The quarterly newsletter of the Midlands Aerospace Alliance

Issue 25 Spring 2011

Potential in BRIC for Midlands aerospace

Big opportunities for MAA members in emerging markets

OVER the next decade, growth in Midlands aerospace will increasingly be driven by the BRIC economies (Brazil, Russia, India and China) and the Gulf State airline hubs. The Midlands Aerospace Alliance (MAA) is making plans to ensure members benefit from the opportunities.

Airbus forecasts 47% of new passenger aircraft over the next 20 years will be sold to Asia, the Middle East and Latin America, more than the 46% to Europe and North America combined. Rolls-Royce's projections for the sales value of twin-aisle aircraft, like the Boeing 777 and 787 and Airbus A350 and A380, are more striking at 62% and 34% respectively.

China leads the pack. Many Midlands companies are already being pulled through by strong Chinese airline demand for widebody aircraft with Derby-built Rolls-Royce Trent engines, Airbus aircraft with big Midlands supply chains, and Boeing aircraft with Midlands' flight control systems.

The same drivers propel demand from India, with the additional revenues flowing into the Midlands in supply chains to BAE Systems (Hawk, Jaguar upgrades, potentially Eurofighter) – defence projects ruled out for China by global politics.

Brazil and Russia have less impact for now but several Midlands companies are opening up market niches there too.

These successes are playing a



What role for the Midlands in China's Xi'an Aircraft Company's MA700, ElS 2015?

Learn the do's and don'ts of China

FAMILIAR MAA face Stuart Le Cornu led Coventry's HPL, now PFW, to open its Xi'an, China manufacturing facility in 2008. Current MD in Xi'an, Mark Franklin has agreed to share his wealth of experience with members at an MAA workshop in early June – the date to be announced in the MAA weekly e-letter and the MAA website.

big role in realising the UK government's "rebalancing" of the economy towards manufacturing exports for emerging markets (see pg 2). But on top of pull-through from the primes' supply chains, what role should the MAA play to support members seeking to work in these regions directly?

Market information: the body plans to continue with specialist MAA aerospace market workshops like those organised in recent months on the Middle East, India, China and Russia working with specialists from A|D|S and UKTI or the Middle East Aerospace Consortium and dissemination of the A|D|S/UKTI annual report on global opportunities (see page 3).

Expertise: the MAA is fast developing in-house expertise and a network of contacts and external experts that members can call on, with MAA chief executive Dr Andrew Mair joining UK trade missions to China (twice) and India as well as delivering a project in the Middle East over the last 12 months.

Active assistance: the MAA's business development group, now chaired by board member David Danger, managing director of HS Marston, will welcome suggestions for additional practical assistance. Danger is keen for the MAA to "develop unique capabilities focused on the needs of our members that draw on but don't duplicate the excellent services already provided by A|D|S and UKTI."

Last chance to join MAA at Paris airshow

TIME and space is running out for MAA members who wish to exhibit with the MAA at the Paris airshow.

As AIM went to press, only three exhibition pods remained on the MAA's stand for the world's biggest aerospace and defence exhibition, which runs from 20-26 June.

With upwards of 138,000 trade visitors and 200 official delegations expected, the show remains a key point in the industry's economic cycle.

"Participating in an event of this size with the MAA presents your company to world markets in the most professional way while taking away many concerns – costs and time being the main ones," says MAA Paris coordinator Emma Burgess.

"The 'pod' stands give you an excellent base, with the MAA taking enquiries while you meet with key contacts."

Members concur. Following Paris 2009, one exhibiting MAA member commented: "Since becoming MAA members we always go along with them. As well as saving money, there is the opportunity to network and you get more interest from passers-by when you're together."

For information, contact emma.burgess@midlands aerospace.org.uk, or call 024 7643 0250.



news from the maa

Minister urges manufacturers to export

UK Trade and Investment Minister Lord Green has urged Midlands manufacturers to broaden their horizons with new export markets.

Advanced engineering in particular had good prospects in export, he told MAA members who met him at Aerospace Opportunities 2011, an event organised by UK Trade and Investment (UKTI) in partnership with the MAA, Enterprise Europe Network and Delcam.

