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Welcome to the Summer 2018 issue of *Airside International*, in which we continue with one of the themes of the Spring issue of the magazine – ramp safety and security – and consider how ramp operators can best be trained in these critical issues.

Another feature analyses the evolving market for that most specialised of airport infrastructure niches: hangars and hangar doors.

Plus, this issue takes a look at the prospects for autonomous GSE with the innovative Yeti system having been trialled on controlling a small fleet of snow-ploughing vehicles at a Norwegian airport; and very successfully too.

With regard to the latest news from airport owner/operators, there is a European bent, as we talk to a range of operators in the UK (Doncaster Sheffield Airport owner Peel, Southend Airport's Stobart Aviation and Manchester Airport's Manchester Airport Group) and Germany (Stuttgart and Munich Airport's operators) about the big plans they have for their respective gateways.

We also talk to a used GSE supplier, AVIACO, and a well-established new GSE supplier in the form of ITW GSE; big ramp handlers Swissport, Menzies and Çelebi; an airline, Germania; and a number of technology suppliers that support GSE operators, including Honeywell, to find out about their role in the airside business and their plans for the future.

Our regular Buyer's Assessment piece concerns British Airways' decision to employ a number of electrically powered, remote-controlled Mototok tugs to handle its short-haul operations at Terminal 5A at London Heathrow. Is that a glimpse into the future for aircraft tugs?



We hope you enjoy the issue

MIKE BRYANT | **EDITOR**

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Pegasus soars
ever higher

EIGHTEEN



Celebi expands
beyond Turkey

TWENTY-TWO



Stuttgart
looks to a
green future

FIFTY



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Rosenbauer's E5000 rescue stair

Fighting fire with... emergency vehicles

No GSE market ever stands still, and that is certainly true for the vehicles that provide the critical aircraft rescue and fire-fighting (ARFF) capability required at all major airports

Leading, Austria-based Rosenbauer is one of a limited number of the globally active suppliers of airport fire-fighting vehicles. It has made some significant changes over the last few years in response to shifting market demands, as the company's head of global product management, Michael Kaiser, explains.

"We have reworked our major ARFF products, mainly the PANTHER. In 2013 we launched the PANTHER 6x6 S – a narrow version of the PANTHER. This product was added as new to the portfolio. Then, in 2015, we launched

the reworked (fourth-generation) PANTHER 6x6 and 4x4 and then, last year, we launched the fourth generation of PANTHER 8x8.

"The highlights of these developments can be summarised in the statement: 'Faster. Stronger. Safer', meaning more performance (driving and pump performance) and increased engine performance."

There is no shortage of demand for Rosenbauer's key offerings. Indeed: "Demand for the PANTHER is steadily increasing," Kaiser notes. "The overall world market seems to stay on a certain level but due to lot of improvements in the new model, we have managed to increase our market share. Up to now, we have delivered more than 1,600 trucks and most of them are still in service."

Models other than the company's 8x8 vehicle are also proving popular, and together they make for a rounded offering to the ARFF market. "There is the PANTHER 6x6 S – ►►



Rosenbauer's PANTHER 8x8

BRISTOL AIRPORT GOES WITH KRONENBURG FIRE

THE UK'S Bristol Airport has commissioned into service the first of three purpose-built MAC CT009 6x6 fire engines scheduled for delivery this year from Netherlands-based Kronenburg Fire.

These new fire-fighting vehicles represent one part of an ongoing investment in fire-fighting capability at the airport – which has already seen the completion of a new extensively equipped fire-training ground, the delivery of a new fire command and control vehicle and the recent breaking of ground on a new state-of-the-art purpose built six-bay fire station which is scheduled for completion early in 2019.

Kronenburg's fire-fighting and crash rescue vehicles are operational in many countries worldwide and the company was, it notes, chosen to supply Bristol Airport with new fire-fighting vehicles following an extensive evaluation process and the completion of a competitive tendering process.

The MAC CT009 6x6 airport crash tender delivered to Bristol Airport is the first of its kind in the UK, and the first ARFF vehicle in the UK to make use of a purpose-built Titan T36-650 6x6 ARFF vehicle chassis. This crash tender is equipped with a Mercedes Benz OM 502 LA 700bhp Euro 5 diesel engine, Allison automatic transmission and coil spring suspension.

The CT009 crew safety cabin features a large glass surface with panoramic vision, easy crew access and wide opening doors. The distinctive cabin exceeds ECE R29 crash test

standards and accommodates a driver and three crew, while the seats have SCBA brackets with integral headrests.

Kronenburg's 'top hamper' design incorporates integral tanks holding 12,000 litres of water, plus 1,500 litres of foam, and was specified with a dedicated monitor platform. The body features easy engine access and eight large lockers, with the high-level lockers incorporating Kronenburg's Kangaroo Rescue Equipment Deployment System (REDS), described by the manufacturer as an innovative powered shelving system permitting low-level equipment accessibility.

Bristol Airport specified its first tender of the order to have a Godiva fire pump, plus a roof-mounted dual output monitor delivering up to 6,000 litres per minute (lpm) and a throw of over 90 metres, with a bumper turret capable of discharging 1,900 lpm. Additionally, there are to be 50kg dry chemical powder trolleys mounted on drop-down lockers.

Another UK first for Bristol Airport will be delivery of Kronenburg's Stingray domestic fire-fighting vehicle in late Spring this year, followed by a second MAC CT009 ARFF vehicle later in the year.

Kronenburg's MAC CT009 range of airport rescue and fire-fighting vehicles are available in 4x4, 4x4 air-transportable, 6x6 and 8x8 configurations, with different options to meet customers' specific requirements, including twin engines, independent suspension, REDS rescue equipment deployment system and a HRET option with a piercing-tip and monitor. ■ ■ ■



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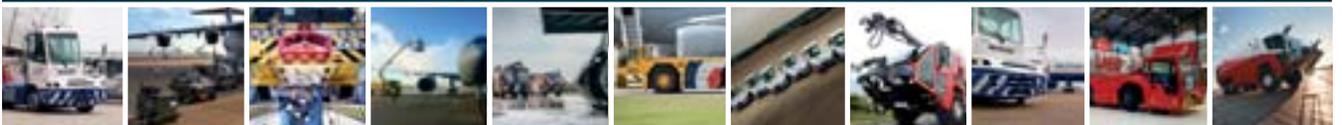
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Oshkosh produces the much-in-demand Striker ARFF vehicle

► a smaller version of the PANTHER which can easily be used for fire-fighting outside the airports (but still stationed on an airport).

“For smaller airports (Fire CAT below 8), there is the option of the BUFFALO, which is an ARFF vehicle on a serial chassis. Besides these two, there is an RIV [rapid intervention vehicle] called Airwolf, produced at RB America.

“As an additional product, we also offer an Escape Stair: a vehicle with a flexible staircase which can be used to offer rapid access for emergency response forces to an aircraft and also for evacuating passengers in those cases when it is not urgent to use a aircraft’s integrated slides.



An Oshkosh Striker of Canada’s Edmonton Airport

CHANGING DEMAND PATTERNS

At Rosenbauer, they have seen certain identifiable changes in the patterns of demand for ARFFs. For example, Kaiser points to increased demand for environmental friendly vehicles. “We also see increased demand for special extinguishing systems like Compressed Air Foam Systems (CAFS).

Rosenbauer is reacting to those trends. “We want to listen to customer requirements,” Kaiser says. “But we’re also trying to expand our technological leadership, always trying to make the fire-fighter’s life easier and safer.”

Jack Bermingham, ARFF product manager at Oshkosh, has also identified various ways in which demand for on-airport emergency fire-fighting vehicles is evolving. “A continued push in the industry for more technology is a trend we have seen throughout the ARFF industry since the beginning,” he says. “Fire-fighters always want to be on the cutting edge of technology in order to be more effective and keep the travelling public safe.”

Like Rosenbauer, Oshkosh too has been making changes to its product offering. Over the last year or so, for example, the manufacturer has introduced its new 8x8 Striker. This new vehicle is powered by twin Scania engines, each putting out up to 770 horsepower.

Says Bermingham: “This impressive power plant enables a fully loaded 8x8 even with a 65ft High-Reach Extendable Turret (HRET) to go from 0 to 50mph in 20 seconds. The new 8x8 has an identical cab to our existing 4x4 and 6x6 trucks that has been proven around the world.”

The Striker has proved its value over many years, and continues to do so, Bermingham declares. “The Striker has►►

► remained in high demand since the original launch of the truck. We have units at airports around the world ranging from 4x4s, 6x6s and 8x8s. Over 1,500 Strikers have been sold worldwide to date.

Changes have been made to other Oshkosh products as well. “We have recently made updates to our Stinger truck and have it available on the latest Ford chassis,” says Bermingham.

Plus: “The Snuzzle HRET has continued in popularity around the world. We offer the 50ft version on 4x4, 6x6, and 8x8 vehicles and also offer the 65ft version on the 6x6 and 8x8. Both the 50ft and 65ft options are able to reach the upper deck on aircraft such as B747s and A380s, which expands the capabilities of fire-fighters compared to just a roof-mounted turret.”

Newly available technologies have supported the improvement of Oshkosh fire-fighting products. “Recent technological improvements include our ECO EFP, K-Factor, and Runway Ready systems,” explains Bermingham. “Our

ECO EFP system allows fire-fighters to measure foam concentration without having to discharge foam or water from the vehicle. This is an integrated, on-board system that also stores historical data for three years.

“The innovative K-Factor system is used with the Oshkosh Snuzzle. This system has a digital readout inside the Striker cab that gives an operator feedback on the positioning of the Snuzzle piercing tip relative to the optimal angle to pierce through the intended object. In addition to providing a distance readout, this system makes piercing operations more efficient and easier in adverse conditions.”

Finally: “Our Runway Ready system is a telematics offering on our Strikers giving fire-fighters and maintenance personnel pertinent and updated information on their vehicles,” says Bermingham. “One major benefit of this system is the ability to look at truck readiness at a glance and see what state of readiness a fleet is in to respond to a call at a moment’s notice. ■

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Migrating the hazards of the apron

Airside talked to three highly experienced providers of ramp operator training about the importance of such coaching, as well as how the challenges of the ramp are changing and how training should evolve as a result

TWIGA AERO: 'LIVE AND BREATHE' SAFETY

Twiga Aero is a Bangkok-based provider of airside consultancy and training services. It is an IATA-registered instructor and an IATA strategic partner, informs Maurizio Anichini, the business' co-founder and chairman; his partner and company managing director is wife Brenda Aremo-Anichini. In addition, both partners recently became certified under the Australian Training Qualifications Framework (ATQF). Australia is one of the few countries to certify professionals in ground operations.

Twiga Aero offers a wide range of training programmes for ground operations staff and will customise them according to clients' needs. It offers classroom-based teaching, training at clients' place of work and ramp-based training. It is also currently developing an e-learning offering; the e-learning courses will be developed in collaboration with KRTS, a registered training organisation (RTO) in Australia.

One of Twiga Aero's top-line courses is called the Ramp Master Workshop. It focuses on operational practices in line operations. Other products cover operational compliance to ramp processes and procedures. Three new courses for the second quarter of this year cover airside safety awareness, aviation security awareness and Dangerous Goods Regulations (DGR) Category 10.

While the company certainly draws some of its business through its IATA connections – though most of its clients are private and approach Twiga Aero direct, Anichini confirms – its IATA strategic partnership also has another advantage: it ensures that all of the latter's courses are right up to date and in close alignment with IATA's policies and recommendations. Twiga Aero, says Anichini, ensures that its training is fully attuned to current IATA Ground Operations Manual (IGOM) and IATA Safety Audit for Ground Operations (ISAGO) standards and recommended practices.

Twiga Aero's home-based training facility is 10 minutes away from Bangkok's huge Suvarnabhumi International Airport, but the company has also provided bespoke training in recent

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ASPIRE
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PROPEL
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Twiga Aero Ltd is an aviation training and consultancy company whose solid ground operations expertise addresses the challenges associated with Aviation Ground Operations

times to clients at their place of operations as far apart as Australia, Africa and Pakistan. Training can be given as just one part of a wider consultancy process and can vary widely in nature. And, informs Anichini: “When we operate a consulting project we ensure that our clients receive implementable elements, tools, practices and insights that tie in directly to the systems they have or should have in place.”

While most of the company’s clients are airport authorities, airlines or their service providers, some clients are very different. One such is a university in the north of Thailand, which, in wanting to establish its own course in aviation management, is in discussions with Twiga Aero for the latter to coach its professors in the relevant issues.

