

# MRO 360°



## Planning Is Key

How Best to Prepare For the  
Narrow-Body Heavy Maintenance Season

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Wheels and brakes  
maintenance





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## Planning Is Key

### How Best to Prepare For the Narrow-Body Heavy Maintenance Season

By David Dundas

There are significant seasonal fluctuations in airline passenger traffic and as a consequence, more strategically effective times to schedule critical aircraft maintenance. The highest peak in passenger traffic typically occurs during the summer months of June to August, often referred to as the 'holiday season' or 'vacation season', a period which coincides with school holidays, warm weather, and the vacation season in many parts of the world. This is a time when families and individuals more usually travel for leisure, resulting in the need to schedule a greater number of flights.

While there is also an uptick in demand for long-haul flights on larger wide-body aircraft, the greater volume of flights in

the summer involve narrow-body aircraft as holiday destinations typically involve short- and medium-haul distances. As a direct consequence, in most world regions the wintertime will see a surplus of narrow-body aircraft available and therefore this will be far better time to perform scheduled heavy maintenance.

We asked three companies who specialise in narrow-body MRO to share their thoughts on how they are able to meet the unique challenges faced when scheduling maintenance for these aircraft. This includes seasonal fluctuations, allocation of manpower, when commence RFQ processes, and whether 'intermediate checks' are a viable solution to mitigating downtimes for narrow-body aircraft.

In addition, we thought it would be interesting to see how a company which specialises in one specific element of MRO, wheels and brakes', might also be affected where scheduled maintenance is concerned.



Scott Butler, Chief Commercial Officer, Ascent Aviation Services

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First off, we specifically asked narrow-body aircraft MRO providers whether they individually experience the above-mentioned seasonal fluctuations in demand for heavy maintenance. According to Giovanni Renga, Chief Technology Officer at AMROS Global, the company plans the bulk of their heavy maintenance operations on narrow-body aircraft for between October through to the end of March the following year. "Based on the size of the fleet it may be the case that that airlines have aircraft undergoing checks and maintenance throughout the year, utilising multiple MROs and locations to cover the needs and to also benefit from the highest check utilization."

Scott Butler, Chief Commercial Officer at Ascent Aviation Services, is very much in accord with the seasonal fluctuations in demand for narrow-body aircraft maintenance, saying that "For the majority of Airlines, summer is usually peak flying season and therefore a low point in heavy maintenance demand. The majority of the customers need their aircraft flying during peak travel seasons in the summer." Gilles Fossecave, CEO MRO Division, Vallair has observed an increase in the length of the 'winter season' running between October and April when there is a noticeable increase in the demand for scheduled heavy maintenance, commenting that: "Heavy maintenance demands are dictated by the peak travel periods for airlines, as they need all their fleet flying during these times. Although, we are seeing that the 'Winter season' period is being extended year-on-year."

Nicolai Hertz, Chief Commercial Officer TP Aerospace, points out that the company specialises in providing a 'one-stop shop' for maintenance of wheels and brakes (W&B), and those specific demands bring their own challenges in three specific areas, W&B cost per landing programs, serviceable W&B components, and distribution of new W&B material and piece parts to the market. He notices that there are regional fluctuations in demand depending on the time of year. He also points out that he is able to mitigate seasonal fluctuations to a degree because not all narrow-body aircraft are used for carrying passengers and instead many are also used for ferrying cargo, which is a sector which sees its own unique seasonal fluctuations in demand. He also points out that the nature of the company's operations are such that: "During the high season (the summer period) we have, together with our customers, primarily prepared that all aircraft have had brakes installed which will have satisfactory life to go through the high season. It means that it is primarily wheels and tires that we support our customers with during those months. The brake exchange demand is much more levelled out across the year as we see exchanges not only in high season but also during low season when the aircraft are in for checks."

Of course, while there may be seasonal fluctuations in demand for narrow-body heavy maintenance, we were keen to find out how companies managed to fulfil their capacity for heavy maintenance during periods when demand was reduced.

At Ascent Aviation Services, Butler advises that not all their customers are affected by seasonal demand for narrow-body aircraft. "We enjoy a very diverse customer base. During low points for airlines, we can weather the valleys in airline demand with cargo operators, leasing customers and other special projects," he points out. The same applies at Vallair where Fossecave admits it is a challenge and "...to address this Vallair ensures it is a flexible organisation, able to manage a diverse workload. When filling our capacity for narrowbody aircraft, we take into consideration the seasonal fluctuation to compensate for the lower demand periods."