The event attracted buyers from 15 companies across the world, including Rolls-Royce, Aerotech Peissenberg, Lufthansa Technik and Hispano-Suiza, and led to 228 individual meetings with suppliers based in the Midlands.

Many buyers surveyed after the event said they expected to be doing business with suppliers they had met at Delcam's facility in Birmingham.

They commented that the suppliers were motivated, business-orientated and had the necessary skills. "In general the suppliers were very good," said one.



Another said the suppliers he met "were extremely specialised, each one with a high level of know-how in aerospace applications."

Suppliers praised the event for the spread of market sectors and interests to which it exposed them. "This was one of the better Meet the Buyer events I have attended," said one. "The quality of people who attended was very good."

Lord Green said advanced engineering is "a good example of an area where there are thousands of SMEs in the supply

chain, which are exporting overseas and winning business in growing markets."

Lord Green said the UK government wanted to turn the UK's export performance around so the economy was more dependent on exports to world markets rather than reliant on demand at home. But this would not happen overnight.

"This will be a marathon and not a sprint. But we have a great deal of talent in a lot of industry sectors in the UK and we are starting from a position of strength."

Two ways to get to Paris with the MAA

> Book your 'pod' on the MAA stand. You get:

- An individual pod stand including display area
- Furniture (2 stools at stand, with a lockable cabinet)
- Exhibitor Pass (valid for the duration of the show)
- 5 x Daily Entrance Tickets

for more information.

- Entry in the official show catalogue
- Entry into the UK pavilion brochure
- Support from MAA staff leading up to the event, including exhibition advice for those individuals within a company that will be manning the stand
- Support from the MAA staff throughout the show
- Use of all facilities on the stand, networking and kitchen area

Contact emma.burgess@midlandsaerospace.org.uk, or call 024 7643 0250

> Book advertising space in AIM.
You get:



- Guaranteed space in the MAA's highprofile newsletter for your corporate message
- Guaranteed availability at the Paris airshow from the MAA's stand
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- A choice of sizes: quarter page, half page of full page.
- Limited guaranteed special positions

For rates and specifications, please contact Anne Esterson at info@midlandsaerospace.org.uk or phone 02476 430250.





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Aero Engine Controls opens up on its supply chain strategy

CLOSE to 50 MAA members took advantage of the opportunity to hear first-hand what Aero Engine Controls (AEC) looks for in its suppliers when the Midlands-based global Tier 1 supplier joined with the MAA to host a ground-breaking event in January.

The one-day intensive site visit for suppliers offered an in-depth briefing on the AEC view of the market, business strategy and new technologies presented by the senior management team, plus an extensive factory visit. The outcome for many participants was the chance to make post-event business propositions to AEC that were tailored to fit the host's strategic direction.

MAA chief executive Andrew Mair commented: "This was less of a 'meet the buyer' event and more of an excellent opportunity to get literally inside Aero Engine Controls to learn what makes the company tick and understand directly from the top team where it is going. The event was designed to help our members align their business strategy more precisely with a significant potential customer."

Delegates said the event was "very worthwhile... a novel attempt to open AEC to suppliers... honest, inspirational, thought-provoking".

For AEC's Vice President Supply Chain and MAA director Annette Rothwell there were also benefits. "If we can communicate better with potential suppliers about what our requirements are and where we are going as a company, our supply chain will be empowered to work in harmony with us", she said.

The MAA plans similar events are planned in the coming months with other key aerospace customers including Moog Aircraft Group, Rolls-Royce and HS Marston.

▲ www.aeroenginecontrols.com

Which future aircraft programme should you bid to be on?

TO help smaller UK companies answer this question, UK Trade and Investment and AIDIS, our national organisation, have worked with consultancy Achieving the Difference to update their excellent analysis of global aircraft programme opportunities for UK aerospace.

Just published for 2011, the report is based on the expert views of the big primes and systems suppliers and is a must-read for anyone responsible for business development in their company.

- Download a copy at http://www.ukti.gov.uk/export/sectors/advanced engineering/uktipublications.html.
- MAA chief executive Dr Andrew Mair sits on the ADS committee that oversees the report. Tell him what you would like to see in the 2012 edition: andrew.mair@midlandsaerospace.org.uk.