The aviation industry in Thailand and the wider South-east Asian region is rapidly expanding, and Twiga Aero’s location in Bangkok can tap readily into this. The number of potential ramp operator trainees is growing fast, while the importance of safety is becoming ever clearer to all ramp operators. “Everything on the ramp is intertwined, including AvSec [aviation security], operations, safety, and so on,” Anichini notes. “Clearly,

Maurizio Anichini and Brenda Aremo-Anichini of Twiga Aero



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safety on the ramp is a critical point and deserves attention to reduce the US\$12 billion annual cost of aircraft damage, injuries and deaths on the ramp.”

What is more: “Standards in ISAGO that require systems to be in place make it even more important for relevant systems to be ‘visible’ on the ramp through workforces adhering to procedures and ensuring safe operations in that way,” he adds. The concepts of safety and security must permeate every aspect of airside operations, Anichini continues – “it must be embedded in all ramp operators’ daily life.”

Bringing the classroom to the ramp and the ramp to the classroom wherever possible, Twiga Aero seeks to make its training dynamic and – at every opportunity – fun. Twiga Aero training and consultancy is about much more than writing a training manual, Anichini says: it is about making the connection between safety systems and the ramp environment a very real one.

Only on the ramp can it be seen whether the right systems are in place and being followed, and all those working there must “live and breath” safety, he adds. Adherence to the right systems helps operators to “hear through the noise and operate within a structured approach”.

Another key aspect of the Twiga Aero training is to engender a sense of proactiveness in those so trained. “You have to increase awareness and deliver action,” Anichini insists. Individual ramp operators should be willing to act when they see a potential hazard, and not be afraid to speak up on safety and security issues.

On a related note, Anichini says: “Just as airlines refocused their attention on flying operations and divested from ground operations, we often ask ourselves why so many GSPs [ground service providers] train their own people as opposed to

hiring people who are hired as trained and already qualified individuals.

“Shifting the cost and time burden to the individual who seeks to work in ground operations would ensure retention, professionalism and business continuity. Initial training programmes for ground operations workers do not have to be expensive. They have to be simple, effective and deliver professional individuals, who can ‘hit the ground running.’”

A CHANGING ENVIRONMENT

The changing nature of today’s ramp is affecting what training is needed and how it is delivered. “More complexities around the aircraft mean the potential for more damages and injuries,” Anichini observes. “If operators are not evolving at the same rate as the changing times by up-skilling and ensuring staff are prepared to face the new *modus operandi*, they may find themselves between the airline and the tarmac or between the hammer and the anvil.

“Shorter turnaround times may require more equipment and people around the aircraft, which, in turn, increases risks. Companies that analyse these processes seem to achieve better turnaround times, with fewer people conducting multiple tasks during the turnaround whilst deploying minimal equipment to avoid congestion and clutter at parking stands. Most importantly they achieve a higher rate of consistency whilst ensuring safe operations.”

As for the future: “The ramp will be run by robots,” Anichini declares. “Artificial intelligence (AI) and virtual reality (VR) are already coming to the ramp. “Training will be most important for the people who will program the robots. And operational knowledge will be even more important in terms of getting the processes and procedures right.”



Hervé Gueusquin

AIR BUSINESS CONSULTANTS: IT'S ABOUT BEING 'RAMP-RESPONSIBLE'

Hervé Gueusquin is an associate director at Air Business Consultants (ABC), which provides a wide range of training and consultancy services to airlines, airport operators and ground handlers. In fact, it currently offers more than 100 courses in relation to ground service provision.

In terms of ramp services, ABC provides training in relation to Ramp Basics, Baggage Sorting, Load Control, Turnaround Coordination, Aircraft Departure, Aircraft Arrival, Pushback, Towing, Marshalling, GSE training, Breaker, FOD, and much more.

Gueusquin is certainly of the opinion that there is now a greater focus on many aspects of ramp safety than there might have been in the past. For example, he notes: “There is a greater emphasis as ICAO [International Civil Aviation Organization] Annex 19 on safety management is now fully in force not only at the airline level but also for GSPs.”

Plus: “The new model ISAGO 2018 is now integrating this as a mandatory requirement to get the accreditation,” he observes.

“Training is a key issue and due to high staff turnover in the airline industry and a clear emphasis on qualified staff, GSPs now have an obligation to train,” Gueusquin continues.

“Every handler is a potential customer, especially in Africa,” he says. Not coincidentally, ►►

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► then, ABC now has a foothold there, having established a presence in Chad, which Gueusquin describes as “an ideal location in the centre of Africa”.

ADAPTING TO EVOLVING HAZARDS

Gueusquin agrees with Anichini that the nature of the hazards on a modern airport ramp is changing all the time. For one thing, Gueusquin points out: “More and more equipment is now electrical, reducing the noise it makes on the ramp. Because Personal Protective Equipment (PPE) these days includes earplugs, a new threat now comes from the [quieter] equipment itself,” he suggests.

And, looking head: “Ramp operations will be driven by processes that allow for quicker turnarounds, all about the need for speed.” Furthermore, the sense of loyalty among staff for their employers seems likely to diminish, he suggests.

“Hence, human factors training should be the first course people take before going on to vocational ramp courses,” Gueusquin argues.

“The European Aviation Safety Agency (EASA) is clear on this,” he says. According to EU/EASA ORO.GEN.110(c/e), GSPs must ensure that all personnel assigned to, or directly involved in, ground operations:

- Are properly trained and instructed
- Have demonstrated their abilities in their particular duties
- Are aware of their responsibilities
- Are aware of the relationship of their duties to the operation as a whole

“So it’s not only about training, it’s also about being made ramp-responsible. ABC provides the perfect training for this with clear and video examples. We teach by example, not only with words,” Gueusquin concludes.

Located in the heart of Paris Charles de Gaulle International Airport and at Chad’s N’Djamena Airport, ABC can provide both local courses and in-house courses.

Training is a key issue and due to high staff turnover in the airline industry and a clear emphasis on qualified staff, GSPs now have an obligation to train

Hervé Gueusquin

RTITB AIRSIDE: 'OUR MISSION IS TO SAVE LIVES AND REDUCE INJURIES'

RTITB Airside has been involved with airside operations departments at various international airfields since 2010, including at the two largest airports in the UK. It has also worked with the engineering departments of a number of prestigious UK airlines for more than 30 years, informs Nick Welch, the company’s technical director.

He explains: “Our mission is to save lives and reduce injuries in airside operations by improving the training delivered to equipment drivers and those working in and around the airside environment.”

RTITB provides airside services including bespoke course development, carrying out training compliance and safety audits, training the trainer/instructor, training airfield supervisors/managers and providing accreditation services including the external verification and certification of driver training in relation to accidental damage protection (ADP).

Welch is in agreement with fellow ramp operator training providers such as Anichini and Gueusquin when it comes to considering the potentially hazardous nature of the apron area. “The ramp is a high pressure, multifaceted environment and therefore the risks when working in this environment are high,” he says.



Nick Welch, RTITB Airside's technical director

What's more, "There are much better communication methods available now, so therefore there is a general heightened awareness of the roles and responsibilities of employees as well as of their individual accountability. Be it an operator on the ramp or a manager sat in head office, everyone shares the responsibility to ensure their own safety and the safety of their colleagues.

"In the airports that RTITB deals with there is a change occurring in that there appears to be a willingness to look at innovative new training standards not only to improve ramp safety and efficiency but also to provide the operators with the ability to prove that the good work they do is documented and stored effectively. Then, should they be required to do so, evidence of their training, control mechanisms and standards can be produced."

Training is clearly going to be a big part of the armoury of those looking to minimise the dangers of the ramp, and training in the use of the equipment currently employed on the apron is a big part of that. This is where the likes of RTITB come in.

Says Welch: "Using tried and tested models from other industries involved with workplace transport, it is essential that any employee required to operate equipment has a fundamental understanding of the equipment, how it functions, how it

It is essential that any employee required to operate equipment has a fundamental understanding of the equipment, how it functions, how it operates and also of its associated components

Nick Welch

operates and also of its associated components." Given that, he argues, employees should be trained and tested on:

- Their competency to check equipment over prior to its use in order to ensure that its mechanical state is good
- Their ability to safely conduct a series of operational skills efficiently
- Their ability to retain a level of associated knowledge about correct equipment operation, the safety factors involved in the equipment operation and also their own responsibilities regarding general health and safety



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RTITB Airside training programmes provide operators with a safe and fundamental understanding of the equipment they are expected to operate, Welch explains. Essentially, he says, there are three stages of training required before competency of the operator can be considered (and assessed separately to the provision of basic training):

- Operators should be provided with the skills they need for the safe operation of each equipment type that they are expected to operate; this is called Basic Training. However, on the ramp there are many different manufacturers of the same type of equipment so after basic training each operator must be shown the specifics of the equipment type in which the equipment manufacture, make or model is different to the one(s) encountered during basic training.
- In addition, operators should be trained on how their equipment interacts with the many different aircraft types seen on the airfield; this is called Specific Training.
- Once the specific training has been conducted, the operator should be shown how to operate the equipment in a live environment, covering amongst other things the

There is a decision to make regarding who delivers training, and as with most things in life there are advantages and disadvantages

Nick Welch

environmental differences the operator might encounter, such as night and day and the pressures of the live environment; essentially, can they do their job? This is called Familiarisation Training.

- Finally, a competency assessment should be completed to officially 'sign off' the individual as able to do their job safely and efficiently. This approach is always the same but the environments, policies and procedures are unique to each airline, handling agent or airfield, and these characteristics are incorporated into the course materials or services taken up by the customer. In addition, each airport or airfield has unique challenges in terms of risks, efficiency and safety, so unique elements of each service can be utilised to build something totally suited to the needs of the customer and resolve their issues.

A lot of the equipment types are quite straightforward to use, Welch, says. ADP requirements in the UK stipulate that at least a DVLA (Driving and Vehicle Licensing Agency) category B licence is required, so operators will have some degree of mechanical sympathy, hand/eye co-ordination. However, this should not be taken for granted, he insists.

Operators may have been trained on other equipment types on the ramp, or they may have even taught themselves, Welch continues – but RTITB basic training programmes concentrate on how the machine handles and on safe manoeuvring capabilities. In addition, they provide information on inspection regimes for the particular equipment type allowing the operator to make an informed decision on whether or not the equipment is safe to operate. Therefore the optimal approach is to utilise the existing knowledge and skills of the operator and provide them with the fundamentals of safe and efficient operation to a testable standard.

Currently, within the airport environment RTITB is mainly dealing with in-house training providers, Welch says. "There is a decision to make regarding who delivers training, and as with most things in life there are advantages and disadvantages. Both have the ability to provide excellent levels of training but also have drawbacks. Whichever route is chosen, customers should always make sure that the person delivering the training has a current and bona fide instructor qualification relevant to the industry, has documented competence on the machine type required for the training delivery and also has up-to-date and relevant training and assessment materials."

PRESSURE

Welch agrees that the changing nature of today's ramp operations is affecting the threats to life and limb on the ramp. "There is without doubt a great deal of pressure on ramp supervisors and operatives to get the job done on time," he says. "There is a lot of new equipment available on the market with many technological advancements and aids fitted. These machines, however, are only as good as the operators using them – employers need to understand that these aids are additional systems to assist the operators and do not negate the need for or replace training requirements.

"In many cases, the training the manufacturer provides when a machine is delivered does not amount to adequate basic training, it is more in line with specific training and can leave the operator without all of the information they need in order to operate the equipment both efficiently and safely."

The ramp of the future will differ from today's, and that too will affect how the industry should go about ramp safety training. "There is a lot of talk about automation on the ramp and airside in general," says Welch. "There is a lot to be gained by looking at how other logistic industries are using automation to great effect, especially where repetitive and labour-intensive tasks are required, but it should be remembered that there will always be the requirement for a 'real person' to be trained and fully conversant with the task(s) required.

"What also needs to be remembered is that although training can be perceived as costly and time-consuming, it brings so much to an organisation, ranging from the obvious compliance and safety benefits but also efficiency and a sense of belonging and ownership for the employees." ■

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Swissport acquires Australasian handler

On 7 March, global aviation services provider Swissport acquired Aerocare, a leading ground handler in Australia and New Zealand, as well as subsidiaries Carbridge, Skycare and EasyCart

The acquisition of Aerocare had been announced in November 2017 but it was only in March this year that Swissport confirmed that it had received all the necessary regulatory approvals for the deal, including that of Australia's Foreign Investment Review Board.

