

aim

aerospace in the midlands

The quarterly newsletter of the Midlands Aerospace Alliance

Issue 20 Autumn 2009



Welcome to the Midlands: Framed by Emirates cabin crew and one of the airline's A380s are (from left) James Males (Timet UK), David Danger (HS Marston Aerospace), Paul Kehoe (Birmingham airport), Mark Kirk (GE Aviation), Tim Clark (Emirates), Joe Eardly (Goodrich Actuation Systems), Mark Day (Eaton Aerospace), Bridget Day (MAA) and Mike Smith (Bromford Industries). Please see page 8 for full story.

Askew joins MAA board for two-year term

MAA members chose two current directors and one newcomer to fill this year's three elected board seats.

Craig Askew, chief executive and director of ITP Engines UK Ltd, joins the board for the first time. Simon Beech of Bulwell Precision Engineers and Mark Johnson of Avingtrans were re-elected. All three have a two-year mandate.

Welcoming the new directors, MAA chairman Clive Snowdon thanked the four other candidates. "It speaks volumes about the MAA when such high calibre individuals put their names forward to serve," he said.

Snowdon commended John Cross (Bromford Industries), David Croston (Withers & Rogers LLP), Dr John Garside (Warwick Manufacturing Group) and Prof Patrick Wheeler (University of Nottingham) for their involvement.



Welcome to the board: Craig Askew (left) is congratulated by Clive Snowdon.

'Invest now' call by MAA chairman

Supply chain must mirror majors' long-term outlook

THE time to invest in the future is now: that was the message to MAA members from their chairman, Clive Snowdon, at the alliance's AGM in September.

Snowdon, the chief executive of Umeco, citing Airbus and Boeing long-term forecasts, told the packed meeting of 100 in Coventry that supply chain companies must take a similar long-term view. Both majors predict "huge demand" over the next 20 years, he said. This, combined with inexorable growth in emerging economies and global travel, will drive the aerospace industry forward, but not without "painful changes" in the Western economies.

In civil aerospace, Snowdon foresaw benefits to the Midlands in both the Boeing 787 and Airbus A350 XWB programmes, especially the latter if Rolls-Royce remained the sole engine provider. As for defence, "success will be project related," he said. "If you're not on the Joint Strike Fighter, you'll struggle."

He urged members to tap into the expertise of the MAA to help develop their skills, lean manufacturing and innovation. Many members had already benefited from funding which the MAA was able to access to support the industry.

Chief executive Andrew Mair said the MAA's "solid" membership of 260 helped attract public money which underpinned key programmes such as ATEP II and dedicated support for SC21 and iNet projects.

Earlier, Frank Bamford, senior vice-president Business Development & Strategy at GKN Aerospace, and Chris Young, customer business executive of Aero Engine Controls, described challenges and opportunities in very different markets – yet united by their current focus on the Airbus A350 XWB programme.

Bamford told members that engineering and

Continued on page 2



midlands aerospace alliance

news from the maa

£1.5m ATEP II takes off with new technologies

INNOVATIVE Midlands aerospace projects part-funded by the second Aerospace Technology Exploitation Programme (ATEP II) are drawing praise.

Three projects approved in the first call for proposals, and launched earlier in 2009, have all exceeded plan, says Bridget Day, MAA Innovation and Technology manager. "It is exciting to attend their quarterly progress reviews and hear what is being done," she said.

Meanwhile, funding has been awarded to three more projects in the ATEP II second call in mid 2009 – more news will follow once final contracts have been signed. The task of allocating funds was made difficult, said Day, by the high quality of submissions. "We were turning down some good projects."

However, work will continue to help prepare those projects for future funding opportunities.

Under ATEP II, £1.5 million of new funding became available this year to support collaborative projects developing new technologies. The MAA administers the programme on behalf of the funding



Bridget Day (third from right) and company representatives at the ATEP II launch.

bodies, Advantage West Midlands (AWM) and the European Regional Development Fund (ERDF).

The first call projects, launched in early 2009, are:

Aerospring – G&O Springs, Reliable Spring Manufacturing and Alloy Wire, teamed with Institute of Spring Technology, BAE SYSTEMS Rochester, Aero Engine Controls;

Aerospace Tyre Finite Element Models – Dunlop Aircraft Tyres and University of Birmingham, teamed with Airbus Filton;

Technology Advancement of Surface Coolers – HS Marston Aerospace, Advanced Chemical Etching and University of Wolverhampton, teamed with Rolls-Royce Derby.

▲ www.midlandsaerospace.org.uk

'Invest now' call

Continued from page 1

technical capability are expected among Tier 1 suppliers.

"Customers want differentiation," he said. For 250-year-old GKN, this means "exceptional engineering and innovation".

"We don't sell manufacturing, we sell technical solutions," he said, and in such a competitive environment, staying close to

customers helps a company's chances of being first with those solutions.

Young said one of the biggest challenges facing the supply chain was feeding into 'next generation' programmes when "we don't know the shape of the future."

Airframers are looking for game-changing technologies, he said. Until something arrives, progress is likely to be through incremental changes to existing programmes.

Everyone's different. Fortunately so are we.

At Grant Thornton, we've always gone about our business in a very different way. Delivering a bespoke service to all our clients is our primary concern and we won't offer you or your clients an 'off the shelf' financial and tax solution. Far from it. We believe it's important to provide flexibility to meet our clients' needs, to tailor our solutions accordingly and to dedicate the right people to the job in hand.

If you want to know more, call:

Dave Munton, Office Managing Partner, Birmingham T 0121 212 4000 E david.munton@gtuk.com

www.grant-thornton.co.uk

 Grant Thornton

Audit • Tax • Advisory

© 2009 Grant Thornton UK LLP. All rights reserved. 'Grant Thornton' means Grant Thornton UK LLP, a limited liability partnership. Grant Thornton UK LLP is a member firm within Grant Thornton International Ltd ('Grant Thornton International'). Grant Thornton International and the member firms are not a worldwide partnership. Services are delivered by the member firms independently.

aerospace in the midlands

MAA welcomes Tim and Emma to headquarters team

THE MAA headquarters team has expanded with the appointment of Tim Holmes as SC21 manager.



In his newly funded post, Tim will be working closely with the Manufacturing Advisory Service in both the East and West Midlands and offering an effective resource to Midlands aerospace and defence companies engaging in SC21, the UK aerospace and defence industry's national programme to improve supply chain competitiveness.

Tim brings wide experience in aerospace including Doncasters Bramah, Goodrich ECS and Technoset. He has a strong foundation of lean tools and

techniques, and first hand experience of implementing SC21 in an SME.

Chief executive Andrew Mair said: "We are delighted Tim can now offer support to all MAA members embarking on the SC21 journey."

