



**Aerospace supply chain companies help fight off  
the effects of Coronavirus on the economy:  
*MAA survey, 19<sup>th</sup> and 20<sup>th</sup> March 2020***

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**This study**

These are the results of a survey of a panel of 20 Midlands aerospace suppliers into the impact of the Coronavirus outbreak in a key UK regional manufacturing cluster. The panel represents both manufacturers of aircraft parts and companies that provide specialist services to the manufacturers. We have set the panel up to help us monitor the impact of the Coronavirus outbreak, share the knowledge across the industry and with relevant authorities, and identify how best the alliance can support member companies. This survey was undertaken on Thursday 19<sup>th</sup> and Friday 20<sup>th</sup> March 2020.

The MAA's own media searches have noted this relevant news from some big aerospace customers published on 23<sup>rd</sup> March 2020, which provides useful context.

- Following a short closure last week, Airbus's active policy is to continue aircraft production, not lay off staff, and to support suppliers (Le Monde)
- Boeing is now going to close its Washington State factories for two weeks starting this week (Seattle Times)
- German engine maker MTU is going to stop production for three weeks starting this week, in part related to disruption of supplies from (unnamed) affected areas (Flight Global)
- GE is laying off 10% of its Cincinnati workforce (no detail on which employees, or any production changes) (Cincinnati Enquirer)

## Highlights of MAA survey

1. Big aerospace customers are not yet giving much information to suppliers or changing their order books. Service providers are using their informal personal connections with customer staff to identify the latter's reactions to the Coronavirus outbreak (e.g. restructuring of shift patterns).
2. Aerospace customers have heightened their close monitoring – and are encouraging continuity -- of the supply of parts from their suppliers.
3. Manufacturers are already identifying red-flag issues when their customers or their own suppliers -- in Italy, for example -- have now had to stop work.
4. The key current issues that manufacturers raise relate to their staff and the organisation of work in their factories so that the huge globalised aircraft production systems in which they play small parts can keep functioning. Issues faced by service providers focus more on short-term revenue and cashflow problems already raising questions about the survival of some companies, because many of their projects are easier for customers to delay or switch off – and this is happening.
5. For three weeks, since early March, both manufacturers and service providers have been steadily putting in place sophisticated human resource management and work organisation policies so they can protect employee health and safety while maintaining business activity.
6. Both manufacturers and service providers want government bodies a) to be more decisive in terms of actions to reduce the impact of the Coronavirus outbreak, and b) to offer financial support to industry to keep capability intact and keep staff employed if and when manufacturing has to be halted.

## Coronavirus in context

The aerospace sector is one of the UK's flagship manufacturing industries, and the Midlands region is home to one of the world's biggest aerospace business clusters. The cluster is centred on aero-engine maker Rolls-Royce and big makers of sophisticated aircraft systems such as Collins Aerospace, Moog Aircraft Group and Meggitt. More than 300 supply chain companies, both manufacturers and providers of specialist services, are rooted deeply in the region's historic engineering base.

The Midlands aerospace industry has grown rapidly between 2005 and 2020, with output doubling and employment increasing by more than half. This growth has been fuelled by high-technology and precision engineering companies ramping up components production to meet global demand for the new more fuel-efficient aircraft that the global giants Airbus and Boeing are producing whilst investing in developing new technologies that can make aircraft lighter and consequently greener.

More recently, a number of uncertainties have been clouding the aerospace industry horizon. Boeing has temporarily ceased production of its best-selling 737 MAX aircraft after fatal crashes revealed a major design flaw, Rolls-Royce has experienced technical problems requiring redesigns and replacement of parts on one of its new engines. Meanwhile, the

advent of Brexit has creating unwanted uncertainties for the industry about future trading patterns and the competitiveness of the UK as a location in the world economy.

By early 2020, these headwinds were already placing strains on aerospace supply chain companies that simultaneously were making significant investments in order to expand their production and R&D capacities. The Coronavirus outbreak is therefore hitting an economically healthy but financially stressed aerospace cluster.

### **Midlands aerospace Coronavirus survey**

To understand the effects the Coronavirus outbreak is having on the Midlands aerospace cluster, and how companies are responding, on Thursday 19<sup>th</sup> and Friday 20<sup>th</sup> March the Midlands Aerospace Alliance set up a panel of 20 representative aerospace suppliers for an impact survey; with a view to repeating the exercise at future intervals. These twenty companies may serve as front-line bellwethers, early indicators, of what is happening across the UK aerospace industry. The knowledge generated from the survey will be shared with the MAA's 300 member organisations and with the relevant local, regional and national authorities with a view to helping all parties make the best possible decisions for people, companies and communities.

The panel includes manufacturers supplying the likes of Boeing, Airbus, Rolls-Royce, Collins Aerospace and Leonardo and the first-tier suppliers to these companies. The manufacturers have both regional and global customers and both regional and global supply chains. The panel also includes a number of the specialist service provider companies that are integral parts of the aerospace cluster and play a vital role in "oiling the wheels of industry."

### **The survey questions**

1. What kinds of information are your customers giving you?
2. What information are your customers asking you for?
3. Do you have issues with your own suppliers?
4. Do you have other issues/challenges? Please list up to three.
5. What policies are you adopting (in the supply chain, with working patterns, with employees)
6. What do you most need government to do?

## Survey results in detail

### 1. What kinds of information are your customers giving you?

*Manufacturers* report receiving little guidance yet from major customers with respect to continuing the supply of products to them and management of the supply chain; the assumption is that production will continue as before. One red flag is an orderbook change from an Italian aerospace customer that has stopped working for a period and has asked for shipments of components to stop. The major companies appear to have given the people with whom the manufacturers are normally in touch (in purchasing departments) little or no information to share yet.