Seminars, workshops and trade delegations





New lead at MAA Business Development Group

DAVID Danger, managing director at HS Marston, is taking over the reins of the MAA Business Development group from Mark Johnson, managing director of Avingtrans Aerospace Division, who has done sterling work in chairing the group since 2006 and remains an elected MAA director. The group is tasked with making sure the MAA offers members the best possible support to grow their aerospace business.

Innovation

MAA pilots new tool for technology roadmapping

A NEW technology roadmapping tool has been developed by the MAA to help member companies tackle fundamental strategic questions. This will help them to be prepared to approach new customers or to make better bids for funding but also it can be tailored to suit the needs of the company.

Initial results from the pilot work, which has involved aerospace companies from a variety of business areas and disciplines, are encouraging.

"We have used the tool in companies who manufacture, even make to print, companies who offer services to other aerospace companies, companies who are design organisations," says Bridget Day, manager of the MAA's Aerospace Technology Exploitation Programme (ATEP). "These companies have varied in size from under 10 employees to a few hundred employees. We want to encourage anyone who is interested to contact us."

Roadmapping provides a framework to help companies make key strategic decisions, and can form the basis of a business case. It is a readily



understandable communication tool throughout an organisation and with key partners.

A roadmap is a set of data in a hierarchical strategic plan. It is designed to convey specific information and display it in an easily-understood chart format.

Bridget says the process of roadmap development brings together an organisation's key stakeholders and builds consensus, while maintaining the roadmap provides a continuing reference point for the business.

"Companies need to plan their technology development for a number of reasons," she says. Among those reasons, she cites the need to show that activities are relevant to business needs, aligned with customer requirements, properly costed and funded, and available to customers at the right maturity level at the right time.

A benefit of the MAA's approach, she adds, is that having gone through the brainstorming, questioning and creation of the roadmap, members may then have an opportunity to present their plan at an event if they wish – hence marketing themselves.

Development of the roadmapping tool in the East Midlands has been supported by the Transport iNet.

For more information, please contact bridget.day@midlandsaerospace.org.uk or phone 02476 430250.

Events showcase benef

New tec

NEW technology and new strategies have been the focus of four successful events run by the MAA in the last 12 months under the auspices of the East Midlands Transport iNet.

Three major events have offered expert advice on how best to adopt new technologies working with universities, to get involved with National Technology Centres and to work closely with customers on new manufacturing technologies.

In a showcase of aerospace expertise at the University of Leicester, delegates heard from leading aerospace and space companies in the UK about cutting-edge space technologies and university/industry collaboration, the latter including case studies from small companies.

National Technology Centres (NTCs)



Page calls on MAA members to 'innovate and collaborate tog

SC 21 WORLD-class suppliers "are a key part of our future," Andy Page, Global Supplier Development executive at Rolls-Royce, has told MAA

members. "We need suppliers to be agile, capable and competitive and SC21 can help accelerate their development," he told an audience of 60 in Derby at a seminar

organised by the MAA and the Manufacturing Advisory Service West Midlands (MAS-WM).

With Rolls-Royce's turnover expected to double in 10 years, its external supply chain spend will increase by 50% over the next five years to £7.6 billion, said Page. To succeed, "we must innovate and collaborate together."

Delegates heard how four Midlands companies had deployed SC21 to develop business strategy and improve performance, with a focus on better customer relationships.

Among themes common to the four – Cinch UK of Worksop, CHH CoNeX of Birmingham, SL Engineering of Lincolnshire and new SC21 bronze award

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its to aerospace industry of working with universities and customers

hnology, new strategy



From left: John Frodsham (iNet), Stan Payne (MAA), Peter Flinn (TSB), Andrew Mair (MAA), Bill Ion (AFRC), Denzil Lawrence (AMRC), Ken Young (MTC), Simon Barker (Freeth Cartwright), Peter Chivers (NCC)

The important of technology roadmapping was the key theme to a further event held at Loughborough University. Key speakers from Rolls-Royce, Boeing and Aero Engine Controls emphasised the desirability for all their suppliers, large and small, to develop their own roadmaps. The MAA has developed such a tool specifically for small company needs.