At AMROS Global they find their global reach a distinct advantage to mitigate for seasonal fluctuations, while also offering 'financial incentives' to clients to consider element of narrow-body maintenance during times of greater capacity demand. "Being an MROs serving international operators have all slot covered by different airlines operating in different continents so the tendency experienced is that the MRO are fully booked over years ahead with the check chains. But in case of available maintenance slot MROs can do special offers to get more attractive or provide shorter ground times if enough manpower is available maybe working in two shifts! What we have observed some MROs doing is to offer different type of customer segments in seasonality, for example private aircraft owners in summer, commercial aircraft in winter," says Renga.

At TP Aerospace the situation is very



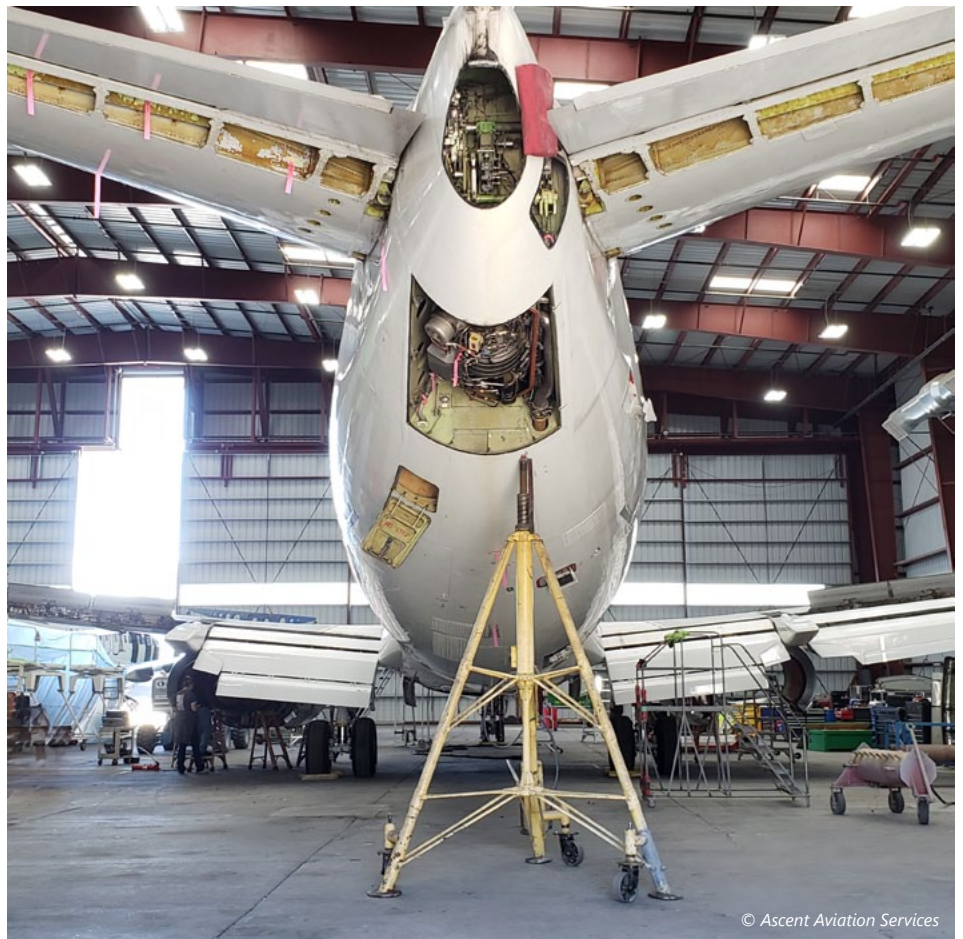
different. Hertz states that: "TP is a W&B maintenance and solutions provider. Due to our three verticals, we are always having a constant maintenance capacity utilization both during high and low seasons. We very much prepare for the seasons well in advance and ensure that all W&Bs are made serviceable in due time before they are actually needed. Our planning is ensuring that this workflow is as constant as it can be while also dealing with and juggling the challenges of supply chain issues in the industry. That is the discipline that we need to master for our customers and that is a fine art that at times can be tough to perform."

The next area we wanted to tackle was that of work schedules and guarantees for on-time performance of scheduled work, as well as timing for requests for work (RFQs) and reserving MRO capacity.