Tim's post is funded by the East Midlands Development Agency (emda), Advantage West Midlands (AWM) and the European Regional Development Fund (ERDF).

Meanwhile, Emma Burgess has also joined the MAA team to provide technology exploitation project support.

Tim may be contacted at tim.holmes@midlandsaerospace.org.uk and Emma's e-mail address is admin@midlandsaerospace.org.uk



Paris good – Farnborough better?

Trade response in global downturn pleases MAA members exhibiting at airshow

THE MAA is beginning its run-up to Farnborough 2010 on the back of unexpected but gratifyingly high levels of interest at this year's Paris airshow.

The six members which exhibited on the MAA stand in July attracted interest from many of the global customers in attendance, despite the current climate.

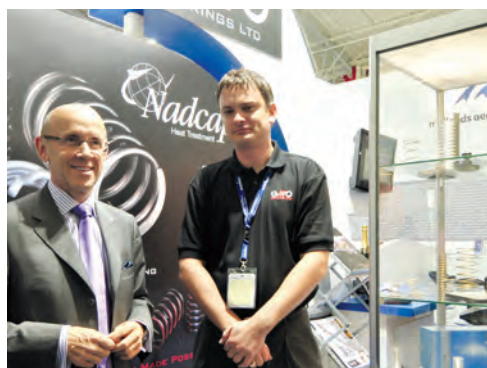
Shaun Moloney, of Atlas Composites, said: "We got 84 enquiries at Paris 2009, compared with 72 at Paris 2007, which is fairly consistent. Certainly in terms of the economic climate, I could see little difference.

"We are still working on the enquiries. It's early days, but we are bidding on one or two bits of work."

With this level of interest, exhibitors said they were keen to repeat the experience at Farnborough 2010 and Paris 2011.

Steve Boyd, of G & O Springs, said: "Since the show, I've got one non-disclosure agreement with a potential client." Meetings with other contacts were booked, he added. If they went well, "then our presence at the show has more than paid for itself. It's our intention to be at Paris every year."

Exhibitors said exhibiting with



Steve Boyd with Lord Davies on the MAA stand.

the MAA brought additional benefits.

"As we had a pod on the MAA stand, we were able to use it more as a base rather than man the stand for the whole time," said Karen Newman of Air & Ground.



Shaun Moloney makes his point to the minister at the show.

She added: "This gave us the opportunity to be much more proactive. As a result, we received e-mail enquiries before we'd even had the chance to chase leads ourselves."

Added Sarah Slack of Paul Fabrications: "We have exhibited alone before, but since becoming MAA members we always go along with them. As well as saving money, there is the opportunity to network and you get increased interest from passers-by when you're together.

"The consensus was that it was good to be there."

Denis Smith of Cooper Antennas agreed he was left with "a positive impression overall", as did Paul Priestley of Cosworth. He said it exceeded expectations. "We got lots

of interest and enquiries from people who were there to do serious business. Was it a positive experience? Absolutely."

After UK trade minister Lord Mervyn Davies visited the MAA stand, exhibitors even received an invitation to 10 Downing Street.

■ *The MAA is now taking expressions of interest from members who wish to join the team at Farnborough 2010 next June. Contact admin@midlandsaerospace.org.uk*

news from the maa

UKTI seminar to spell out funding available for low-cost supply chains

Seminar on Supply Chain Globalisation
30 October, Loughborough

UK Trade & Investment (UKTI) is offering East Midlands aerospace companies help in developing low-cost supply chains to remain competitive in the global marketplace.

"While an encouraging number of East Midlands suppliers are already engaged with low-cost supply chains in China, India, Mexico and Poland, those vulnerable companies that have yet to make a move will require their own strategy by 2010 or may well fail to win lucrative new business," says Peter Stevenson, International Trade Adviser for UKTI East Midlands.

Following research with MAA members into supply chain globalisation in the aerospace sector, UKTI has developed a programme covering consultancy, research, evaluation and ongoing support for qualified suppliers.

UKTI presents its research and support programme at a seminar at Loughborough University on 30 October.

"The seminar is designed to help companies make an informed decision on whether to be part of the UKTI initiative to globalise your business," said Stevenson. For those wishing to do so, UKTI will provide a specialist aerospace consultant to evaluate options for sourcing and structuring a supply chain, research into achievement of the planned strategy, a market visit and ongoing support and direction.

With UKTI funding support, participants will only need to make a minimal contribution to their programme. Places are limited.

▲ www.uktradeinvest.gov.uk/ukti/midlands_east



The MAA's Stan Payne (second right) at the Loughborough members' meeting.

Support for East Midlands: major initiatives weigh in

AN encouraging number of support programmes – several of them new – are on offer for aerospace companies in the East Midlands, members learned at a special MAA members meeting in Loughborough held as part of the MAA's participation in the Transport Innovation Network (iNet).

Ranging from national to local, what these programmes have in common is an acute focus on helping companies in the supply chain survive the downturn and prepare for the economic recovery.

They include:

UKTI – UK Trade and Investment (UKTI) has funding available to help companies with their export activities. Regional representative Peter Stevenson added that UKTI has a "very good network" that "needs to be used".

AeISP – the Aerospace Innovation Support Programme is run by the MAA as part of the iNet to identify and exploit innovative projects. "It's about people finding new customers and new research support," said the MAA's Stan Payne. The programme (see pg 5) aims to broker relationships between businesses and universities by means of events and one-to-one support.

iNet – funding from the East Midlands

Development Agency (*emda*) is available for innovation-led projects through Loughborough University in addition to the MAA's iNet support. A Higher Education Collaboration Fund is available to support research projects.

SC21 – *emda* has allocated £375,000 for SC21 projects running to September 2011 under a programme delivered by the MAA. Andrew Mair said the funding would encourage companies to "use the slowdown to improve performance".

MAS – funding is available from the Manufacturing Advisory Service to support aerospace suppliers involved in manufacturing. MAS funding criteria have become more flexible on the size of company eligible, said Ian Davie.

SEMTA – the sector skills council has a total of £65 million available under a Sector Compact with the government to support training and development in science, engineering and manufacturing technology companies.

Business Link – new funding is available to support businesses under two loan guarantee programmes and an equity finance fund. Andrew Kwan said funds are also available under various grant schemes.

▲ www.midlandsaerospace.org.uk

aerospace in the midlands

New programme from MAA to support innovation in East Midlands

THE MAA's participation in the East Midlands Transport Innovation Network (iNet) has crystallised into a new support programme set up to help East Midlands supply chain companies identify opportunities for innovation.

Called the Aerospace Innovation Support Programme (AeISP), it is run by the MAA on behalf of the East Midlands Development Agency (emda) and Loughborough University.