The purchase represents a significant boost to Swissport's footprint in the wider Eastern Asia region, as well as an entrance to the Australasian market. Eric Born, Swissport group president and CEO explains: "The integration of Aerocare into Swissport is a key milestone in the execution of our growth strategy.

"Aerocare provides us with an entrance into Australia and New Zealand and it will serve as our platform to expand in the fast-growing Asia-Pacific markets."

Aerocare was formed in 1992 and is, says Swissport, the market leader in airline services provision in the region. It employs more than 3,000 staff and provides services to major domestic and international airlines across 36 airports in Australia and New Zealand. It handles more than 160,000 flights a year, and serves some 15 million passengers annually.

According to a Swissport statement, Aerocare's existing management team will continue to run the business in Australia and in New Zealand from its Australian office. This

is, Swissport says, "to ensure continuity in service quality and in client-relations management".

"There is an exceptional cultural fit between the two companies and I am confident that we will jointly continue our success story in the region and beyond," Born considers.

Christoph Meier, a spokesman for Swissport, explains to *Airside International* the thinking behind and evolution of the purchase. "We had identified Aerocare [as a possible acquisition] in 2016," he recalls.

"In the process of our strategic planning, we continuously scan the market for attractive opportunities. This includes potential acquisitions targets. Aerocare's market presence is 100% complementary to that of Swissport and the company is a well-established and well-managed business. It will contribute returns instantly."

Moreover, "The Aerocare acquisition is a very significant step for Swissport. The acquisition adds 36 airports to our global network, which will now increase to 315 stations.

"Aerocare provides Swissport with access to Australia and New Zealand, two very attractive markets. Swissport is now present on all five continents. Beyond that, the integration of Aerocare provides us with an ideal platform from which to further expand our presence in the fast-growing



Asia-Pacific markets. It is very positive to have an established base in this dynamic region.”

Sydney-headquartered Aerocare subsidiary Carbridge, meanwhile, is Australia’s largest and most experienced airport bus specialist. It is “too early to say”, Meier states, whether Swissport will retain its bus provision offering (Carbridge offers the innovative TORO and DUO buses) as well its on-airport bus service provision. “Together with Aerocare’s management team, we will discuss the strategic development for each business segment in the coming weeks,” Meier says.

The Aerocare acquisition forms just one part of a wider strategy to expand Swissport’s ground services offering in the area. “Swissport plans to further expand in the Asia-Pacific region,” Meier confirms. “Beyond ground services, where Aerocare already has a well-established presence in Australia and New Zealand, we will be looking at the market potential in the cargo handling business. Swissport operates 133 warehouses worldwide and is also looking at growing this business.” ■

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Pegasus continues its rapid expansion

Over the course of last year, Turkish carrier Pegasus Airlines handled a total of nearly 28 million customers – approximately 17 million flying on services within Turkey and approximately 10.5 million on its international routes. As of March this year, Pegasus had a total of 75 aircraft in its fleet, and 10 more new aircraft will be added during 2018. The growth in operations and fleet size has implications for both its in-house ground handling and its ground service provider partners... as the carrier's ground operations vice president Murat Demirbilek explains

PEGASUS AIRLINES TOOK OVER THE MANAGEMENT OF ALL GROUND OPERATIONS FOR ITS FLIGHTS AT ITS MAIN HUB OF ISTANBUL'S SABIHA GÖKÇEN AIRPORT ON 1 JUNE 2016. WHAT HAVE YOU FOUND TO BE THE BENEFITS OF THAT?

Running our own ground operations in our growing business has improved our operational quality and allowed us to meet increasing demand. We have satisfied both our employees and our guests.

We have achieved a 98% OTP (on-time performance) success rate due to these changes. There has also been a significant decrease in ground accidents and baggage-related problems. Our NPS (net promoter score) rating has increased. Our delays have decreased. Consequently, launching our own ground operations service has strengthened our success.

PEGASUS AIRLINES CEO MEHMET NANE HAS PREDICTED THAT "REAL GROWTH [IN THE AVIATION SECTOR] WILL BEGIN IN 2018" – HAVE YOU PLANS TO CONTINUE TO EXPAND THE SCOPE OF YOUR GROUND HANDLING OPERATIONS AS A RESULT OF THIS AND PEGASUS' OWN ONGOING GROWTH?

We are currently running a successful [ground handling] operation at Istanbul Sabiha Gökçen and Izmir Adnan

Menderes airports. We have prioritised both our ground operations personnel, including their training, and the acquisition of state-of-the-art equipment since we are going to grow further this year.

If needed, we may also grow in other stations in line with management decision-making. However, we have no such plans for the near future.

HAVE YOU ALSO CONTINUED TO BUILD ON YOUR COLLABORATION WITH YOUR GROUND SERVICE PROVIDER PARTNERS?

Our work and collaboration with ground service providers continues as always. There are many things we have gained, and will continue to gain from each other. We recently entered into a new five-year agreement with Havaş Ground Handling Services. We always support each other in terms of training and knowledge sharing.

Also in this regard, we have made a deal with dnata in Amsterdam to implement a personnel exchange programme for our ground operations teams. Our personnel in the Netherlands will go to Turkey, and vice versa, on temporary assignments to experience each other's working practices.

We have prioritised both our ground operations personnel, including their training, and the acquisition of state-of-the-art equipment since we are going to grow further this year







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In this way, we will both improve the knowledge of our personnel and we will present them with a new world in which they will have new experiences. We have to support such development programmes for the future of our company and industry.

In addition to that, we run joint student training programmes with universities. Contributing to the development of the aviation sector must be among our responsibilities, along with the good management and growth of our company. As an airline with this vision, training personnel for the Turkish aviation sector is very important to us.

ARE THERE ANY PARTICULAR ASPECTS OF PEGASUS' GROUND HANDLING REQUIREMENTS AND SYSTEMS THAT YOU HAVE FOCUSED ON OVER THE LAST THREE YEARS?

Technology is very important for us. In this regard, we do our personnel and equipment planning using a special program. We have made significant progress in this matter. We have put our plans to simplify our check-in system into action. We will introduce the new face of our system to everybody at the end of this year.

We don't create the load sheets for the aircraft anymore, but they are directly sent to the aircraft from the office. We will also soon launch our Turnaround Management system for our operational personnel. We will equip them with state-of-the-art equipment and automate everything. In this way, we will be able to measure and evaluate everything we do.

WHAT PROCEDURES DO YOU GO THROUGH WHEN YOU OPEN UP A NEW PEGASUS STATION TO ENSURE THAT YOUR GROUND HANDLING IS OF AS HIGH A QUALITY AS POSSIBLE?

First of all, there must be a need for our ground handling operations at that station. The most important factor in the creation of this need is quality. When the quality drops,

Technology is very important for us. In this regard, we do our personnel and equipment planning using a special program

we discuss how we would have done it, and we do a SWOT [strengths, weaknesses, opportunities and threats] analysis and a feasibility study.

In the feasibility study, we determine the number of personnel and equipment needed in order to achieve the quality we want. We consider every aspect of the matter and ask the opinions of various departments. Then we organise things appropriately and move on from there.

Ground and air safety, guest satisfaction, quality and personnel satisfaction are at the heart of everything. We determine our procedures accordingly.

WOULD YOU EVER CONSIDER SELF-HANDLING AT STATIONS OUTSIDE OF TURKEY?

Yes; while we are already self-handling at Istanbul Sabiha Gökçen and Izmir Adnan Menderes airports we have undertaken feasibility studies for several international stations. However, as I have mentioned before, the main criterion for moving to self-handle is when we don't receive the level of quality we want at a station.

DOES PEGASUS HAVE ANY OTHER STRENGTHS AS REGARDS GROUND HANDLING?

Our unit runs an intense operation that requires 24/7 work. Therefore, the importance of teamwork is very high. Working closely with my colleagues, who are professionals and experts at what they do, harmony is vital. I think this harmony strengthens us and builds our success. ■





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It's all about connections

Çelebi develops its ground handling footprint **beyond Turkey**

Earlier this year, Istanbul-headquartered ground handler Çelebi Aviation Holding began handling at Cochin Airport in India, the first national market in which it chose to become active outside of Turkey. The handler is now present at a number of India's busy airports. Athina Kapeni, Çelebi's vice president sales and marketing, explains the thinking behind the development of its handling footprint in this rapidly burgeoning aviation market, and explains what the future might hold in regards to further expansion there

THE LATEST INDIAN GATEWAY AT WHICH ÇELEBI IS NOW HANDLING IS COCHIN. WAS THIS AN IMPORTANT ADDITION TO YOUR INDIAN OPERATION?

Çelebi Aviation is focused on the expansion of our operations in multiple airports in India. As part of this strategy, in August 2017 Çelebi was awarded the licence to provide ground handling services at Cochin International Airport Limited (CIAL).

Today, Çelebi is already well established as one of the prominent ground and cargo handlers in Mumbai, Delhi and Ahmedabad, as well as having launched operations in Cochin with our first customer Air Asia Berhad and Thai AirAsia on 8 January this year. [Thai AirAsia is a joint venture of Malaysian low-cost carrier AirAsia and Thailand’s Asia Aviation. It serves AirAsia’s scheduled domestic and international flights from Bangkok and other Thai cities.]

Shortly after the commencement of operations at Cochin on 8 January, Çelebi signed another two contracts with prominent customers, and started operations for Indigo and Jazeera Airways.

WHAT IS THE SCALE OF THE ÇELEBI HANDLING OPERATION AT COCHIN? IN PARTICULAR, WHAT GSE ARE YOU USING AT THE AIRPORT TO HANDLE YOUR VARIOUS CARRIER CUSTOMERS THERE?

We made a significant investment in GSE to ensure operational readiness to provide services to all types of aviation traffic (freighters, passenger aircraft and business jets) at Cochin.

The entire fleet of GSE required to handle our operations is positioned at the station. Plus, our SAP GSE management system is implemented to control, follow, plan and perform preventive and corrective maintenance on GSE, as well as optimise GSE’s movements and utilisation at the airport. Our GSE positioned at the airport is state-of-the-art technology as per Çelebi’s corporate standards.

HOW ELSE IS ÇELEBI EXPANDING IN INDIA?

Çelebi Ground Handling Delhi Pvt Ltd was recently awarded the contract to provide ground handling services at Kannur International Airport. The airport is not currently operational but Kannur International Airport Limited (KIAL)

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– the managing body of the airport – plans to commence commercial flight operations at the beginning of July 2018. We are in contact and holding discussions with potential customers with a view to starting operations in Kannur; contracts will be signed at a later stage.

DOES INDIA REPRESENT A KEY PART OF THE ÇELEBI NETWORK? IS THIS COUNTRY GOING TO BE A SOURCE OF FURTHER EXPANSION FOR YOU?

Çelebi Ground Handling has made significant progress within the last 10 years in India, expanding its business at various airports in the country, as well as developing an executive team with experience for long-term success.

The environment in which we operate is evolving rapidly. Markets around the world are volatile, and the aviation sector is seeing accelerating competitive challenges; however, Çelebi focuses on both short- and long-term developments so as to navigate the challenges and capitalise on the opportunities in a way that provides added value to our partners and customers.

Çelebi currently provides comprehensive ground handling services at Mumbai, Delhi, Cochin and Ahmedabad and cargo/warehouse services in Delhi, being one of the authorised concessionaries awarded contracts by Mumbai International Airport Limited (MIAL), Delhi International Airport Limited (DIAL) and Cochin International Airport Limited (CIAL).

Çelebi Ground Handling India serves major airlines, freighter operations, private jets and charter aircraft across India. Apart from the traditional package of ground services that are all available in our portfolio, additional innovative and value-added services are offered, such as Meet & Assist & Kerbside Assistance for our customers’ selected passengers, as well as other services which customise client airlines’ different requirements for passengers and cargo.

With the granting of the International Air Transport Association’s Safety Audit for Ground Operations (ISAGO) certification, along with many other awards received from international and domestic airlines that we serve, we have a successful record on service excellence and customers’ satisfaction.

The most important strength for us is our employees, having built up an experienced and highly professional team, delivering the best possible training programmes, and establishing a high level of operational oversight and quality control, including safety.



Çelebi has identified India as a large market and one of the strategic markets for expansion and investment. Therefore, we plan to be at more stations in India over the next three to four years. India is the second hub market for Çelebi, after Turkey.

IN TERMS OF GROUND HANDLING, WHAT OTHER PLANS FOR EXPANSION ELSEWHERE DOES ÇELEBI HAVE?