Specialist *service providers* have more information about organisation and work changes (new shift patterns to minimise personal contact, working from home etc) being implemented at their customers, perhaps because they usually have stronger informal personal relationships because of the nature of their work. Much of this information is about rules restricting travel and meetings, which have already been in place since the start of March at many aerospace companies.

### 2. What kinds of information are your customers asking you for?

Customers are regularly asking *manufacturers* to explain their Coronavirus risk mitigation plans, how they intend to continue supplying parts, and to estimate any impact on supplies to the customer. Other customers are asking for confirmation that parts will continue to be supplied. Some manufacturers see the level of detail requested as a disproportionately onerous rolling out by customers of existing business continuity/ resilience plans and are responding by giving the customer the key facts they believe the customer really needs to know rather than provide the detail requested.

For the *service providers*, some customers want to understand their new working practices, key contact points, etc. Some want to know where supplier staff have travelled to recently, if any staff have been ill. A potential supplier of Coronavirus testing capability directly to industry has had detailed engagement with industry manufacturers.

### 3. Do you have issues with your own suppliers?

The *manufacturers* are not generally experiencing supply chain shortages themselves, yet. However, there are red flag examples from Coronavirus hotspots in Asia and Italy where supplier production has stopped even if the manufacturer still has stocks.

*Service providers* have nothing specific to report in terms of their own supply chains. However, they are monitoring a general slowdown of activity at their suppliers and reduced visibility of supply which the service providers believe is temporary as suppliers adjust their working practices.

#### **4. Do you have other issues/challenges?**

Asked to list other challenges they are facing, two thirds of the issues *manufacturers* report are related to staff. Starting with those most frequently mentioned, these are:

- managing Coronavirus-related staff shortages while customers have not altered their expectations of full on-time deliveries;
- the high-risk-group older workforce of some smaller manufacturers means more staff members are self-isolating and therefore absent;
- managing offsite working (e.g. don't have enough software licenses);
- safeguarding employees while at work (e.g. by physical isolation);
- many (e.g. machinists and quality inspectors) obviously can't work from home.

Other issues raised include:

- potential future revenue loss;
- no customer visits to discuss issues;
- cleaning products in short supply;
- customer IT systems fail;
- uncertainty over government policy.

Specialist *service providers* report facing a different set of issues at present, with 9 out of 10 issues related to immediate business revenue concerns, such as the following (starting with those most frequently mentioned):

- customers have stopped making decisions on new projects that were about to start;
- planning for capacity needs is now virtually impossible;
- potential revenue loss is a growing concern;
- for some, business has already dried up;
- cashflow will become a major problem in a few more days;
- companies will soon be unable to pay staff wages.

#### **5. What policies are you adopting (in the supply chain, with working patterns, with employees)?**

Every example of new policies being adopted by *manufacturers* relates to protecting the health and safety of employees while keeping production running. Step by step over the previous two-three weeks, aerospace suppliers have already been implementing sophisticated human resource management and work organisation practices to allow production to continue. These include, again starting with those mentioned most frequently:

- on-site workers continue to work with appropriate distancing measures e.g. no internal meetings, shifts no longer overlap;
- most office staff are now working from home;
- companies are giving health guidance for employees both at and away from work;
- regular cleaning of work spaces;
- alternative communication methods are being adopted including on-line from different offices on site;
- flexible working is being offered to employees where possible;

- paid leave being arranged for some;
- no routine visitors – whatsoever -- allowed on site.

Observing other countries, companies are anticipating more stringent measures will be necessary in the UK.

More than 80% of new policies being adopted by *service companies* are also related to people:

- alternative communication methods are being adopted;
- most office staff are working from home;
- changing to the same new shift patterns and staff segregation that customers are adopting;
- flexible working offered;
- temporary layoffs.

Beyond these, some companies are having to make new cashflow projections and are delaying planned investments.

## **6. What do you most need government to do?**

*Manufacturers* and *service companies* make the same recommendations to government:

- more than 40% of recommendations ask government to plan more clearly, communicate better and calmly, and especially to deliver what is announced (respondents lack some confidence in government);
- a further 35% relate to the need to organise financial support for industry, largely so that workforces can be retained so as not to undermine the economic recovery.

Other recommendations include:

- make coronavirus testing kits available to industry companies to dispense;
- ensure the UK's IT infrastructure can cope with home-working;
- prioritise bringing the virus under control;
- support airlines financially which are this industry's final customers;
- plan to make the entire UK economy more resilient and self-sufficient to protect it better from future disasters.

### **The MAA view**

According to Dr Andrew Mair, Chief Executive of the Midlands Aerospace Alliance:

“Like our 300+ member organisations, it’s our job to do everything we can in the current situation. Building on our close links to peer organisations Medilink and Make UK in the Midlands, we have actively supported the initiative for the UK to manufacture more medical equipment urgently. At least fifteen MAA member companies have responded to that call. We are delighted to see that Meggitt, with its global centre of operations in the Midlands, has stepped up to lead one consortium planning to make intensive case ventilator equipment.

“With this survey initiative, the MAA should be able to play a second role by collecting and sharing knowledge amongst members and with the authorities.

“We’re now planning our third initiative, setting up a regular webinar series for the duration of the current crisis to keep our members informed and networking with each other, covering subjects of mutual interest to our members; some about coronavirus, many about business and technology opportunities in the industry that can still be pursued in the new business environment.”