AeISP was launched at the MAA members meeting in July to help East Midlands companies exploit opportunities by forming relationships with customers and/or research and technology organisations, identifying customer needs, recruiting staff and finding appropriate project funding.

MAA iNet manager Stan Payne has been visiting companies across the region to help assess their strengths and needs from an innovation point of view, and help develop the necessary ties with customers and research organisations.

He plans a series of events covering:

- ❖ new materials technologies;
- ❖ technology funding;
- ❖ university show case;
- ❖ how to do business in aerospace;
- ❖ aerospace and the environment;
- ❖ new manufacturing technologies.

Dates and venues will be announced in due course.

For more information, contact Stan Payne on 0845 225 0503 or e-mail

stan.payne@midlandsaerospace.org.uk



MAA steers SC21 programme for East Midlands aerospace suppliers

A DEDICATED two-year project to bring the benefits of the national SC21 programme to East Midlands companies has been launched by the MAA.

SC21 is the industry-led 21st century supply chains initiative designed to improve the global competitiveness of UK aerospace and defence companies. Since its launch at the 2006 Farnborough airshow, it has gathered momentum, with more than 600 large and small companies now committed to it through the country.

The East Midlands Development Agency (emda) is funding the project which will be delivered across the East Midlands by the MAA as the regional strategic partner to the

new national trade body AeroSpace, Security and Defence (ASD) which leads the programme.

The MAA will work closely with the Manufacturing Advisory Service in the East Midlands to encourage local companies to become involved in SC21, offering effective support throughout the key stages of its implementation.

Tim Holmes, SC21 manager with the MAA, said SC21 will make a huge impact on the performance of the supply chain. "The programme has a well designed process, the outputs of which will give companies the best chance of survival in the global market."

▲ www.midlandsaerospace.org.uk

CASE STUDY

iNet backs research into new materials

RESEARCHERS at two East Midlands universities have secured £223,000 from the Transport Innovation Network (iNet) for research into new materials for aerospace.

The project will team Loughborough and Nottingham universities with Loughborough-based M Wright and Sons, a manufacturer of high technology textile products.

The aims of the research are to develop innovative techniques to create lightweight materials to replace traditional aluminium alloy components used in the manufacture of aircraft parts such as skin panels and wing ribs.

Terming the project "internationally significant", David Pickering of the Transport iNet said: "This Transport iNet Higher Education Collaboration grant is crucial in establishing and maintaining a strong, efficient and low-cost manufacturing base in the East Midlands for new materials."

Michael Wright, of M Wright and Sons, said: "We have scoured universities looking for the right partners and Loughborough and Nottingham have the exact aerospace and automotive experience we need to further develop our capabilities. Through working with the universities we are able to add credibility to our own products at an international level."

▲ www.emda.org.uk

Precision Engineers to the aerospace industry

Manufacturer of complex parts using the latest advances in multi-axis CNC machinery.

3D Solid modelling CAD/CAM with file transfer facility.

Services include non-destructive testing, thread testing laboratory and pressure testing.

www.arrowsmitheng.co.uk

Tel: +44 (0)2476 361773 Fax: +44 (0)2476 368126



ARROWSMITH
Precision Engineering



POWERING GLOBAL AEROSPACE

news from the maa



Members of the West Midlands delegation to MAKS 09 on the tarmac at Moscow.

Cobra strikes success in first West Midlands foray to Moscow

MAA member Cobra UK has signed a letter of intent (LoI) to supply its new seats to two of Russia's largest aircraft manufacturers. The work is potentially worth in excess of £150 million for Cobra's Shropshire-based airline seats division.

The LoI was signed during a visit in August to the MAKS 09 airshow near Moscow, organised by UK Trade and Investment (UKTI) as part of its support package for West Midlands aerospace companies. It was the region's first visit to MAKS, Russia's premier civil and military aviation event.

Cobra was one of nine West Midlands firms taking part. Managing director Gary Seale said the LoI outlined a three-stage process starting with delivery of the seats, progressing to supply of kits and eventually integration with the Russian manufacturers. Interest in the Cobra seats was primarily for a newbuild type.

Karine Barateau, international trade adviser from UKTI Shropshire, said six of the nine participants plan to return to Russia within six months. One participant described his visit to MAKS 2009 as an "excellent use of time which captured a wide audience of aerospace companies"; another said his expectations were "greatly exceeded" with an invitation to discuss a contract worth £250,000.

Cobra, which moved into aerospace six months ago from an automotive base with the help of Advantage West Midlands funding, found success with a recently-developed low-cost, low-mass airline seat. The company says the seat weighs 5.2kg less than competitive products; for a 220-seat configuration, this would translate into annual savings of more than £530,000 per aircraft.

Other members of the group traveling to

MAKS were Peter Power (MPI Aviation), Stephen McCarthy (Didsbury Engineering), Tony Shrewsbury (CG Tech), Mark Doherty (Timken Aerospace), Hugh Humphreys (Delcam), Arie Pieter Vanit Verlaet (Icon Polymer), Jim Randall (Cobham Antenna Systems), Richard Holcroft (Dunlop Aircraft Tyres) and Wendy Hall (UKTI international trade advisor Staffordshire).

▲ www.cobraukltd.co.uk

▲ www.uktradeinvest.gov.uk

Eastern opportunities for Midlands firms

BUSINESS opportunities exist in both India and China for aerospace firms with the courage to pursue them. This was a message emerging from a half-day conference organised by the MAA and UKTI as part of the East Midlands Transport iNet aerospace events programme.

Summarising the event, the MAA's Anthony Barlow said Chinese industrial strength lies mainly in single product manufacturing, less so in series production capabilities. Given the country's emerging private sector, Midlands companies able to supply this 'missing link' are more likely to find a market.

Despite difficulties, he said those who show a keenness to invest "are the kind of people India and China want to do business with."

Further good news for MAA members looking to the East is the opening of a UK Advanced Engineering Regional Office (AERO) in Bangalore, in the heart of India's 'silicon valley'.

The representative office is an initiative of the AeroSpace, Defence and Security (ASD), successor organisation to the Society of

• Nationwide collection/delivery service • UK and Europe • Hazardous Freight A.D.R. • Air freight - Level 4 •

The logistical specialists... serving the aerospace and defence industries

24-hours
**07787
525053**

Call 01384 221642
email info@jjxlogistics.co.uk
web www.jjxlogistics.co.uk

JJX Logistics is a member of the Midlands Aerospace Alliance



POWERING GLOBAL AEROSPACE

aerospace in the midlands

British Aerospace Companies (SBAC), supported by UK Trade and Investment (UKTI) and regional trade associations. It provides a three-tier service for companies interested in finding and maintaining a position in the Indian market.

For information, please contact Alan Fisher at alan.fisher@adsgroup.org.uk

MAA provides link to new client

MAA membership is proving valuable to JJX Logistics, which has won at least one new customer since joining the organisation.