Çelebi is constantly looking at new expansion opportunities via acquisitions, partnerships, greenfield projects, via tenders for licensing for ground handling and cargo services, as well as by seeking co-operation with major hub airlines.

We aim to create global leverage for our customers by connecting their main hub markets in Turkey and India with a presence in new regions like Asia-Pacific, Africa and the Middle East. Most notably in the case of India, we are participating in the tender launched for Bangalore Airport, and we plan to participate in other tender processes for all other Indian airports.

HOW IS THE GROUND HANDLING BUSINESS CHANGING AT THE MOMENT, AND HOW IS ÇELEBI EVOLVING AS A RESULT?

Globalisation, as well as major acquisitions and partnerships with airlines, will gradually change the ground handling business’s major characteristics that we have seen over this last decade.

Airlines now focus more on customisation, quality, innovation and global leverage. Çelebi focuses on all those challenges, looking to benefit from its strength in service excellence, its vast know-how of the handling business and its major asset – its multicultural, well-educated, experienced personnel and management team. ■

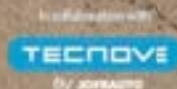




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This hangar at Newquay Cornwall Airport benefits from Rubb's patented Thermohall® cladding product



Dedicated expertise

There are comparatively few manufacturers of hangars and the specialist doors that are a fundamental part of the vast majority of major airports around the world. Airside talks to a hangar manufacturer and a dedicated maker of bespoke doors whose portfolio includes the well-known Esavian aircraft hangar doors



Andrew Knox, sales manager at Rubb Buildings

Andrew Knox is a sales manager at Rubb Buildings, which designs and manufactures high quality fabric tensioned buildings, including aircraft hangars. He advises that the most recent hangar Rubb installed is to be found at the UK's Doncaster Sheffield Airport. It is a steel-framed, fabric-clad structure, which measures 40m wide by 46m long and features a sliding door measuring 30m wide by 5m high. Additional modular buildings have been fitted to the right and rear of the building and include a number of offices and amenities.

Rubb was tasked with ensuring the hangar connected effectively to the modular structures and that they were correctly positioned to allow a clear viewing area and access to the hangar.

Rubb has made improvements to its product offering in recent times. "One huge addition to Rubb hangars is our patented Thermohall® cladding product, which has been used in our latest aviation hangar projects for Aerohub at Newquay Cornwall Airport and EasyJet at Gatwick Airport," Knox explains.

"This is our latest insulated fabric cladding system, which provides many eco-friendly benefits, including reduced energy use and helping support a stable indoor temperature all year round," he continues. "The technology features high-density, non-combustible glass wool insulation encapsulated within a heavy-duty PVC fabric, which is designed and manufactured

in-house to suit site-specific project requirements.”

As the technology changes that a manufacturer such as Rubb can use in its hangars and other structures changes, so too the nature of demand for these facilities evolves. Notes Knox: “As the aviation industry is constantly changing, developing and growing we have seen a dramatic increase for our flexible and relocatable hangar systems.

“Airlines are increasing the overall size of their fleet of aircraft and with that comes additional maintenance operations. This, coupled with constant R&D [research and development] within the industry, has brought the need for quality hangar space that can be manufactured and delivered in short time frames, which is what our types of structure offer.”

Moreover, demands associated with the infrastructure of aviation buildings in terms of requirements for offices and storage facilities within hangars have moved on too. There have also been increasing requests for trying to incorporate different types of aircraft under one roof. What is more, in general, Knox notes: “Every project is different and brings new challenges.

“The nature of the industry is constantly developing and that’s what makes it such an exciting sector to be involved in. Our alternative building solutions have adapted to support this over the years and continue to offer unique benefits to our end users.”

Knox believes that it is the overall quality of Rubb’s products and its willingness to deliver varied clients’ requirements within short time frames that helps the company to stand out, as well as Rubb employees’ enthusiasm and the fact that it custom-designs and manufactures all of its products in the UK.

Of course, also vital to its distinctiveness is Rubb’s

expertise in providing dedicated fabric-tensioned buildings. Airlines and maintenance, repair and overhaul (MRO) businesses are increasingly looking for climate-controlled, affordable and cost-effective MRO environments for their fleets, Knox points out.

“We find many aviation professionals and heads of maintenance saying that this is key to their aircraft running effectively and efficiently. A traditional hangar to accommodate a widebody aircraft could cost in excess of £7 million (US\$10 million). Once constructed this hangar is then stationary for its entire lifetime. There is now increasing demand for more affordable, state-of-the-art, fabric hangar facilities, which provide the ideal environment for MRO activities. When investing this amount of money, clients are looking for the best lifetime value from their hangar assets. A more affordable, adaptable, alternative solution to this would be a Rubb MRO hangar, Knox insists.



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SPECIALIST KNOW-HOW AND EXPERTISE

Just as hangar structures require specific expertise, so too for the doors that offer access and egress to these structures for the aircraft using them. UK-headquartered Jewers Doors manufactures the very popular Esavian aircraft hangar doors. It offers a complete service, including design, manufacture, installation, maintenance, servicing and repair. Operating globally, it has installed doors in markets as far afield as Australia, Singapore, Qatar, Turkey, Iraq and Azerbaijan.

Director Jonathan Jewers talked to *Airside* about some of the recent projects that the company has concluded (others, he notes, are covered by confidentiality clauses).

The company recently completed the design, manufacture and installation of three major projects that make use of its Type 126 sliding hangar door system. The first was for Oman Air's new Engineering Center at Muscat International Airport, Oman. The new 62,700 square metre aircraft maintenance hangar is for the use of the national airline of Oman – Oman Air. It is located on the south of the airport facing the New Muscat International Airport, which only opened on 20 March this year.

The hangar is capable of housing two widebody Code F aircraft – including the A380 super jumbo – and Jewers Doors incorporated its own vertical lifting fabric doors above the main horizontal sliding doors in order to accommodate the A380's tail fins. The main hangar doors measure 192m wide by 21m high.

This is just one of several major contracts Jewers Doors has completed in Oman over the last 35 years, Jonathan Jewers informs.

The second project was for the design, manufacture and installation of the company's Type 126 sliding hangar door system for Icelandair's second hangar at Keflavik Airport, Iceland. The new steel-framed hangar, which has a floor area of 13,600 square metres, was built to increase the carrier's in-house MRO capacity. It can house two B757 aircraft and one B767 aircraft, side by side, in addition to larger aircraft. There will also be space for simultaneously housing three B737 MAX aircraft.

Jewers Doors supplied one set of Type 126 doors comprising six individual door panels totalling 94.8m wide by 18.4m high. A special feature is that the bottom door track system is geothermally heated to prevent icing of the doors.

The third project was again for the design, manufacture and installation of a Type 126 sliding hangar door. This time, the work was for DC Aviation Al-Futtaim Lufthansa at Dubai South Aviation District. The new 7,500 square metre hangar more than doubled the customer's hangar capacity and significantly increased the size and number of aircraft that can be accommodated.

The Type 126 door supplied is 55.4m wide by 13.5m high and also incorporates a central tailgate door so that larger aircraft of up to B767-300 can be accommodated. This is the second door that Jewers Doors has supplied to DC Aviation Al Futtaim, with the first door being provided to DC Aviation Al-Futtaim for its hangar on the adjacent plot in 2012.

Jewers Doors has always designed bespoke hangar doors, says Jonathan Jewers, tailoring each to suit the client's operational requirements, while ensuring that the latest developments in terms of technology, environmental considerations and ease of maintenance are borne in mind. For example, Jewers Doors has replaced its unique printed circuit boards (PCBs) with programmable logic controllers (PLCs) to improve reliability, ease of programming and fault diagnostics.

Moreover, he remarks: "In the very near future, our doors will be capable of remote fault diagnostics. For instance, if a Jewers door develops an electrical fault, the end user can simply use a smartphone to interface with the door that will result in a fault diagnosis message being sent to Jewers Doors. The end user will then be advised of the fault and how to rectify it – which will result in dramatically faster fault rectification."

BOOMING MARKET

"There is currently a high demand for hangar doors, both military and commercial, with the majority being for new build," enthuses Jonathan Jewers. "However, there has been less demand for business aviation hangars and 'bizjet' [business jet] MRO in recent months, especially for those aircraft operating out of Saudi Arabia. This has primarily been due to the detention (in the Ritz-Carlton Riyadh Hotel) of several VIPs who own and operate these aircraft.

"Nevertheless, they are expected to be released shortly, which should kick-start this particular market within the Gulf Co-operation Council (GCC) region," he adds.

Jonathan Jewers has, like Knox, seen demand evolve in recent years. Customers for new hangars and doors are now seeking cost-effective, functional and efficient designs to complement their operations, whilst ensuring the highest quality, he explains. "Most importantly, end users want to achieve long-term reduced life cycle running costs for their hangars; and they are going 'green' and want the best thermal performance from their buildings and doors.

"The days of the elaborate 'money no object' hangars seem to have passed, but even so, architects are still achieving fantastic designs for real money," he observes. ■



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Honeywell and Pinnacle collaborate on the ‘connected ramp’

Co-operation between the two partners involving telematics and GSE ramp management software has created a solution – GoDirect Ground – that can provide airlines and ground handlers with real-time insights into vehicle activity anywhere on an airport

Pinnacle has a 15-year history of research and development as well as the provision of telematics systems for GSE, while US manufacturing and software giant Honeywell had previously developed a group of connected services it calls GoDirect. The two companies have combined their expertise in Honeywell’s new GoDirect Ground product.

GoDirect Ground allows ramp operators to better connect their GSE operations, resulting in better on-time performance, lower maintenance costs and greater fuel efficiency.

GSE vehicles equipped with telematics hardware transmit data into advanced software that then gives airlines and ground handlers real-time, operational data, providing what Honeywell describes as “real-time insights into vehicle use and maintenance requirements”, as well as exact locations of ongoing ramp operations.

“The ability to provide ramp operators with connected services combined with telematics creates a new connected ramp reality that addresses one of the last untapped areas in the aerospace industry,” opines Kristin Slyker, vice president, connected aircraft, at Honeywell Aerospace.

“We’re ready to implement this new approach today for any customer ready to improve safety and operational efficiency on the ramp – from the moment an aircraft lands until that same aircraft is airborne again.”

The new connected ramp solution is said to be able to offer customers: an up to 15% reduction in maintenance costs; a 10 to 45% reduction in the cost of damage to GSE due to improved safety in operations (such as, for example, less speeding), location awareness and improved knowledge on vehicle status (for example, ensuring that stairs are locked in place); and an up to five-minute reduction in average aircraft turnaround times.

Slyker talked to *Airside* about the genesis of the collaboration between the two companies. “Honeywell and Pinnacle had been in discussions for over a year, getting to know each other’s capabilities and understanding how we can partner together creating value to our customers.

“Pinnacle has a field-proven technology and a history of high quality and robust equipment integration,” she notes. “Customers will benefit from Honeywell and Pinnacle’s complementary product portfolio. Honeywell’s Connected



The GoDirect Ground ramp dashboard

Aircraft product portfolio and Pinnacle’s ground experience combine to create a seamlessly integrated ground-based solution to improve all aspects of aircraft ground handling.”

Honeywell will be able to offer a tailor-made solution to different clients. Its ability to customise the solution means we can serve the disparate needs of different market segments, she informs. “Honeywell can optimise ramp operations by providing real-time, data-driven situational awareness. Telematics, visualisation, improved resource management and real-time turn tools mean a ramp co-ordinator has all the information needed to minimise the impact of disruptions.

“It is a scalable solution which can be adapted to the size of the operation and to the needs of the customer. This allows our customer to have a tailored experience by selecting the features best suited for their operational needs. Obviously those operators and providers with a significant volume of turns will benefit more from the efficiency of a quicker turn.”

While customisable to suit different requirements, Slyker has no doubt about the widespread applicability of the system. “Airports, airlines, and GSPs [ground service providers] of all sizes anywhere in the world will benefit significantly from GoDirect Ground,” she insists.

A VISION OF THE FUTURE?

Telematics and associated ramp operations management software have become more popular in the last few years, and more widespread. And, says Slyker: “Our connected ramp vision is to provide solutions that gather data from the field of

operations while providing tools that help everyone do their jobs better and faster while improving safety.

“We enable ground handlers to act in a concerted manner to do the right thing by integrating data used to run certain aspects of operations, analysing this data and providing useful information, recommendations and metrics tailored to each person.