At Ascent Aviation Services they like their customers to begin the RFQ process and reservation of MRO capacity as soon as possible. "While we can accept a drop-in here or there, we like to book narrow-body heavy maintenance 9-15 months out to ensure we can adequately staff," comments Butler. Fossecave is also keen to see customers schedule heavy maintenance as far ahead as possible, ideally in the form of a three-to-five-year maintenance agreement. However, he also points out the company has noticed a change in slot request fulfilment: "In recent years we have started to observe a shift in slot request fulfilment, due to several factors such as wars, shortage of manpower and logistics issues. Slots are becoming harder to find and airlines will eventually begin to



Nicolai Hertz, Chief Commercial Officer, TP Aerospace



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suffer the consequences if they don't book required maintenance work far enough in advance."

At AMROS Global it sees the need for maintenance to be organised for between 24 and 36 months ahead, though this is very mech dependent on fleet size, while at TP Aerospace, Hertz advises that: "Operators that have signed up to one of our Program solutions will never need to worry about MRO capacity related to W&B. We must perform and deliver to our commitments via our W&B pools, 11 global sites and on-site inventories. As mentioned, our MRO capacity and workflow is our internal task to master.

We then wanted then to establish what companies felt was important for airlines to ensure a smoothly run heavy maintenance season for their narrow-body fleet?

TP Aerospace is keen to promote frequent communication concerning operational changes and maintenance plans. "To get proper support, our

operators need to frequently advise TP Aerospace of their operational changes and maintenance plans. When we are aware of these plans, we can adjust of service accordingly to support during the seasonal and operational changes of the customer," says Herz. Gilles Fossecave is also of a like mind where regular communication is concerned: "The most important factor to ensure a smooth-running maintenance season is to have a reliable MRO provider, like Vallair, who has proven ability, good communications, guaranteed turnaround times and a flexible approach."

At AMROS Global ongoing problems with the supply chain remain a key challenge when it comes to the smooth running of heavy maintenance schedules. Renga comments that: "Good long-term planning is for between 24 and 36 months ahead the check due dates for slots and manpower. It's important to plan all the components and AC condition checks if required in order to have all the needed

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*Nicolai Hertz, Chief Commercial Officer, TP Aerospace*





Giovanni Renga, Chief Technology Officer, AMROS Global

parts in place at least three month in advance of the on-ground time start. This is a major issue these days as the supply chain is recovering slowly, and we see many maintenance checks being delayed due to spare parts not being available at the time of the check."

At Ascent Aviation Services, Butler is unequivocally clear as to what are most important - advanced planning and risk mitigation, stating that: Working closely with the MRO planning teams as far out as possible will give the MRO enough time to ensure the plan, materials, and manpower are all secured, and the project runs smoothly."

As a final point, we wanted to examine if 'intermediate checks' with smaller work

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*Giovanni Renga, Chief Technology Officer, AMROS Global*

packages could provide a solution to mitigate the downtimes of narrow-body aircraft.

Gilles Fossecave, the CEO of the MRO Division at Vallair is not convinced this is a 'catchall' solution, pointing out that: "Regular 'intermediate checks' with smaller work packages can help reduce the downtime of narrow-body aircraft, however, the effectiveness of this solution depends on the age of the aircraft. For instance, if an aircraft has structural damage due to corrosion, a shorter turnaround time may not be feasible. In such cases, more time may be necessary to ensure the aircraft is still released on time." Additionally, Scott Butler is not sure this 'solution' doesn't bring with it additional problems, commenting that: "Intermediate checks are only a short-term solution and should only be used as an emergency need. Deferring major maintenance events only kicks the can down the road and creates more risk (and costs) and the next maintenance event.

Giovanni Renga, the Chief Technology Officer at AMROS Global sees splitting up the heavy maintenance tasks such as the A- and C-checks and perhaps introducing an E-check concept: "It can be a good

solution, but it requires more maintenance slots, maybe at different night-stop stations with the adequate MRO base maintenance approval and skills. It will require more planning activities as well by experienced planning engineers. The aircraft rotation planning together with the planning team will be a challenge to plan the A- and C-checks at the right night-stop station to cover the planned maintenance."



Gilles Fossecave, CEO MRO Division, Vallair

**“ More time may be necessary to ensure the aircraft is still released on time. ”**

*Gilles Fossecave,  
CEO MRO Division, Vallair*

As with all aspects of aircraft maintenance, it is clear that there is no 'one-size-fits all' solution to providing all the solutions required to successfully and effectively deal with the seasonal challenges for the needs of narrow-body aircraft. Clearly long-term planning is preferable, but supply-chain challenges still remain a thorn in the side of MRO providers.



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