The logistics supplier, which specialises in aerospace and defence cargo, was introduced to the MAA by Goodrich Actuation Systems, its largest client – and immediately secured a delivery job to Hungary for another MAA company.

JJX director John Donovan says: "If not for the MAA, we wouldn't have got the job." He was grateful for the MAA's "hands-on approach" and optimistic that his membership will yield further enquiries.

▲ www.jjxlogistics.co.uk

Knowledge transfer programme champions 'collaborate to innovate'

A UK government-backed initiative called Knowledge Transfer Partnerships (KTP) is promoting its 'collaborate to innovate' approach to Midlands aerospace companies.

The scheme is based on a three-way partnership between a business, a university or research organisation and a high-calibre associate, usually a recently qualified person who works with the business on a specific need-based project with the support of the university. While the business pays its share of the costs, the scheme attracts a significant government subsidy.

The UK's Technology Strategy Board (TSB) recently provided an added incentive with extra funding for small and medium enterprises (SMEs). The new rules mean organisations with fewer than 250 employees that start a KTP project during 2009-10 will receive a cash payment that reduces their contributions to project costs to 25 per cent.

Since October 2008, more than 250 businesses have launched a KTP project. Among them is MAA member Bromford

Industries, which sought Birmingham City University help in re-engineering the business and manufacturing processes of its Worcestershire facility.

Bromford managing director Gary Lowe said improvements made across the business with the help of the university and the associate "will continue to provide benefits for years to come. The greatest success, however, is a change in the culture. Continuous improvement has become part of the day-to-day running of the company."

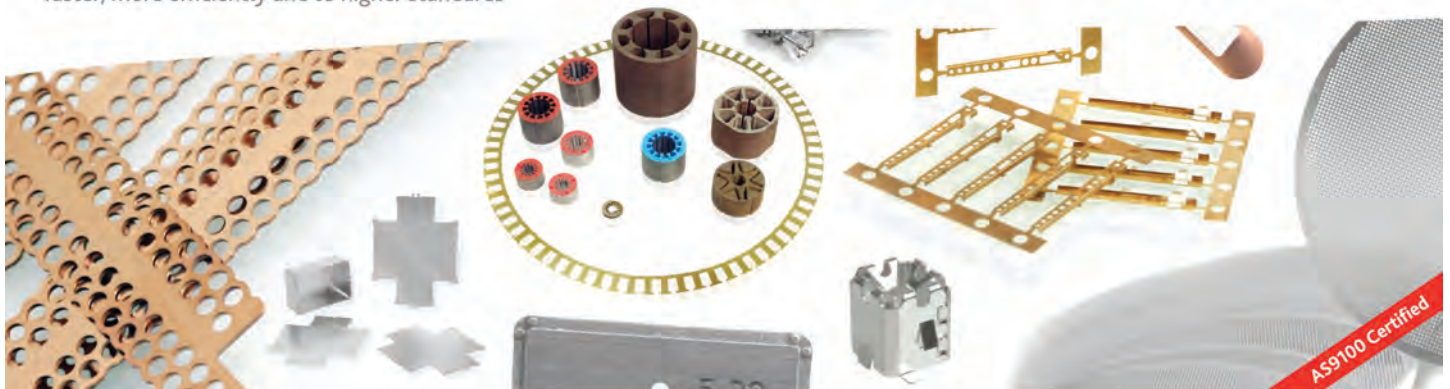
Birmingham City University's Phil Arch, the academic supervisor on this KTP, said the programme provided the vehicle to bring in "the knowledge, skills and systems needed to nourish competitiveness, rapidly respond to market driven demands while achieving sustainable market growth."

If you have a business improvement project that could benefit from this approach, or for more information about KTP in the Midlands, please contact Barry Henley at barryhenley_ktp@btinternet.com

Europe's Leading Photochemical Machining Specialist

From shims and gaskets to bespoke EMI / RFI screening enclosures, Precision Micro manufactures components faster, more efficiently and to higher standards

PRECISION
micro
www.precisionmicro.com



- Photochemical machining
- Electroforming
- Wire EDM
- Technical finishing & plating
- In-house forming, bonding and machining

- Over 40 years experience of aerospace supply - AS9100 certified
- Rapid prototypes to high volume with accuracy and repeatability
- Features down to 15 µm achievable
- Low cost, flexible tooling
- Wide range of stock metals with full traceability
- Dedicated technical and customer support

Want to know our secret?

Experience our quality and expertise first hand. Visit www.precisionmicro.com or call the number below to order your free sample brochure pack



Tel: +44 (0)121 380 0100 Fax: +44 (0)121 359 3313 e-mail: info@precisionmicro.com web: www.precisionmicro.com

Visit honours Midlands role in A380 genesis

ONE of the finest and most visible examples of Midlands supply chain collaboration and advanced engineering capability honoured the heart of England with a visit to coincide with the 70th anniversary of Birmingham International Airport.

The Airbus A380, in the livery of Emirates airline, operated the historic one-off service on 9 September between Dubai and Birmingham – the first UK commercial service by the super-jumbo outside London. Emirates A330s normally operate on this sector.

More than 20 Midlands-based firms operate within the supply chain of the Emirates A380 with its GP7200 engines, supplying among other parts the high lift actuation systems for its wings, titanium parts of the fuselage and engine bearings and oil coolers.

At least another 20 Midlands-based firms are part of the supply chain for the Rolls-Royce Trent 900, the Derby-built engine that powers much of the global A380 fleet.

On hand to greet the A380 were representatives of six Midlands firms that contributed to its construction. They included Timet UK of Birmingham, Bromford

Industries of Birmingham and Leicester, Wolverhampton-based Goodrich Actuation Systems, GE Aviation and HS Marston Aerospace, both also of Wolverhampton, and Eaton Aerospace of Redditch (see photo, pg 1).

Bridget Day, the MAA's Innovation and Technology manager, commented: "There are around 250 Midlands companies at the core of the aerospace industry – a total of 700 support it – and the roots of this established and highly experienced supply chain extend deep into our advanced engineering capability – which helps fuel the region's economy.

"Today's arrival of the A380 at Birmingham International airport is testament to the world-class technical capabilities of the many MAA members that helped to make the aircraft possible."

Tim Clark, president of Emirates, told reporters the operation had been a long time in the planning but its success meant the airline would consider using its A380s on the sector again. "We have proved it's possible," he said.

Raise your profile in the aerospace sector

THE arrival of the A380 in the Midlands gained considerable media coverage, thanks in large part to the efforts of Birmingham public relations agency Trimedia. The agency has been appointed by Advantage West Midlands (AWM) to publicise the aerospace industry in the region by featuring the work of relevant companies through targeted media channels. The MAA is fully behind the initiative.