“GoDirect Ground will smooth operations on the day of flight where all information flows freely to the right person at the right time to enable the right decision to avoid disruptions or recover painlessly. Each piece of the GoDirect Ground ecosystem provides value independently, but the combined benefit is significantly higher by leveraging the data and efficiencies of each one.

“It starts with GoDirect Ground telematics as a foundation for ensuring positive control of all the ground operations equipment, both through real-time monitoring to better respond to disruptions immediately and advanced analytics to improve planning and deployment.

“The GoDirect Ground turn solution allows ramp operations to manage the aircraft turn using mobile systems, putting the power of information into the hands of personnel directly responsible for a safe, fast and accurate aircraft turn.”

Furthermore: “Paperwork is filed automatically and electronically, improving operational speed, which creates an easily searched historical record for analysis. The GoDirect Ground resource management systems addresses all the resource allocation requirements to ensure the right people are in the right place at the right time.

“Advanced AI [artificial intelligence] algorithms not only guide our customers to the right decisions in real-time, but help build future schedules based on any potential scenario that may come their way.

“Finally, the GoDirect Ground Control and Navigation Suite can visualise the real-time position of every aircraft or piece of equipment at the airport and provide all the details with a simple click. This powerful tool guarantees operations can immediately respond to constantly changing conditions.”

The value of such systems is clear. Thus, Slyker concludes: “We believe all GSPs and their operators will [be using] connected systems such as GoDirect Ground in the coming decade. When you consider the growth in demand for air travel, limited real estate for airports and growing expectations of efficiency it is apparent that GoDirect Ground offers a capability that is a differentiator today and a requirement to compete tomorrow.” ■

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Buyer's Assessment: British Airways

In this Buyer's Assessment, Richard Treeves – British Airways Heathrow Programme Delivery Manager – talks us through the value to the UK carrier of remote-controlled, electric-powered Mototok tugs



In late Summer 2017, British Airways acquired five electric Mototok tugs to push back aircraft operating short-haul services out of its London Heathrow Terminal 5 base. The Mototok tugs allow a single ramp agent to push back an aircraft, while the electric power is more environmentally friendly than the diesel tug counterparts more commonly used elsewhere.

By April this year, British Airways had a total of 28 Mototoks, together providing pushback for up to 1,000 flights a week from Terminal 5A. The Mototoks are being used across all BA's

short-haul services from T5A, pushing back A319, 320 and 321 short-haul aircraft.

Looking back, Treeves recalls: "In August 2017 we introduced our first three Mototok pushback tugs onto three aircraft stands, used by nine operatives. As we trained up more staff, we gradually built up the operation so that all stands in T5A had a Mototok deployed [on them] by February 2018."

And why did BA opt for this very different sort of tug? "British Airways was the first airline worldwide to introduce the Mototoks into a live operation," Treeves notes. "This move

As we trained up more staff, we gradually built up the operation so that all stands in T5A had a Mototok deployed [on them] by February 2018

was to modernise our operation, and maintain and further improve punctuality for our customers.

“The eco-friendly Mototok tugs allow British Airways staff to prepare aircraft for departure more efficiently. They are emissions-free and capable of moving aircraft with precision. We have completed more than 15,000 pushbacks using this technology and have experienced a 53% reduction in pushback-related delays.”

Asked whether BA would consider adding more Mototoks to support its various services out of Heathrow, or indeed other stations, Treeves states: “British Airways is working with Mototok to develop the technology for widebody aircraft.”

Indeed, he adds, it is very much the airline’s ambition to have all its pushbacks conducted by remote-controlled and electric equipment one

day. And a good start seems to have been made: “British Airways is the most punctual major short-haul airline in London. The Mototok has become an integral part of our short-haul operation, and its introduction will help us to stay at the top of the league and keep our flights departing on time,” Treeves concludes. ■

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Germania spreads its wings

Berlin-based airline Germania is expanding its fleet and network, and is making changes on the ground as a result

Germania, which serves a wide-ranging network of leisure destinations from Germany, is benefiting from the German aviation industry's ongoing consolidation to grow its fleet and route network, while simultaneously modernising many aspects of its operations.

By June this year, Germania expects to have a fleet of up to 36 aircraft, having added as many as seven extra Airbus aircraft to its inventory. It is also replacing its Boeings with Airbus models in order to standardise its fleet.

According to the carrier, it is growing its fleet in "direct reaction to the commercial success of many flights in the recent winter season", the expansion of its fleet allowing for an increase in frequencies on existing routes as well as the creation of wholly new routes.

Germania now flies to more than 55 destinations across 18 countries, with Spain, Greece, Turkey, Egypt and Portugal being its largest markets.

Kristin Büttner, Germania's director ground operations, talked to *Airside* about the implications of the fleet and network expansion on the airline's ground-based operations, noting that adding more than 50 new connections to the route network "of course entails developments in our ground handling operations.

"We will evaluate each new destination separately and check out all available options. Both new agents and ground handlers that we are already working with elsewhere will be taken into consideration."

She explains: "When choosing new ground service providers, we generally look for long-term partnerships at competitive rates. Germania traditionally maintains a decentralised network and mainly operates flights with a regional focus, outside of major hubs.



"There, we are keen on establishing long-lasting and confident partnerships with our providers and have ourselves proven to be a reliable partner over the years. When providers have been chosen, strict SLAs [service level agreements] will be put in place for each handling contract."

Germania has no plans to self-handle, Büttner confirms. Nor is it planning to acquire any ground support equipment, but always looks instead for "reliable handling partners who provide sufficient GSE.

"The expansion of Germania's route network certainly has an impact on our work. We generally talk to our handling partners individually and make sure our contracts fit our operation, including its growth," she concludes. ■



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Yeti-based snow-clearance has been trialled by Norwegian airport operator Avinor



Ploughing a lone furrow

Will testing on semi-autonomous snow-ploughing at Norway's Fagernes Airport pave the way for the GSE of the future?

At a little air gateway in Leirin, Norway, an Abominable Snowman – a Yeti – has been used to control a small fleet of snow-ploughing vehicles each 20 metres long and more than 5 metres wide, to clear the runway at Fagernes Airport. Yeti Snow Technology is the brainchild of Swedish technology company Semcon and Norway-based snow plough and sweeper manufacturer Øveraasen, and testing of the system has been conducted in collaboration with Avinor, Norway's state-owned limited company airport operator.

Fagernes Airport is 200 kilometres north of Oslo, and receives its fair share of snow. The snow ploughs used in the testing have enough capacity to clear an area of 357,500 square metres an hour, and the Yeti semi-autonomous system allows the vehicles to clear snow in formation, working in partnership together but guided by the one system.

“Autonomous snowploughs will allow airports all over the world to streamline their activities and reduce delays for their passengers. This is a good example of how autonomous vehicles can increase profitability and add value for people,” declares Markus Granlund, CEO at Semcon.

John Emil Halden, Semcon project manager, explains the workings of the Yeti: “We have designed a control system that sets up digital patterns for autonomous snow clearance at airports. The system can then download these patterns and monitor a number of vehicles that navigate using RTK GPS, an accurate form of position measurement, and communicate using 4G modems.”

All the vehicles in a snow-clearing fleet can be remotely operated, using a pre-programmed mission profile by means of the Yeti system. In such a case, the mission is controlled and monitored in real time by the Yeti Control System.

We have designed a control system that sets up digital patterns for autonomous snow clearance at airports

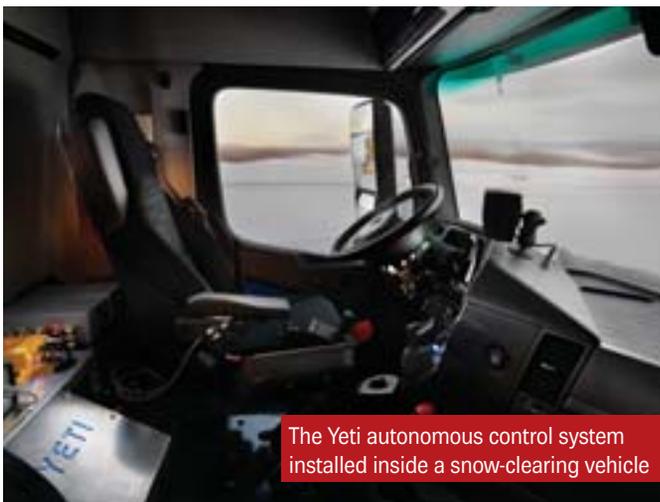
John Emil Halden, Semcon project manager

DIGITAL DECISION-MAKING

Halden talked to *Airside* about the development of the Yeti technology, and hopes for its future widespread utility. “We have been working on the system for 18 months,” he said in March. “Before that, we made some small-scale demonstration with RC [radio-controlled] trucks to demonstrate the principles of the technology.”

He continued: “The Yeti Control System is a system for planning and execution of snow removal operations at airports, creating digital plans where several vehicles work together to perform a snow-clearing mission.”

Elaborating, Halden explained: “A Yeti Mission is a collection of vehicles that jointly perform a specific task of snow removal. The vehicles may be of different types: ploughs, snow blowers, dumpers, command cars, and so on. They may also be a mix of autonomous vehicles, driver-assisted vehicles or manually operated vehicles. The system is also adapted to rules for safe operation at airports and airport ground traffic control authorisation.”



The Yeti autonomous control system installed inside a snow-clearing vehicle

According to Semcon, an airport might progress along a phased development process of achieving fully autonomous snow-clearing capability in four steps: Planning and Training – Logging & Control – Driver Assistance – Full Autonomy.

The Yeti Control System itself offers a wide range of benefits, some or all of which can be enjoyed by its user. Halden lists its capabilities as such:

- Education and training of personnel; snow-clearing plans can be used to simulate operations on computers
- Supporting documentation of winter maintenance at airports
- Monitoring of snow removal operations
- Logging snow removal operations, both manual and autonomous
- By means of that logging, actual performance can be compared with planned performance, and digital plans and training can then be modified as required

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AVINOR LOOKS TO A POSSIBLE SEMI-AUTONOMOUS FUTURE

TOR HOLMGREN, who is responsible for airport equipment and technical infrastructure – airside at Avinor, is clear on the value of the Yeti system. Looking back, he recalls: “Avinor completed a pre-commercial procurement process in 2016. There were several providers, but the choice fell on Semcon and Øveraasen, partners in Yeti.

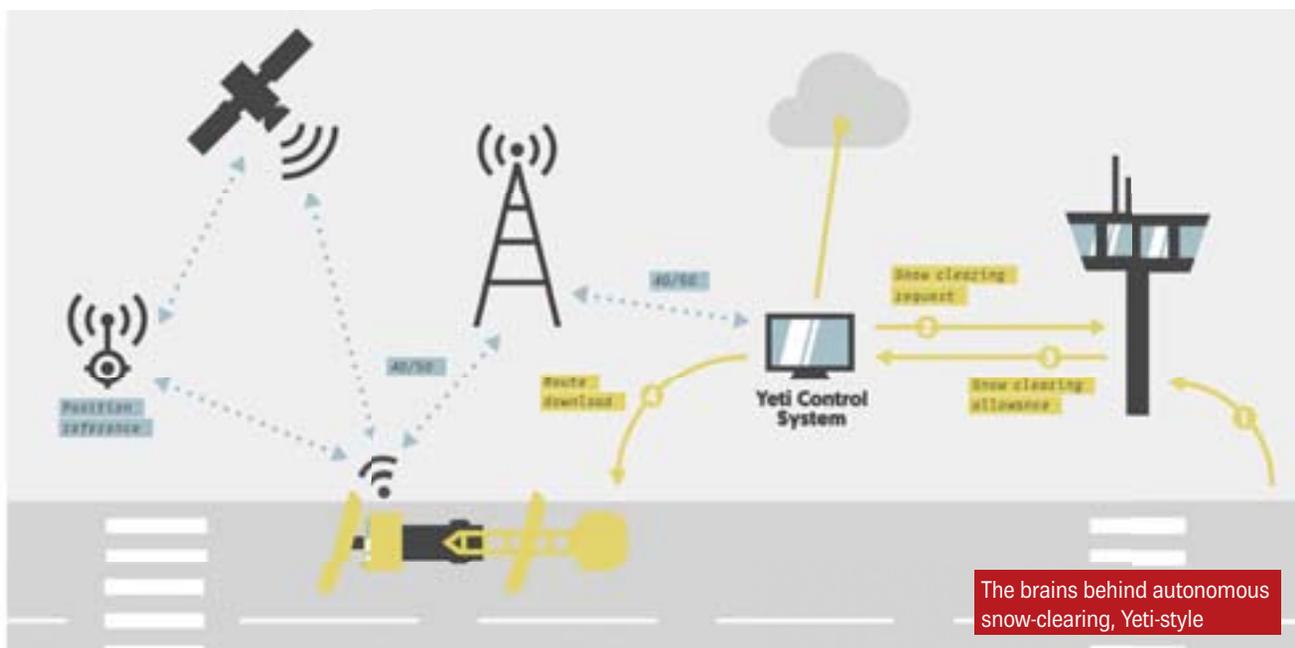
“The reason why Yeti was chosen was that they delivered a good answer with a detailed and realistic plan,” he confirms.

