufacture of
large structural
components.

DANATROL

Loughborough
Production
of precision
CNC machined
components.

PHOENIX COUNTY METALS

Northamptonshire
Reclaiming of
precious metals from
the industrial sector.

AXILLIUM CONSULTING

Daventry
Research
in advanced
engineering and
high volume
manufacturing.

DE-STA-CO UK

Wolverhampton
Stockists of manual,
hydraulic and
pneumatic products.

SANDERSON

Coventry
ERP/MRP software
systems.

HARRISON GODDARD FOOTE

Birmingham
Intellectual property,
patents, trade mark
and design solicitors.

SIEMENS PLC

Solihull
Automation and
digital design
software

CARBOLITE

Derbyshire
Manufacture of
laboratory and
industrial furnaces.

HEINRICH GEORG (UK)

Wolverhampton
Aircraft test rigs.

STAFFORDSHIRE PRECISION ENGINEERING

Newcastle under
Lyme
Manufacture of
precision machined
components.

CE TURNER ENGINEERS

Melton Mowbray
Precision
manufacture,
machining and
fabrication.

HOLDEN ALUMINIUM TECHNOLOGIES

Hereford
CNC machining
and forming of
complex aluminium
extrusions.

THALES AEROSPACE DIVISION

Leicester
Technology for
civilian and military
markets.

CENSOL

Nottingham
Supply of spill
containment
products.

ON LOGISTICS LTD

Staffordshire
Logistical support.

WYE VALLEY PRECISION ENGINEERING LTD

Herefordshire
Manufacture of
precision rubber
components.

COMPONENT COATING AND REPAIR SERVICES

Derbyshire
Repairs and coatings
on compressor and
turbine sections.

PETERSON SPRING EUROPE

Redditch
Manufacture of
engineered metal
products.

Scan to visit the searchable database of all MAA member companies.



www.midlandsaerospace.org.uk/join

If you have a query or suggestion
that you would like to make, please
contact the MAA.

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