Stephen Gray, head of Clusters and Manufacturing at AWM, said the communications campaign is designed to "boost the reputation of the region as a whole and attract inward investment."

Trimedia is looking for examples of innovation and excellence to use in promoting the capabilities of the West Midlands aerospace sector – and the firms themselves.

❖ Companies interested in taking part should contact Trimedia PR manager Tom Rawlings on 0121 265 2764 or e-mail Tom.Rawlings@trimediauk.com.



Midlands Airbus

- Bron Wing Birm**
- Aero Engine Controls**
Slat motor drive electronics
Birmingham
- Flowmaster**
Fluid systems analysis tool
Towcester, Northamptonshire
- Jonathan Lee**
Recruitment of
Stourbridge, V
- Technoset**
Precision machining
Rugby, Warwickshire
- Greene, Twe**
Sealing systems
Ruddington, M
- Industrial Measurements Ltd**
Torque-measuring equipment
Castle Donington, Derbyshire
- Jet Blades Engineering**
Titanium fuselage parts an
Ilkeston, Derbyshire
- Mettis Aerospace**
Large aero structure parts forged in high strength
and flap drive assemblies. Complex manifolds
and elevator actuation equipment Precision for
Redditch, Worcestershire
- TM Specialist Engineers**
Ground support vehicles specific to an
Kingswinford, West Midlands

To download a p

aerospace in the midlands

Emirates A380 Suppliers

Key:

Wings

Engine

Fuselage

Other

Bromford Industries

Wing aileron and flap motor housings / Aero-engine parts
Birmingham/Leicester

Eaton Aerospace

Flexible hose assemblies, rigid pipes
Redditch, Worcestershire

Bulwell Precision Engineers

Fuel and hydraulic pipes, machined parts
Pinxton, Nottinghamshire

GE Aviation

Highlift actuation system for wings
Wolverhampton

Goodrich Actuation Systems

Slat wing tip brake, slat power control unit, motor control electronics
Wolverhampton

Man Lee Recruitment

Recruitment of skilled staff
Birmingham, Worcestershire

HS Marston Aerospace

Galley evaporators / Air cooled oil coolers / Fuel hoses
Wolverhampton

TRW Conekt

EMC Testing
Solihull



John Tweed & Co.

Wing systems
Birmingham, Nottinghamshire

Meggitt Aircraft Braking Systems

Nose wheel and major brake components for all wheels plus advanced carbon heat packs
Coventry

Timet UK

Bearings
Birmingham

Engineering

Wing parts and engine parts
Birmingham

Strand Engineering

Engineering for wing parts
Malvern, Worcestershire

NDT Services

Non-destructive testing of components
Kegworth, Derbyshire

High strength titanium alloys for pylon
Manufactures for high pressure aileron
Precision forged aerofoils for engines

NMB-Minebea Group

Bearings
Lincoln

Efficient to aircraft

Tekdata Interconnection Limited

Cable interconnection
Stoke-on-Trent

UNIMERCO

Cutting tools
Lichfield, Staffordshire

Read a poster-size version of this graphic showing Emirates A380 suppliers and for a link to the interactive version, see www.midlandsaerospace.org.uk.

Moog buys into Midlands expertise

A LEADING Midlands aerospace company has been acquired by Moog, the American precision engineering firm, in a consolidation of aircraft control system manufacturing.

GE Aviation Systems of Wolverhampton (formerly Smiths Aerospace) was described by a Moog spokesman as "a world-class designer and manufacturer of aircraft actuation systems" which will be "a great addition to our team".

Moog makes controls and systems for aircraft, missiles, satellites and space vehicles as well as industrial and medical equipment.

The Wolverhampton operation designs and manufactures primary and secondary flight control actuation for commercial and military programmes, including high-lift actuation systems for the Boeing 777 and 787 and the Airbus A330 and A380.

The plant also provides primary flight controls for the Eurofighter Typhoon, and a main engine lift system for the Rolls-Royce engine on the STOVL version of the US J-35

Lightning II Joint Strike Fighter.

The plant's 470 workers are not expected to be affected by the £56 million takeover.

▲ www.moog.com

Akzonobel joins land speed record team

AIRCRAFT coatings supplied by Leicester-based Akzonobel are rising to the challenge of helping the Bloodhound SSC, the British-built rocket and jet-powered supersonic car, push the boundaries of speed.

The paints, more usually applied to commercial and military aircraft, guarantee a smooth finish to reduce aerodynamic drag, something Bloodhound will certainly need in its 800 miles per hour land speed record attempt in 2011.

Martin Carter, Akzonobel Aerospace Coatings' technical manager, said: "The vehicle will be up against many of the operational and environmental conditions experienced by jet aircraft. We have provided a full technical advice and backup service, just as we would with a jet that flies."

▲ www.akzonobel.com

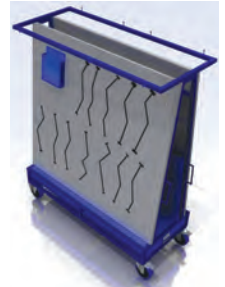
Acres finds simple solution in quick time

MIDLANDS-based Acres Engineering used a combination of the latest CAD software, metal forming and vinyl signage techniques to design, manufacture and deliver 50 assembly line trolleys (*CAD image pictured*) in record time for a leading Midlands-based aerospace company.

Acres Engineering worked with the customer on design and manufactured a final prototype for trial before the £35,000 order was placed.

The trolleys, with two-sided interchangeable shadow boards, are for a new sub-assembly line, and were delivered less than four weeks after the order was placed.






Acres Engineering managing director Tony Parker credits his team's success with the



Technically superior coolants designed for the Aerospace Industry



Unique Ingredients

-  30 years experience from the UK's leading supplier of Aerospace machining coolants
-  Coolant technology approved in 2009 by Boeing, Airbus, MTU and other leading OEM's
-  Quality guaranteed from the UK's only AS9100 approved coolant manufacturer
-  Unrivalled knowledge from a UK dedicated Aerospace technical team
-  Collaboration of OEM's and universities to develop coolants for titanium and inconel materials

It's what's inside that counts...

Visit www.fuchslubricants.com to download our new Aerospace brochure.

Tel: 01782 203700



Fuchs Lubricants (UK) plc, Quality as standard

POWERING GLOBAL AEROSPACE

aerospace in the midlands

desire to engage with the customer on a true partnership basis and to its ability to supply reliable bespoke solutions in an innovative and flexible way.

The work also introduced the customer to Acres' complete project capabilities beyond metal fabrication.

▲ www.acres-willington.co.uk

More success for new supply chain portal

MIDLANDS supply chain portal Xactio has signed another major customer days after release of the latest version.