Avinor has been pleased with the work done so far on the project, “but there is still some development and testing left”, Holmgren points out. Moreover, on the question of possible acquisition of the system, he informs: “Avinor has

not decided the way forward yet; it’s possible to extend the contract to do some more testing. In the future Avinor will announce any new competition and procurement.”

For Holmgren, a technology like Yeti would be adopted by Avinor not to allow a reduction in employee numbers, but to streamline airport operations and free up time to perform other tasks. “Such technologies will require resources and another type of expertise in the future,” he predicts.

But, he is sure: “In the future Avinor anticipates that increased use of autonomy will come... [as well as in the area of snow-clearing], so also within other areas, such as line marking and grass cutting.” ■ ■ ■



- Providing guidance to the driver, helping in the operation of snow-clearing equipment
- Operating autonomous vehicles, or facilitating a combination of autonomous, driver-assisted and manually driven vehicles

Avinor has co-operated with the designers of Yeti on the testing of the system. In fact, says Halden: “Avinor launched the thought about autonomous snow removal operation back in 2010. Semcon has since then been in contact with Avinor, resulting in a small-scale demonstration in 2015 and an innovation project starting in November 2016.” The result of

the first phase of this project was demonstrated in March this year at Leirin’s Fagernes Airport.

That trial saw the snow-clearing vehicle fleet guided by the Yeti Control System effectively put to the test, and showed that autonomous snow removal is indeed possible. “We expect to use the vehicles in a pilot installation, but commercial, fully autonomous snow removal will probably not happen until autonomous trucks are available from the big OEMs [original equipment manufacturers],” Halden suggests.

And, he confirms, “Yeti has no plans for developing autonomous vehicles – our focus is on the development of systems that use autonomous vehicles to perform an operational task.

“We will continue testing and development over the coming years, to make sure that the system is ready when autonomous vehicles are available,” he adds, concluding: “The planning and training module may be available in beta version this year, allowing airports to start the four-step journey [described above] to autonomy.” ■

We will continue testing and development over the coming years...

John Emil Halden, Semcon project manager



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Fuelling the Northern Powerhouse

It is not just in the south of England that huge investment is required for airport operators to keep up with ever-increasing demand for aviation capacity, and Manchester Airport is keen to play a full role in the development of what has been termed the country's Northern Powerhouse

In July last year, construction work began on one of the UK's biggest infrastructure development projects: Manchester Airport's Transformation Programme, or MANTP. This programme is expected to cost approximately £1 billion (US\$1.4 billion) and will see the existing Terminal Two facility doubled in size, complete with new piers and supporting facilities such as baggage hall and forecourt.

The transformation programme, the largest private investment in the region, is expected to take 10 years to reach full fruition. It is intended to support the gateway's role as what operator

Manchester Airport Group (MAG) calls "the UK's global hub in the North of England".

According to MAG: "The Manchester Airport Transformation Programme will provide millions of passengers and airlines with facilities that combine state-of-the-art services with excellent customer service. With the new development complete, the airport will be able to grow alongside a thriving Northern economy to handle 45 million passengers a year, an increase of almost 20 million compared to today."

The construction site covers an area of more than 115,000 square

metres, and significant progress on the development work has already been completed. By February this year, for example, steel work on one of the new piers had been finished, with work continuing rapidly on the terminal extension superstructure.

The Transformation Programme is phased to ensure minimal disruption to airport operations, passengers and airlines.

The six-month mark in the project was reached during February, with the first phase of construction work completed: this was said to be the tightening of the final bolt of the steel framework connecting one of the

Construction continues apace; this picture was taken in November 2017



airport's new piers to the Terminal Two extension.

At the time, Manchester Airport CEO Andrew Cowan observed: "Today is one of the major milestones for our £1 billion Transformation Programme, which is gathering pace at a rapid rate.

"Through the delivery of the transformation we will have a world-class airport the whole of the North [of England] can be proud of, and one that will attract new airlines and routes so that we can continue to play economic provider by linking the North to key investment and trade opportunities across the globe."

Passengers are expected to be using the newly expanded terminal by the summer of 2019. Future developments that are expected to represent milestone markers in the Transformation Programme will include the full handover of the first



pier, the completion of construction of the second, changes to the local road system, a redesigned Terminal Two forecourt and the building of a new baggage hall for Terminal Two. If all goes to schedule, the first pier should be available for public use by 2019.

GLOBAL CONNECTIVITY

Manchester Airport is now, says MAG, Europe's 19th-biggest airport, and – already serving more than 210 destinations – is looking to expand its reach further. It is particularly looking

for new long-haul services at a time when the UK's big southern gateways at London Heathrow and London Gatwick are pretty much full to capacity.

MAG's aim is to become a "top 10 European airport" and – alongside Heathrow – one of the UK's two primary international gateways.

As part of the process of reaching that goal, the many facets of the MANTP are set to include developments both landside and airside:

- The expansion and reconfiguring of Terminal Two to become the airport's primary terminal building
- The improvement of Terminal Three to cater for increased demand and an expanding flight schedule
- The introduction of new and enlarged airside transfer facilities, including direct linkage between Terminals Two and Three
- Introduction of the latest technology

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- in two new security halls
- The introduction of a host of new customer-friendly enhancements, including self-service check-in facilities and around 50 food, beverage and retail outlets
- Potentially introducing a US pre-clearance facility, allowing passengers to clear immigration, Customs and agricultural inspection by US Customs and Border Protection (CBP) before boarding their flight
- The creation of an operational airport environment that provides greater flexibility and resilience to cater to evolving airline and security needs
- The construction of new stands and piers, offering better departure gate facilities
- The creation of an improved surface access road system to make it easier for customers to come to and from the airport

AIRSIDE DEVELOPMENT

Airside, the improvements will be significant. Says Anna Russell, head of stakeholder liaison and communication for MANTP: “The amount of bussing required at Manchester will be reduced when all the facilities are complete. The scope of the project currently includes three new finger piers, with space for a fourth safeguarded. This will increase the

Today is one of the major milestones for our £1 billion Transformation Programme, which is gathering pace at a rapid rate

Andrew Cowan, CEO, Manchester Airport

amount of contact stands and reduce the amount of bussing to aircraft required.”

The piers will have airbridges to each stand, enabling passengers to board directly from the departure level. However, because some airlines favour steps rather than airbridges, both processes will be catered for, Russell confirms.

There is the opportunity to put business lounges on top of the finger piers and, she informs: “We are currently talking to our airline customers about their requirements.”

Other changes to the airside operating environment at Manchester will see the introduction of a new dual E taxiway that will enable two widebodied aircraft to pass one another unabated when entering/leaving the main apron area to the south of Terminal Two.

The airfield design will make the best use of space through the introduction of Multiple Apron Ramp System (MARS) stands that will be able to take either two widebodied or three narrowbodied aircraft. “These stands will provide greater flexibility throughout the day and will enable us to better react to changes in airline fleet mix,” Russell remarks.

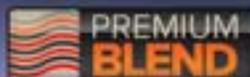
The design incorporates three pier-severed code F stands, plus two remote code F stands for resilience. Again, these stands will also be usable by narrowbodied aircraft at other times.

There will also be changes to the road layout at Manchester, with the majority of vehicle movements transferring from the rear of stand to the head of stand. This is expected to improve the reliability of journey times for both taxiing aircraft and airside vehicles as there will be no need to stop baggage trucks, servicing and delivery vehicles for aircraft to pushback.

In terms of the scheduled milestones for these developments, the plan is for the first new stands to open for this summer. The first new pier is to open in April 2019, with the new terminal opening in 2020. The second pier is scheduled to open in April 2022 and the third pier in April 2024; the full project is expected to be completed in 2024. ■



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Doncaster Sheffield Airport outlines its vision for the future

In March Peel Airports, operator of Doncaster Sheffield Airport (DSA), announced a new vision and master plan laying out the growth that it expects the gateway to achieve over the next 20 years

Execution of the vision would, Peel says, realise DSA's "full potential, delivering major international connectivity and economic benefit to Yorkshire, the surrounding regions and the UK".

The vision involves the creation of an 'aerotropolis' with the airport's 1,600-acre site, known as Aero Centre Yorkshire, becoming a central transport and logistics hub for the region.

The airport's master plan details the future development of the current site and projected growth over the next 20 years, and will now be subject to public consultation. The airport is forecasting 4.7 million passengers and 70,000 tonnes per year by the end of the two-decade period. But should a new rail station be opened to serve the airport directly by 2024 as per the long-term vision, the expected passenger numbers would more than double to 11.8 million by 2050, Peel suggests.

Robert Hough, chairman of Peel Airports, comments: "This is a vision with a central pillar that delivers air connectivity, new housing, highly skilled employment, tourism and better rail connectivity at exceptional value for money. It is straightforward to build and deliverable in five years.

"It is of national significance for aviation and the economy, particularly the North, and we want to see it realised as soon as possible. This is required beyond what Heathrow expansion will deliver, with a range of benefits for the North and East of the country."

Chris Harcombe, aviation development director at DSA, considers the implications for the airport's airside environment arising from the planned expansion, as well as the investment that will be needed to realise the ambitious plans that Peel has for the gateway.

"We are setting out what we believe are very affordable solutions to national capacity," he says. "It will require investment around the terminal and associated passenger infrastructure – car parking, roads and so on – but if you compare that to other schemes that require runway investment we think that DSA offers an affordable solution in comparison to other schemes."

Harcombe points out: "The same is true in the cargo scheme – there is developable land within the Peel group ownership that means we don't have to get into 'messy' compulsory purchase orders (which is a lengthy and costly procedure).



"The airport is supported with a long-term view with an appetite to invest for the future. DSA is committed to delivering the vision and master plan and we have clear vision to make it happen. Whilst DSA is a small regional airport, the operational environment is more aligned with a much larger scale operation."

And from the specifically airside ramp point of view: "In terms of the runway, it will require no changes to accommodate the vision and master plans."

However, of course there would be associated taxiway improvements required in order to add capacity and resilience, Harcombe informs.

"There would be further apron and aircraft parking requirements and the terminal would require further investments – but it is built in a way that is modular, meaning that we can increase easily and gradually. We would also add expandable piers throughout the airport as it grows in size and passenger capacity increases."

Moreover, he observes: "There are further technology enhancements to be introduced, including smart technology, like fixed electrical ground power. The master plan also outlines further opportunities to develop cargo shed facilities, both airside and landside. It also includes mixed-use hangars. We envisage some maintenance, repair and overhaul (MRO) as part of the vision and master plan. All of this is achievable with the current land we have available."

The infrastructure growth will support and encourage

passenger and cargo transport through DSA. And Peel has some distinct plans in this regard, too. “In the short term, the focus is on building more volume,” Harcombe says. “So, at the moment increasing low-cost traffic focused around European sun and city destinations is our priority.

“Over the medium term we will be looking to build on the recent long-haul announcement [in late March, it was confirmed that TUI would fly from DSA to Sanford, Florida, becoming the first long-haul carrier to operate out of the Yorkshire gateway] and further our leisure traffic. We will also be looking to serve international markets for leisure, business and ethnic traffic, through long-haul traffic.”

How? “By both reducing leakage away from the Yorkshire and North Midlands regions to airports in the north-west or south-west, as well as capitalising on the projected market growth over the next 20 years,” Harcombe declares. “DSA will aim to capture a bigger share of this market, coupled with the market growth.”

To achieve the ambitious targets Peel has set DSA, the airport operator will need to have plenty of collaboration with existing and potential new partners. Thus, for example, its ground handling services will need to be stepped up. Harcombe explains: “Swissport is the current ground handler

at DSA but we would certainly encourage further competition and market entrance in accordance with both legislation and increasing market demand.

“The airport has also recently begun operating the landside cargo handling, as well as the FBO [fixed-base operator] operation to improve customer service and to add value.”