Two of the events, on how to adopt new technologies and how to work with the NTCs, were co-sponsored by the MAA's ATEP programme funded by Advantage West Midlands and the European Regional Development Fund.

such as the Advanced Manufacturing Research Centre at Sheffield were the focus of an event at MAA member Advanced Composites Group's site in Derbyshire. Representatives of five of the UK's NTCs described work undertaken at their centres. Experts stressed the importance of IP and how to protect it – a key issue for small firms when dealing with third parties.

Further evidence of the important of working with customers on new manufacturing technologies was offered at a fourth event staged in association with the University of Nottingham. The event focused on two new organisations at the university, the Airbus-sponsored Centre for Manufacturing Excellence (CME) and the Institute for Aerospace Technology (IAT), both of whose directors attended.

Frontline help for East Midlands members

THE Transport iNet supply chain brokerage programme delivered to aerospace by the MAA has recorded a number of successes over the past year.

The MAA has assisted 22 East Midlands members in various ways.

Several companies have helped pilot the exciting roadmapping process being developed by the MAA (see story opposite). "This is an extremely flexible tool that not only covers technology roadmapping but where appropriate provides a solid, no-nonsense tool for make-to-print organisations to develop a capability roadmap for their future," says Stan Payne, MAA Innovation and Technology Specialist. "For smaller businesses, it is an invaluable tool for business planning."

The MAA's high-value-added network of aerospace executives has proved an invaluable asset in helping connect companies to the right potential new customers.

As valuable has been the MAA's ability to assist businesses who had little or no experience in aerospace to understand the industry in more detail and to develop a strategy for getting involved in it.

Further funding for similar work is available in the East Midlands.

For details about iNet brokerage, contact stan.payne@midlandsaerospace.org.uk

gether' to become world-class suppliers

winner Technoset of Rugby – were the benefits of regional collaboration and clustering in implementing SC21.

Tim Holmes of the MAA said: "It's clear that the SC21 programme is beneficial to any organisation. The SC21 framework helps organisations focus their efforts, providing a clear route to world class performance."

Customer support for SC21 in the Midlands was demonstrated by the presence at the event of customers including Aero Engine Controls, General Dynamics UK, Goodrich Engine Systems, Goodrich Actuation Systems, GKN, Meggitt, MBDA, Rolls-Royce and Selex.

■ To get involved in SC21, contact Tim.Holmes@midlandsaerospace.org.uk



From left: Peter Jones, MAS-WM; Phil Curnock, ADS; Andy Page, Rolls-Royce Aero; Tim Jackson, Rolls-Royce Submarines; Tim Holmes, MAA.

Members update



was used to manufacture demonstration parts and the initial

Delcam helps de-ice Dreamliner

MIDLANDS technology innovator Delcam has played a major part in supplying new electro-thermal ice protection technology for the wings of the Boeing 787 Dreamliner aircraft. It is the first application of this technology to a major wing environment.

Delcam developed a novel manufacturing process based on its adaptive machining technology.

The Wing Ice Protection System is a joint project between GKN Aerospace and Ultra Electronics, which provides the system controller.

▲ www.delcam.com

Dunlop wins major deals

BIRMINGHAM-based Dunlop Aircraft Tyres has won a major deal to support Air Nostrum's new fleet of Bombardier CRJ1000 Next Gen regional jets. Under the agreement, Dunlop will supply the two nosewheel and four mainwheel tyres for each of the Spanish carrier's 20 firm and 15 optional aircraft.

Dunlop has also signed a contract with Korea Aerospace Industries (KAI) to be the

exclusive supplier of tyres for its new Korean Utility Helicopter (KUH), Surion. The Surion made its first flight early in 2010 and more than 245 are on order.

▲ www.dunlopaircrafttyres.com

New deals for Trent engines

DERBY-based Rolls-Royce has won a £1.4 billion long-term services contract from Emirates, covering Trent engines for 70 Airbus A350XWB aircraft.

The agreement brings the airline's Rolls-Royce powered fleet of 128 aircraft, in service and on order, under TotalCare arrangements.