The supply chain management solution, devised by MAA member CANDA Systems, has been adopted by international aerospace parts designer and manufacturer Cinch Connectors, part of the Safran Group, as a key feature of its supply chain management programme.

Xactio supplies online data that can be updated at hourly intervals and encourages supplier performance improvement with the use of online non-conformance reports. Supply chain problems can be spotted quickly and moves taken to rectify them.

Xactio will be used by the organisation at its UK base in Nottinghamshire to enhance communications, quality, cost, delivery and responsiveness between its suppliers and its European design and distribution network.

Chris Hayward, director of the Birmingham website design and IT support company, said: "This is an outstanding client win for us and a resounding endorsement of Xactio. In less than three years, its use has spread to almost 1,000 suppliers around the world."

▲ www.xactio.com

▲ www.cinch.com



A Harrier aircraft-based flight simulator is among Coventry University's leading facilities for aerospace related degrees.

Coventry University calls on aerospace industry to support activity-led learning

COVENTRY University is raising its profile in aerospace by advertising a series of industrial partnership options designed to put greater emphasis on activity-led learning.

The university offers four aerospace-specific avenues for learning – aerospace systems engineering, aerospace technology, avionics technology and aviation management – the first three leading to accredited engineering degrees.

Dr Caroline Lambert, senior lecturer in aerospace engineering, says the faculty is so focused on industry involvement in its courses that five placement and employability tutors have been appointed.

Midlands companies have a range of options for collaboration with the university,

some of which qualify for government funding. Low-level involvement could take the form of 'in-kind' support for final year projects and curriculum development.

For the medium level, companies could sponsor summer placements and research projects, while high-level options include year-long 'sandwich' placements, research funding and collaborative partnerships under the Knowledge Transfer Partnership (KTP) and Employer Engagement Project (EEP) schemes, both of which are partially funded programmes.

"Students see much more relevance in their work when there is a clear industrial purpose," says Dr Lambert.

▲ www.coventry.ac.uk



Tamworth Heat Treatment Ltd.
7 Darwell Park,
Tamworth, Staffordshire B77 4DR
+44 1827 318 030 (TEL)
+44 1827 318 039 (FAX)
sales@tamworth-heat.co.uk

VACUUM HEAT TREATMENT

Wide range of processes up to 1250 c

- Harden and Temper
- Annealing processes
- Stress Relief and Normalise
- Solution Anneal & Precipitation hardening

PLASMA NITRIDING

Wide range of materials processed

- Mild Steels
- Tool Steels
- Engineering Steels
- Stainless Steels of all types

CASE STUDY

Burcas boosts strength in sector with SC21 journey



MAA member Burcas Ltd, a Birmingham-based precision engineering manufacturer, is firmly on the road to SC21 accreditation with a

stronger offer to the aerospace sector and the supply chain to back it up.

Burcas enlisted the help of the Manufacturing Advisory Service – West Midlands (MAS-WM) to help it meet the criteria of SC21, the national supply chain improvement programme designed to boost the global competitiveness of the UK aerospace and defence industries.

MAS-WM, though a specialist consultant, helped Burcas identify a need to improve its overall quality, cost, delivery and responsiveness performance and also that of its main suppliers. A key objective was to harmonise and streamline all of the supplier-interfacing systems and the internal processes that supported them.

Burcas, which employs 75 people, is also benefiting from a £19,000 business support grant to help it implement process improvements and a new



Success in view: Mike Burrows (left) and Paul Round of Burcas.

communication system.

Burcas works manager Steve Bounds says: "Building and maintaining relationships is one of the biggest challenges companies face today. Thanks to MAS-WM's SC21 support, we are now able to provide our aerospace customers with a better service immediately and a commitment to ongoing improvement in the future."

Cliff Johnson, MAS-WM SC21 project manager, adds: "Burcas was one of the

first companies to sign up for SC21 and it is this foresight that will put it in a prime position to exploit the multi-million pound opportunities that will come up in the aerospace industry over the next five years."

▲ www.mas-wm.org.uk

▲ www.burcasonline.com

west midlands
mas
The manufacturing advisory service

Bromford carries on engineering tradition

THE former Hampson Aerospace Machining Ltd has emerged with a new owner as Bromford Industries.

Following completion of the deal, Bromford's owners, Darwin Private Equity, said expansion of the business was on the cards.

The company, operating from sites in Birmingham, Alcester and Leicester, manufactures complex, highly-engineered and performance-critical components for jet engines powering civil and military aircraft. Its customers include Rolls-Royce, Siemens, Messier-Dowty and Goodrich. The workforce numbers 380.

Previous owner Hampson Industries said the disposal was part of a plan to streamline the group and focus on developing its

advanced composites businesses in components and tooling systems.

▲ www.bromfordindustries.co.uk

▲ www.hampsongroup.com

Funding boost for engine research

A ROLLS-Royce-led collaborative programme to accelerate development of the new environmentally friendly aircraft engine has received a £40 million funding boost.

The new programme is called SAMULET – an acronym of Strategic Affordable Manufacturing in the UK with Leading Environmental Technology.

It is backed by the Technology Strategy Board (TSB) and the Engineering and Physical Sciences Research Council (EPSRC) with £28.5 million and £11.5 million respectively.

TSB chief executive Iain Gray said the programme "aims to ensure that the UK aero-engine industry remains competitive in the face of new 2020 emissions targets for aircraft and that it is in a position to manufacture engines for the next generation of civil aircraft."

"Through the supply chain and academic partners, SAMULET also offers exciting opportunities to promote UK high-value manufacture more generally."

Energy efficiency and limitations on materials will feature prominently within SAMULET, which will focus on developing new high-tech engine manufacturing techniques, on developing energy efficient engines, and on cutting down on items used in these engines' manufacture where possible.

Other participating firms are BAE Systems, Tacit Connexions and GKN.

▲ www.rolls-royce.com

aerospace in the midlands

Newbow lands MOD replacement contract

NEWBOW Aerospace of Redditch has been awarded a three-year contract from the Ministry of Defence for the supply of specialist aircraft tyre pressure check gauges.

The contract covers replacement of about 700 units currently in use worldwide with newly modified high-spec units. Newbow says the MOD's decision was based on the overall age and condition of the gauges in use on different fleets for various military missions.

▲ www.newbowaerospace.com

Cosworth tests UAV engine for US Navy

BENCH testing is under way on a new Midlands-developed heavy fuel engine in preparation for its first flight aboard the US Navy's ultra-endurance UAV in 2010.

Cosworth, the Northampton-based high-performance engine specialist, won the contract after two competitive phases to design the engine for the Navy's small

Midlands aerospace embraces SC21

ONE of the largest aerospace and defence gatherings ever held in the West Midlands took place on 15 October as companies from across the region descended on RAF Cosford in Shropshire to hear about progress on the World Class Supply Chain initiative.