The master plan was made available for public consultation on 18 April; that process is expected to last approximately eight weeks. Peel has said that it will then take any feedback into account over the summer and publish a final plan towards the final quarter of this year.

For the vision, the East Coast mainline railway project is being developed and, says Harcombe, “We hope to move to the next stage of that project in the next 12-18 months. We are already working hard alongside our regional partners to make both plans a reality.” ■

We are setting out what we believe are very affordable solutions to national capacity

Chris Harcombe, aviation development director at DSA

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Munich Airport on the up

*Munich Airport CEO Michael Kerkloh tells
Airside about the big plans for expansion he and
his team have for the busy Bavarian gateway*

A Lufthansa A380 pays a visit to Munich; credit Flughafen München

GERMAN FLAG-CARRIER LUFTHANSA IS GROWING ITS PRESENCE AT MUNICH. WHAT WILL THIS MEAN FOR THE AIRPORT?

We are of course very pleased that Lufthansa has decided to station five of its 14 Airbus A380s here at Munich Airport. That makes Munich the fourth European location, as well as London, Paris and Frankfurt, where the A380 widebody jet is deployed.

Apart from giving us added capacity in the long-haul segment, it especially boosts our overall attractiveness by putting us in a new league among international hubs. Munich Airport is already well known for its high quality standards. We jointly operate an award-winning terminal with Lufthansa, and the airport itself was once again voted Europe's number one airport in a survey of millions of passengers from all over the world.

WILL THE EXPANSION RESULTING FROM THE ADDITIONAL LUFTHANSA OPERATIONS FORM PART OF A WIDER, ONGOING PROCESS OF EXPANSION?

The switch to the A380 on Lufthansa's long-haul routes to Los Angeles, Beijing and Hong Kong certainly represents a big milestone in the successful history of Munich Airport, which has been steadily developing as a high-performance hub for many years. This is the result of a long-term strategy developed jointly with Lufthansa.

Along with their familiar appeal as tourist destinations,

Munich and Upper Bavaria offer enormous potential through the countless successful companies based here, not to mention the very large concentration of affluent customers living here.

Munich Airport operates a hub offering excellent connecting and feeder flights to destinations all over Europe in addition to the long-haul services to the Americas and the Far East. Munich serves more European routes than any other airport in Europe.



Michael Kerkloh, CEO
of Munich Airport;
credit Flughafen München

IS THERE MUCH SPARE CAPACITY FOR YOU TO GROW YOUR OPERATIONS AND WILL YOUR STATED REQUIREMENT FOR A THIRD RUNWAY FORM THE CENTREPIECE OF A WIDER PROGRAMME OF EXPANSION AND IMPROVEMENT OF AIRSIDE INFRASTRUCTURE?

Munich Airport has now been in operation for more than 25 years. During that time, we have gradually expanded our facilities, always keeping pace with demand.

A few highlights of our development: in 1992, our first year of operations, we handled 12 million passengers. Since then, our passenger traffic has almost quadrupled to 44.6 million last year. That is an enormous increase, and we have expanded our terminal capacity accordingly. We expanded Terminal 2 and, with the midfield satellite terminal, created capacity for an additional 11 million passengers per year.

With regard to the capacity of our runway system, we have reached our limits. We anticipated this situation and took action well ahead of time to initiate the approval process for a third runway. We need more capacity and are planning to increase the number of take-offs and landings we can handle per hour from the current 90 to 120.

For the construction of the third runway we are waiting

for the green light from our shareholders. Our master plan itself offers excellent development prospects for the airport. That is because, in the original design, the planners opted for a 'green field' development to ensure adequate space at the new location.

Incidentally, we are now creating an inter-disciplinary 'LabCampus', where we will bring together companies, experts, start-ups and global players, creative people and investors to spark innovations and develop advanced applications to the point of market readiness. The aim is to establish a workshop for the future at Munich Airport, an ideas factory, where the mobility concepts of tomorrow will emerge. That will ensure that Munich Airport remains a step ahead in the future, too.

Munich Airport operates a hub offering excellent connecting and feeder flights to destinations all over Europe...



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WHAT MILESTONES ARE CURRENTLY SCHEDULED IN THE MASTER PLAN FOR THE THIRD RUNWAY?

We already have a very long approval process behind us. The arguments were exchanged and evaluated over a 10-year period. In the end, the responsible authority granted us planning permission. Various municipalities and citizens' initiatives took legal action against the planning permission but all of the lawsuits were dismissed, right through to Germany's highest administrative court, which confirmed the planning permission ruling in every point. After many years of litigation through all courts of appeal, we now have legally valid planning permission for a third runway.

However, we cannot build it until our three shareholders, the State of Bavaria (which holds a 51% share), the federal government (26%) and the city of Munich (23%) give us the green light. This political decision is still pending.

WHAT DO THE LUFTHANSA DEAL AND CURRENT PLANS FOR FURTHER EXPANSION AT THE AIRPORT MEAN FOR YOUR GROUND AND CARGO HANDLERS AT THE AIRPORT? ARE THEY FULLY ON BOARD AND ABLE TO CATER TO THE FURTHER GROWTH IN AIRSIDE OPERATIONS?

Our facilities are spacious enough for us to accommodate additional traffic on the airport aprons. But to enable the A380 to dock at the terminal, we had to rebuild pier-served aircraft stands so that passengers can board on the upper deck as well.

In general, the deployment of an A380 on a route doesn't necessarily mean a big difference in cargo capacity. A lot

of room is needed in the hold to carry passengers' baggage. What is interesting for the freight business is the addition of new long-haul routes such as Lufthansa's recently announced resumption of service to Singapore. And incidentally – it will operate this service with the world's most advanced, environmentally friendly aircraft: the A350-900.

At Munich Airport, Lufthansa is going to operate 15 of these new, resource-conserving aircraft that use 25% less fuel, generate 25% lower emissions and cause much less noise when taking off and landing.

WHAT OTHER POLICY PRIORITIES DO YOU HAVE?

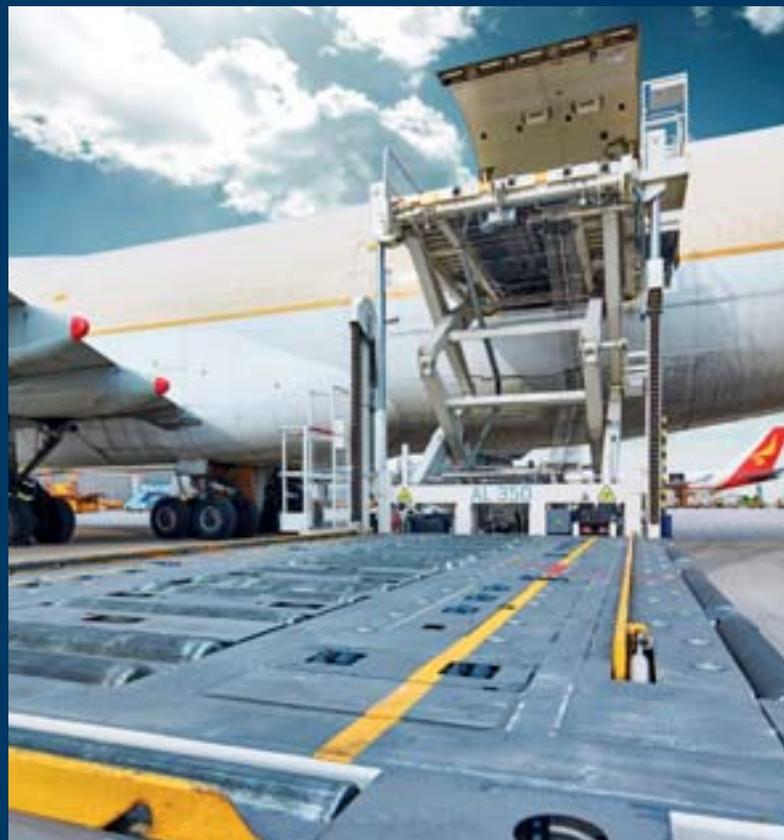
Munich Airport is going to get greener. We have made sustainable air transportation a corporate objective. We are committed to climate protection and aim to be Germany's first climate-neutral airport by 2030.

We will reduce carbon dioxide emissions directly attributable to airport operations by 60% by 2030, and will take appropriate measures to offset the remaining 40%.

Technological innovations make a big difference in saving substantial quantities of CO₂ emissions, for example through efficiency improvements in the combined heat and power (CHP) and sustainable construction. Our efforts also include the increased use of renewable energy sources, retrofitting of energy-saving LED technology and increasing the share of electric vehicles in our fleet.

We will invest a total of 150 million Euros (US\$186 million) in an ambitious climate protection programme. This underscores our belief in the importance of resource-conserving airport operations. ■

A busy Munich Airport;
credit Flughafen München



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Green is the colour for Stuttgart Airport

Over the last few years, Germany's Stuttgart Airport has worked hard to minimise its environmental footprint, and it is keen to do more, as airport CEO Walter Schoefer explains

IN 2017, STUTTGART AIRPORT SET ITSELF NEW CLIMATE GOALS. PRESUMABLY THEY REPRESENT AN EVEN STERNER TEST OF YOUR GREEN AMBITIONS?

We have assigned ourselves an extremely demanding task: we are striving to run the airport entirely carbon neutral by 2050. Our first milestone is in 2030. By then we want to have halved our greenhouse gas emissions compared to 1990. Climate protection has been on our agenda for many years now. We want to do our part in worldwide efforts against climate change.

So far we have managed to reduce 26% of our emissions through efficiency and emissions reduction projects. We will continue to do so by expanding our electric GSE fleet,



producing more electricity from alternative sources ourselves and by installing large energy storage facilities. Beyond that, we can still save energy by investing in new buildings and refurbishments.

WHAT PROGRESS HAVE YOU MADE SO FAR ON ELECTRIC GSE?

Making ground handling more efficient and sustainable is a part of our core business. In only a few weeks we will have reached one of our interim targets: by the end of spring we will be running an all-electric fleet of passenger buses and baggage tugs on the ramp. This will save about 280,000 litres of diesel fuel a year; that is about 700 tons of CO₂ from handling operations. Our GSE fleets are one of the major levers on our way to climate neutrality.



credit: All images courtesy of Stuttgart Airport

We provide infrastructure for alternative vehicles not only airside but also landside. Since the beginning of this year we have launched 33 new charging points for our passengers' and visitors' electric cars. We have installed the latest charging technology. The most recent generation of electric cars can fill up their batteries during a short stop at our fast charging stations.

HAVE YOU BUILT ON THE WORK YOU ACHIEVED IN THE PRE-2014 PERIOD, WHEN YOU INITIATED A TEST PROGRAMME FOR CERTAIN ELECTRIC GSE AND VEHICLES?

In 2013, we launched efleet, a showcase for e-mobility at Stuttgart Airport, in close co-operation with GSE producers and the German Aerospace Center (DLR). The aim was to gain experience with this technology and to collect technical, environmental



and financial data that would help us make informed decisions on future electrification on the ramp.

We started off with a wide variety of electric GSE including passenger buses, baggage and cargo tugs, a belt loader and a pushback vehicle. Some of them were only available as prototypes at that time, but were brought to market maturity in the course of the test run.

During the pilot phase, our battery-powered fleet towed about 12,000 aircraft, transported more than 300,000 passengers and moved 1.5

million pieces of luggage. The daily routine and data analysis showed that airports are particularly suited for an application of electric equipment, thanks to the short distances and shift work involved. The efleet project served as a cornerstone for the large-scale expansion of emission-free ground handling that we are working on right now. In the current project scale-up, we are expanding our electric fleet by another 40 ground handling vehicles in the period up to 2019.

HOW DOES YOUR GREEN STRATEGY PERTAIN TO AIRSIDE BUILDINGS AND OTHER INFRASTRUCTURE? HOW DOES IT RELATE TO NOISE MITIGATION?

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will tackle and renew our Terminal 4 next. The new terminal will be able to produce its own energy and fulfil the highest possible efficiency standards. This will be an essential step towards reaching our climate goals.

In line with our fairport STR concept – the leading idea behind all our decisions – we integrate ecological and socio-cultural aspects besides technical and economic factors in every construction project within the airport city. We are a member of the German Sustainable Building Council (DGNB eV) and pre-certify according to their sustainability criteria.

HAVE YOU COLLABORATED DIRECTLY WITH YOUR HANDLER (LOSCH) AT STUTTGART TO MINIMISE THEIR ENVIRONMENTAL FOOTPRINT WHEREVER POSSIBLE?