Rolls-Royce has also signed new contracts with two Asian airlines.

South Korea's Asiana has ordered Trent 900 engines to power six Airbus A380 aircraft, scheduled for delivery in 2014. The value of the deal, which includes long-term service, was not disclosed

Turkish Airlines confirmed a £120 million order for Trent 700 engines, plus long-term service, for three more Airbus A330 freighter aircraft. One of the two similar examples previously ordered is already in service.

▲ www.rolls-royce.com

Good year for Ultra

DEFENCE supplier Ultra Electronics, which has a major unit in the Midlands, has recorded increases in revenue and profits despite difficult trading conditions and concerns about spending cuts in its principal markets. Revenue for 2010 rose 9% to £710 million, while pre-tax profits rose 15% to £102 million.

Reduced spending on the Boeing 787 and Lockheed-Martin F-35 Lightning II programmes were partly responsible for a drop of 3% in revenue in Ultra's aircraft and vehicle systems division.

The company attributes its success to differentiated positions in its market sectors and a successful strategy for growth.

▲ www.ultra-electronics.com

Castlet invests for the future

LINCOLN-based engineering specialist Castlet is looking to use the success of the past three years as a springboard to invest in the future.

Castlet, which designs, manufactures and supports ground support electronic test equipment for aerospace and defence applications, has doubled the sales of its aerospace division despite the economic downturn. Castlet total sales now stand at £6million per annum. The aerospace division has been rehoused in a purposebuilt cleanroom facility and a major update of the equipment portfolio is under way which will result in digital programmable functionality as standard.

Business development manager Tom Cooney says Castlet intends to reinvest by



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Nottingham launch is big step in Midlands aerospace R&D buildup

MORE than 100 people attended the launch of the Institute for Aerospace Technology (IAT) at the University of Nottingham in December when the institute opened the doors to its 700sq m of new office and laboratory space.

The institute was officially opened by MAA chairman Clive Snowdon, chief executive of Umeco. Its aim is to establish Nottingham as a world-leading university for aerospace R&D by implementing major infrastructure development and investing in the research base, says its director, Professor Andrew Long. This includes the new Aerospace Technology Centre, a new 1800sq m facility due to open in spring 2012 which will house industry research and technology transfer activities.

The University of Nottingham's current aerospace research portfolio is valued at £35-40 million, including £20 million in funding from the Engineering and Physical Sciences Research Council (EPSRC) and involving more than 50

academic experts. Its key programmes include research on the power electronics, manufacturing, aero engine transmissions and polymer composites. The university is involved in the EU's Clean Sky Joint Technology Initiative (JTI) and works with major industry players including Rolls-Royce, Airbus and GE Aviation.

The IAT has been set up as a dedicated research and knowledge transfer centre, said Prof Long. "Multi-disciplinary, integrated projects will build on our leading basic research, evolving towards large-scale demonstrators."

The institute's goal is to support aerospace innovation regionally and nationally by providing a pipeline from fundamental to applied research.

The project provides specific support to help SMEs develop new technology and engage with major aerospace research programmes as a way of developing new customers.

▲ www.nottingham.ac.uk/aerospace



AWS ribbon cutting in Slovakia

acquiring a technology company with compatible products. No details have been released. He adds that strategic partnerships with like-minded high tech businesses will also be considered.

▲ www.castletltd.com

AWS grows in Slovakia

INCREASING demand has led Midlandsbased AWS Electronics Group, a leading independent electronic manufacturing solutions (EMS) provider, to open a new purpose-built facility in Slovakia. Located in Namestovo, less than two hours from Kracow airport, the facility provides PCBA assembly, SMT and conventional PTH, cables and electromechanical assemblies and test services.

At the opening ceremony, chief executive Paul Deehan said AWS would "progressively develop" high-tech support functions at the new facility to complement its low-cost manufacturing capability.

▲ www.awselectronicsgroup.com

Training academy go-ahead

ROLLS-ROYCE has received the go-ahead to build a £6 million state-of-the-art training academy that will enable it to double the number of apprentices it trains. Among the 400 trainees will be apprentices who work in Rolls-Royce's supply chain as well as other manufacturers in the East Midlands. The academy will be built adjacent to its Learning and Development Centre.