The occasion was a combined SC21 dissemination and national Task Force event, organised by the Manufacturing Advisory Service – West Midlands (MAS-WM) in association with AeroSpace Defence & Security (ADS).

Keynote speakers outlined the progress of the internationally recognised SC21 programme and its growing impact in the industry, highlighting funding opportunities for companies looking to deploy the SC21 principles.

MAS-WM's Cliff Johnson said the SC21 initiative, backed by £1.5 million from Advantage West Midlands and the European Regional Development Fund, has had "tremendous" response since its launch in January.

MAA members G&O Springs and Glenair were each presented with the Bronze SC21 award following their successful deployment of the programme with their key customers. Said Johnson: "I'm hoping these awards will encourage a long line of local businesses to achieve this prestigious recognition."

▲ www.mas-wm.org

tactical unmanned aerial system's vehicles.

The Cosworth engine is designed to run on diesel, JP-5 and JP-8 fuels. Its target output is 10hp. A proof of concept engine has already powered a UAV to 10,000ft.

Cosworth principal engineer John Vaughn said the company modified commercial off

the shelf components to cut the engine's weight. The fuel injection system was critical to the way the engine works, he added.

Other features will reduce vibration and prevent fuel overflow that can cause visible exhaust smoke.

▲ www.cosworth.com



Leadership drives success but leaders vary.

From Churchill to Gates to Branson different leadership skills are needed at different times.

Whether permanent or interim, we are the "topguns" in delivering the leaders to match your needs for CEOs, MDs, NEDs and functional Directors. We also watch for exceptional talent in the market for you.

Our Consultants are themselves experienced directors from aerospace, defence, manufacturing and engineering companies with a wide network of senior contacts.

We truly understand your needs and have an unparalleled reputation for delivering the best of the best.

Factura Ltd, 6 Mill Pool,
Nash Lane, Belbroughton,
Worcestershire DY9 9AF

01527 573939
exec@factura.co.uk
www.factura.co.uk

Factura

EXECUTIVE SEARCH | EXECUTIVE SELECTION
INTERIM | TALENT MANAGEMENT

CASE STUDY

2

Business takes off with the Midlands Aerospace Alliance

Profile:

CFS AeroProducts Ltd

CFS AeroProducts Ltd is an independent repair and overhaul supplier based near Coventry airport. The company, established in 1994 as part of the Air Atlantique Group, became a standalone facility in 2007 to provide a quality service to a wide range of aircraft operators, from private pilots to regional airlines.

Its capabilities in the repair and overhaul of engines, propellers and associated aircraft accessories are extensive, and cover aircraft weighing, non-destructive testing and battery checks and overhaul. An EASA 145 approved company, CFS AeroProducts holds approvals to carry out work on engines, propellers and accessories on numerous heritage aircraft as well as modern types.

Its capabilities in the repair and overhaul of engines, propellers and associated aircraft accessories are extensive, and cover aircraft weighing, non-destructive testing and battery checks and overhaul. An EASA 145 approved company, CFS AeroProducts holds approvals to carry out work on engines, propellers and accessories on numerous heritage aircraft as well as modern types.

More proactive in marketing

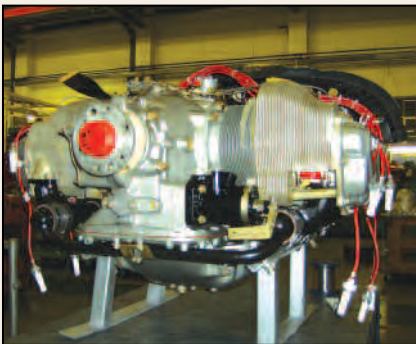
Management of CFS AeroProducts were aware that they needed to be more proactive in marketing to compete in the tough marketplace they inhabit. As a member of the Midlands Aerospace Alliance (MAA), the company was able to sign up to the Aerospace Business Strategy (ABS) programme which was run by the MAA to help Midlands companies improve their competitiveness.

ABS part-funded the cost of a third-party consultant to help CFS AeroProducts improve its corporate strategy, marketing and internal efficiency. The upshot of the exercise was a rebranding of the company, partly through an updated website, and stronger brand promotion. A first experi-

We're better organised, more customer focused



Ready for the trade show (above) and ready for service in CFS AeroProducts overhaul base.



ence of a trade show – AeroExpo Europe 2009 at High Wycombe – proved a useful experience, said general manager James Slater. “It was a good opportunity to learn more about the marketplace so we have a better idea of pushing forward into third-party work.”

Improvements instigated

Working with the consultant, the company reviewed its finance and administrative processes and instigated improvements to boost efficiency and improve customer relationship management and procedures. “We’ve seen benefits already,” said James. “We’re better organised, more customer focused and communicate better with our customers.”

A new computerised system for workshop and quality control enables the company to provide status updates throughout the repair and overhaul process. The greater efficiency has had a positive impact on accounts and

FACT FILE

- > **Company:** CFS AeroProducts Ltd
- > **Address:** The Alvis Works, Bubbenhall Road, Baginton, Coventry CV8 3BB
- > **Activities:** Repair and overhaul of engines, propellers and associated accessories, aircraft weighing and non-destructive testing.
- > **Accreditation:** EASA 145 approval
- > **Contact:** James Slater, General manager, jslater@cfsaeroproducts.co.uk
- > **Tel:** +44 (0) 24 7630 5873
- > **Fax:** +44 (0) 24 7630 2088
- > **www.cfsaeroproducts.co.uk**

finance with better cash flow.

James credits the ABS-supported consultant for identifying batteries as an opportunity for CFS AeroProducts to expand into other areas on the back of existing skills.

CFS AeroProducts survives and grows in its highly competitive marketplace by having a broad capability which James believes puts it close to many specialist repair and overhaul suppliers. He is grateful for the consultant’s advice in “helping us to look at avenues we should be going down.”

The MAA, he said, was very helpful throughout CFS AeroProducts’ engagement with the ABS programme: an “approachable, excellent” organisation to work with. “I would definitely recommend MAA support programmes to others in our position,” he said.

aerospace in the midlands

MAA members join aerospace support for new Bribery Bill

MAA members are among the 116 UK aerospace companies that have signed up to the Common Industry Standards (CIS) for ethical business since it was launched two years ago.

Developed through the Aerospace and Defence Industries Association of Europe, the standards provide a firm base for companies to demonstrate their commitment to combating bribery. Recent press reports surrounding BAE Systems have highlighted the importance of ethics for the UK aerospace and defence industry.

The new UK draft Bribery Bill, published in March, is undergoing pre-legislative scrutiny. The Bill, one of the government's top priorities, is expected to become law before the next General Election.

Ian Godden of the new national trade body AeroSpace, Security and Defence (ASD) said the aerospace and defence industry in the UK is "leading the way" in

promotion of ethical business practices. "We welcome [the] draft Bribery Bill... Defence employs over 300,000 people across the regions of the UK. We are committed to demonstrating how they work lawfully in our world-leading sector..."

The new law will make companies responsible for bribery committed by their employees, agents or subsidiaries. Companies guilty of 'negligent failure to prevent bribery' could face heavy fines and jail sentences.

A defence is available if the company has 'adequate procedures' designed to prevent bribery. Signing up to, and upholding the principles of the CIS could provide the evidence needed to show that a company is tackling bribery effectively.

The guidance provided by the CIS is backed up by a booklet. The adoption form for the CIS and the booklet are accessible at www.sbac.co.uk/pages/83675783.asp

'Back to school' seeds Design Q concept

WORCESTERSHIRE-based design consultancy Design Q has unveiled a new, high-density seating concept that has aircraft passengers seated facing each other.

The company – instrumental in the design of Virgin Atlantic's acclaimed 'Upper Class' seats – was inspired to move away from its normal high-spec designs after

working on an unusual project with Kingsland Primary School in Staffordshire.

Design Q co-founder Howard Guy said: "The school installed a second-hand aeroplane on its playground to use as an alternative teaching space. We were asked to design the interior and came up with two rows of fold-up seats facing each other on either side of the plane and pull-down tables.

"The project got us seriously looking at the possibility of using the design commercially."

Design Q's preliminary, commercial image



Unusual outcome in seating design from unusual project.

shows a similar set up of two rows of generously spaced, inward facing fold-up seats on each side of the aircraft, plus two back-to-back rows down the middle, staggered to coincide with the gaps on the outboard seats.

Guy added: "The seats would be lighter than more traditional options and more efficient to make. They would also increase leg room for passengers and reduce boarding time."

▲ www.designq.co.uk

NEW MEMBERS

The MAA welcomes the following new Full and Associate members:

FULL MEMBERS

Kepston Ltd

Aldridge

Surface grinding processes

Express Worldwide

Rugby

UK and global freight

GOM UK Ltd

Coventry

Optical measurement equipment

Cobra AS Ltd

Whitchurch

Interior trim, seating, galley trim and lighting.

Encore Personnel

Leicester

Recruitment services

Crane Electronics Ltd

Hinckley

Custom hardware and software solutions

Harrison Goddard Foote

Rugby

UK and European patent and trademark attorneys

Preci-Spark

Leicester

Forming, laser machining, EDM and vacuum brazing

Pegrex Ltd

Oldbury

Components, sub-assemblies and engineering solutions

Phoenix CNC Engineering Ltd

Nottingham

Machining of precision components

ASSOCIATE MEMBER

Hyde Precision Components

Manchester

Machining of precision components

IN BRIEF...

Rolls-Royce Derby-built Trent family engines have been selected by Air New Zealand (ANZ), Turkish Airlines and AirAsia X to power a variety of aircraft on order. Trent 1000s will power ANZ's eight firm Boeing 787-9s orders plus eight options. For Turkish Airlines, Trent 700EP engines will power seven Airbus A330s.

Meanwhile, AirAsia X has selected Trent XWBs for its 10 firm and five option Airbus A350s and Trent 700EP for 10 A330 aircraft.

Nottinghamshire-based **Icon Polymer** has been bought by its management for an undisclosed figure. The company, which employs 230, specialises in technical rubber products to aerospace, defence, transport and energy industries, and has secured exclusive supply agreements with Stork Fokker and BAE Systems.

Birmingham insulation products manufacturer **W G Eaton** is benefiting from growing awareness of low-carbon and energy-saving issues in aerospace and other sectors. It is working with a number of very large companies to solve their heat-protection and insulation issues.

Loughborough-based **Intelligent Energy** has provided German engineering firm Aerotec with a fuel cell test APU aimed at providing on-board power and other loads in future commercial aircraft. The

equipment has been installed at Aerotec's fuel cell test centre at the Hamburg facility of Airbus, which was officially opened in August 2009.

Lincolnshire-based **Castlet Ltd** has been awarded a contract to develop a guided missiles training simulator for Royal Navy and Royal Air Force aircrew.

Meggitt Aircraft Braking Systems has won its third consecutive 'Supplier of the Year' award from Gulfstream Aerospace. In a letter of congratulation to the team based in Coventry, Gulfstream praised the "outstanding accomplishment that speaks to the commitment of [Meggitt's] leadership and the dedication of its entire team."

Staffordshire-based electrical engineering firm **Technical Solutions 24 Seven** has landed a £400,000 contract with titanium manufacturer **Timet** to produce an ultrasonic system to gauge the quality of metals used in aerospace components. The system can detect defects as small as 0.5mm in ingot

Leicestershire-based electronics specialist **Semelab** has joined forces with TT electronics, a world leader in sensor and electronic component technology, after TT acquired a majority stake in the company's semiconductor business. Both companies are active in defence and aerospace, among other sectors.

TECHNOTES

Precision Micro of Birmingham has launched two new process routes capable of creating true and precise micro components or component features, in prototype to high volume quantities. Developed by Precision Micro, they are called laser evolved etching process (LEEP) and laser evolved electroforming (LEEF), and allow etching and forming at sizes previously possible only with the more expensive micro laser or advanced electroforming techniques. The company says the high definition and precision of its new process routes opens doors to "true micro manufacturing".

Solihull-based **TEC Concepts**, an approved SC21 strategic partner, has set up a benchmarking service for identifying and implementing best practice. The service, aimed at aerospace and defence industry supply chain companies, is designed to help organisations achieve business excellence and raise performance levels.

Jet Blades Engineering of Derbyshire has installed one of the UK's biggest water jet facilities – a bed size of 6m x 3m capable of cutting materials up to 160mm thick. The company has been approved by Rolls-Royce for this advanced machining technique. Along with three water jet cutting machines, Jet Blades has installed a new four-axis machining centre to complement multi-axis capabilities in its new 22,000 sq ft facility.

About the MAA...

The Midlands Aerospace Alliance (MAA) is the voice of companies in the British Midlands supplying global aerospace. It was set up in 2003 to improve wealth creation and employment for companies and people involved in the aerospace industry across the Midlands. The MAA is supported by Advantage West Midlands (AWM) and the East Midlands Development Agency (emda).



For additional copies of AIM, or to add your clients to the distribution database, please contact the MAA Secretariat: info@midlandsaerospace.org.uk.

Contact the MAA

If you have a query or suggestion that you wish to make, please contact the MAA by any of the means below:

T: +44 (0) 845 225 0503

F: +44 (0) 845 225 0504

E: info@midlandsaerospace.org.uk



midlands aerospace alliance