NEW MEMBERS

The MAA welcomes the following:

FULL MEMBERS

Amelec

Cannock

Electronic component distributor, ISO9001-2008 approved.

Archer Woodnutt

Stoke on Trent
Precision subcontract sheet metal

Arden Precision Ltd

Solihull

Precision engineering services.

BHW Commercial Solicitors

Leicester

Solicitors specialising in aerospace.

Cube Precision Engineering

Birmingham

Bespoke tooling and components.

D&S Engineering (Coventry) Ltd

Coventry

Precision engineering company.

Hexagon Metrology Ltd

Telford

Metrology machines, software and systems from the world's largest metrology group.

Holscott Fluoroplastics Ltd

Grantham

Extrusion of melt processable fluoroplastic tubing and sheet.

Invotec Circuits (Tamworth) Ltd

Tamworth

Manufacturer of time-critical, high-technology printed circuit boards.

Surface Finishing Engineering Ltd

Wolverhampton

Design and installation of chemical process lines and surface treatments.

ASSOCIATE MEMBER

Entech Technical Solutions Ltd

Hemel Hempstead

Specialist aerospace recruitment.

NEWS IN BRIEF

Wolverhampton-based **Armoloy (UK)** has received NADCAP accreditation for its proprietary nodular thin dense chromium plating process, making it the first NADCAP-approved European source for this process. This follows the company's renewal of AS9100 Rev.B which Armoloy says it intends to upgrade to AS9100 Rev.C over the next 12 months.

Avingtrans has signed a three-year contract extension with its largest customer, a market-leading Midlands-based aerospace manufacturer. Worth about £5 million and running from January, the contract covers precision surface polishing and finishing of a range of aerospace components.

Derbyshire based **Gardner Group** has acquired aerospace supplier **Blade Tooling and Blade Technology**, a specialist manufacturer of complex aerofoil tooling, ceramic cores and wax mouldings. The deal secures the jobs of more than 60 workers at Blades

Worcestershire site. The new company will trade as Gardner Blade.

Engineering group **Bodycote**, which has several sites in the Midlands, has recorded a £45 million pre-tax profit for last year, reversing a £55 million loss in 2009. The group cited improved sales and operational efficiencies for the

turnaround as well as improved trading conditions in its key sectors which include aerospace and defence.

NDT Services has consolidated its administration, technical services, surface inspection, x-ray and ultrasonic immersion testing units in new purposebuild premises at Victory Park, Derby. NDT's materials testing and European inspection divisions are not affected by the move, which is part of the firm's continued expansion.

MB Aerospace Holdings of Derby has sold its energy services division for £8 million in a move which chief executive Craig Gallagher says will allow the firm to re-invest in the company's core aerospace business.

Leicestershire-based **Winbro Group Technologies** has secured orders worth £5.5 million for equipment for companies in the USA and Europe, including Rolls-Royce. The machines will be designed to make parts for aero engines and turbines.

Bromford Industries' Firthstones facility in Coventry has achieved AS9100 Revision C certification, making it one of the first in the UK to be accredited to this new quality standard. Bromford sees it as a step in its transition to becoming a globally recognised precision engineering service provider.

MAA events for your diary:

CAI FNDAR

LAST MINUTE! Meet Connecticut aerospace companies

Wednesday 20 April 10:30 – 14:00 MAA office, Coventry, CV3 2TX (For MAA member companies; places are strictly limited.)

Use sophisticated aircraft market forecasts in your business strategy

Friday 13 May Afternoon, time to be confirmed MAA offices, Coventry, CV3 2TX

MAA members meeting with rail industry

Tuesday 24 May 14:30 – 18:00 Derby Conference Centre, DE24 8UX (With Derby and Derbyshire Rail Forum, supported by the Transport iNet.)

Meet Czech aerospace companies and research institutions

Wednesday 25 May 14:00 – 17:00 MAA offices, Coventry CV3 2TX

Learn from experience in Chinese aerospace

Watch for this event in early June. MAA offices, Coventry CV3 2TX

MAA at Paris 2011

20 – 26 June Le Bourget, Paris

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.







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:

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