As an airport operator we assume responsibility not only for our own environmental footprint but also for the impact of the airport as a whole. Accordingly, we set incentives and collaborate with other players on the campus.

For example, the second ground handling service provider in Stuttgart (other than our own), Losch Airport Service, is collaborating with us in the scale-up programme for our electric fleet. We have installed battery-charging stations for them. We believe that if we work together, we can create a



healthier working environment for our employees who work on the apron, like ramp agents or loaders.

HAVE YOUR GREEN PROPOSALS BEEN WIDELY WELCOMED BY YOUR OWN STAFF AS WELL AS BY OTHER AIRPORT OPERATORS AND VISITORS?

Stuttgart Airport takes a pioneering role by investing in new, environmentally friendly technologies. Airports exchange their best practices – we are all learning from each other. We like to think of airports as innovation platforms, where requirements for future developments can be gathered and where prototypes can be tested. In Stuttgart that has particularly been the case for electric vehicles, and currently is the case for smart grids as an aspect of the transition towards renewable energies.

WHAT HAS DRIVEN YOUR THINKING TO MINIMISE YOUR ENVIRONMENTAL FOOTPRINT? IS IT PUBLIC PRESSURE, A DESIRE TO DO THE RIGHT THING, REGULATORY PRESSURES, OR A COMBINATION OF THOSE THINGS AND MORE?

Environmental protection and social responsibility are not new ideas to us. Our first – what you would now call CSR [corporate social responsibility] – activities date back to the 1960s and 70s, when we implemented a noise monitoring system and a noise-dependent fee structure.

Since then, we have worked on energy efficiency, water protection, resource management, employee development, compliance management and more. There were certainly intrinsic motivations, because saving energy – for instance – also saves money. Business success and sustainability performance are inseparably connected to us.

In 2013, we finally bundled all our activities in our fairport STR strategy. We have set an ambitious goal for ourselves: in the long run we want to become one of the highest-performing and most sustainable airports in Europe. In everything we do we want to create an added value for our employees and the environment as well as for the economy and people of our region. ■



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Looking ahead to *inter airport* China in Beijing

Mr Shi Dong, vice president of event organiser Mack Brooks Exhibitions (Shanghai) Ltd, tells Airside all about what visitors to inter airport China, to be held in Beijing between 5 and 7 September, have to look forward to

IS THIS YEAR'S INTER AIRPORT CHINA EXPECTED TO BE AS POPULAR AS EVER?

By as early as the end of March this year, 95% of the booths for the 8th *inter airport* China had already been booked, the stands to be placed in an exhibition area of over 10,000 square metres. There will be over 200 exhibitors and brands at the show.

inter airport China will attract guests and buyers from China's top 35 airports, five newly built or rebuilt airports, its top 10 airlines and many other areas related to airports. Plus, it is expected that over 4,000 professional visitors will come to the show.

In addition, there will be a German Pavilion, British Pavilion, Danish Pavilion and Italian Pavilion at *inter airport* China.

WOULD YOU SAY THAT THE LAST INTER AIRPORT CHINA IN BEIJING WAS A SUCCESS?

The last *inter airport* China maintained its influence and a high standard of professionalism. There were more than 200 companies and brands from around the world and 3,538 visitors from 34 countries attended the show; all the visitors were from airports, airlines and other relevant industry sectors.

We are proud to claim that the visitor satisfaction level was 99%. From the feedback of the exhibitors and the visitors, the last session was certainly successful.

DID THAT EVENT BUILD ON A GROWING SUCCESS OF INTER AIRPORT CHINA SHOWS OVER THE YEARS?

inter airport China has been successfully organised seven times over the past 14 years since 2004, when *inter airport* China was first introduced. From only one pavilion at first, to the present indoor and outdoor exhibiting area, from 2,000 to 4,000 visitors today, we are making progress every time.

This year will be the 8th edition of *inter airport* China, and it has undoubtedly become China's largest and most influential professional exhibition in the area of airport construction.

WHAT WOULD YOU SAY MADE THE 2016 EVENT STAND OUT? WHAT WAS DIFFERENT ABOUT IT TO PREVIOUS SHOWS?

The highlight of the 2016 show was that we had two different themes of forums. We had always had a discussion zone at previous shows but, in 2016, we co-operated with two industry associations and organised two forums: 'China's airport development in the 13th Five-Year Plan' and 'New technology exchange meeting'. More than 200 experts and scholars from 56 Chinese airports, airlines and the field of airport construction attended the forums.



and invite purchasing decision-makers from key domestic airports, providing the exhibitors with more opportunities to promote their products.

WILL THERE BE ANY PARTICULAR THEMES THAT THIS YEAR'S SHOW WILL ADDRESS? IF SO, HOW AND WHY?

China's 'Belt and Road' initiative will bring huge business opportunities to the whole airport industry. No less than 124 airports are currently under construction in the country and it is estimated that the total number of civilian airports in China will reach 260 by 2020.

inter airport China 2018 will take the construction and development of airports in China under the 'Belt and Road' project as the theme and hold relevant activities around it. We will also invite guests from airports along the One Belt And One Road to the site to share the development prospects associated with China's Air Silk Road with us.

WHAT WILL BE DIFFERENT THIS YEAR? WHAT HAVE YOU LEARNT FROM PREVIOUS SHOWS THAT WILL FEED INTO THE COMING EVENT?

After the success of the forums in the last edition of the show, we will hold more events like forums, seminars, airport visits and various collaborative activities this year.

Both indoor and outdoor exhibition areas are ready for the events, making the whole exhibition period a lively one. In addition, we will upgrade the VIP buyer plan of the airport,

DOES THE SHOW'S LOCATION IN BEIJING REPRESENT A SIGNIFICANT ADVANTAGE FOR IT, GIVEN THE RAPID GROWTH OF CHINA'S AVIATION INDUSTRY?

It is reported that there will be around 166 million

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passengers on flights passing through Beijing by 2020, and the city's new airport, Daxing Airport, will be operating by October 2019. Total investment in the Beijing Daxing International Airport project is RMB79.98 billion, and RMB30 billion investment is open to private capital. Beijing's geographical location will allow it to act as a regional hub for China and even Asia.

Beijing, as the capital of China, has always been the number one choice for China's exhibition industry. It hosts the largest number of exhibitions that have UFI certification in China [UFI describes itself as 'the global association of the exhibition industry' and it states that 'UFI Approved Event labels are a global stamp of authority for high-quality exhibitions'].

Beijing also enjoys unique conditions and advantages in the developing exhibition economy. So it is self-evident why *inter airport* China is held in Beijing.

THE AVIATION INDUSTRY HAS GENERALLY HAD A GOOD YEAR; WILL THAT BE REFLECTED IN THE SUCCESS OF EVENTS SUCH AS INTER AIRPORT CHINA 2018?

According to the International Air Transport Association (IATA), global aviation industry net profit will reach US\$38.4 billion in 2018, and this will represent the fourth consecutive year of sustained profit growth in the airline industry. Indeed, there is now more travel than ever before and air cargo demand is at its highest level in more than a decade.

China, as an indispensable part of the world aviation industry, will also deliver satisfactory results: in addition to Beijing Daxing International Airport, the first phase of the Chengdu Tianfu Airport construction project is expected to be completed in 2019, involving a total investment of RMB56.21 billion.

Qingdao Jiaodong International Airport is expected to be completed in 2019 and will involve an investment of about

RMB38.18 billion, with its terminal area planned to cover 700,000 square metres.

Other airports like Chongqing Wushan Airport, Wulong Xiannvshan Airport, Hubei Ezhou Airport, Jiangsu Lianyungang Huaguoshan International Airport and Anhui Wuhu Xuancheng Airport are also receiving heavy investment and are expected to be completed over the next couple of years.

The expansion of the global aviation industry, the booming development of China's airport industry, and the holding of *inter airport* China in Beijing will mean a win-win situation of '1+1+1', and all the relevant people in the airport industry will gain a lot from it.

ALL THAT INVESTMENT MUST BE VERY GOOD NEWS FOR THE CHINESE AVIATION INDUSTRY?

On 19 January 2018, new 'domestic investment in civil aviation industry regulations' were unveiled. Civil aviation investment and private capital will be allowed for the airport industry and there will no longer be limits on this in many areas. The new regulations cover airlines, airports, terminals and other core areas of civil aviation.

All in all, the new regulations aim to encourage, support and guide state-owned and non-state-owned enterprises to invest in civil aviation and regulate investment behaviours among civil aviation enterprises. Private capital will have more opportunities to share a trillion RMB market. ■

Beijing, as the capital of China, has always been the number one choice for China's exhibition industry

Danny Vranckx, seen here on the left, is the CEO of AVIACO. On the right is Bart Kroonenberg, AVIACO chief operating officer



AVIACO establishes Spanish subsidiary

The Benelux-based specialist in the provision of used and refurbished GSE has expanded its operations in the Iberian Peninsula – and has plans for further development

Called Aviation Ground Equipment Spain, the new enterprise will reinforce AVIACO operations in the region, bringing AVIACO closer to the Spanish market and allowing it to offer its customers there a more localised service.

AVIACO CEO Danny Vranckx explains to *Airside International*: “We had carefully studied the market and for several reasons we came to the conclusion that Spain was the best location in which to open up [a new subsidiary].”

“We had created another subsidiary in the Netherlands already and we had a bit of experience which helped us to

decide the kind of company we wanted to create in Spain.”

He continues: “AVIACO management is convinced that the Spanish market represents a substantial growth potential for the company and considers that it is the right moment to invest locally.

“Our new subsidiary in Spain reflects our will to keep improving the quality of our service and the assistance to our customers in this area. I am convinced that our presence in Spain is an important step in our expansion strategy and will be a boost in our approach to other markets.”

The subsidiary has a sales office in Madrid and will open up several more workshops around Spain. “At the moment, we are already active in Madrid and Barcelona,” Vranckx notes.

As part of a wide-ranging expansion strategy, AVIACO is also now negotiating the opening of new workshop facilities in Johannesburg, South Africa and at Amsterdam Airport Schiphol in the Netherlands, both of which are expected to be fully operative in the coming months.

Vranckx explains the thinking behind these two locations: “South Africa is a strategic location for the African market, Schiphol because we are in this part of the world.”

That programme of expansion will build on recent success. Business has been “good so far, and we are ambitious to make the company grow as the number one refurbished GSE company in the world”, he remarks. ■



AVIACO's Netherlands facility

ITW GSE rebrands under the one roof

In Spring this year, ITW GSE merged its various brands under one banner. The various ground power units (GPUs), pre-conditioned air units (PCAs), cables and hoses carrying the well-known names of AXA Power, Hobart, Houchin, Military and J&B Aviation have since April all been marketed under a unified ITW GSE brand



ITW GSE now markets all its products under the one name, but within four simple product segments – power, air, cables and hoses.

At the time of the branding change, Poul Elvstroem, vice president of global sales & marketing for the company, informed: “Moving from a local to a global supplier, a single brand strategy is the natural step in order to streamline our market approach and to reduce global customers’ confusion.”

He continued: “As we unite around our corporate vision to supply the cleanest, most reliable and cost-efficient GSE systems to the aviation industry, we will continue to focus on what we do best.

“We are turning our product numbers – used every day at airports worldwide – into proper product names. Like the name of our latest product, the all-new battery-powered ITW GSE 7400, which signifies a bold step into a cleaner future.

Because ‘clean, reliable and cost-efficient’ is where our future lies, and we are proud to march towards it as simply ITW GSE.

“It’s all about connections,” he concluded, going on to explain to *Airside* the history behind the change. “We started the consolidation of our GSE business back in 2011. The brands of AXA Power, Hobart, Houchin, J&B, Military were all owned by Illinois Tool Works (ITW); however, the affiliation to ITW was not visible to the market, as our branding and logos were not connected.

“This sometimes led to confusion over ownership among our customers. We decided to streamline our marketing material starting with the logos, that all had the same topography – but kept their initial colours. To each brand logo, we added a tail-shaped ITW GSE logo in front to show that we belonged to ITW. At that time, we

decided not to go for a single brand strategy as the brand equities were very strong, and nobody really knew who ITW GSE was.

“Last year, we decided to take the next step on the journey and we became simply ITW GSE as of April of this year. This will make us appear as one strong player in the market and any confusion over the same product being sold in multiple brands will disappear.”

The reaction to the change has been a healthy one. “As we are still the same company, the same people, selling the same products, customers and business partners have generally reacted very positively and many have said that it makes a lot of sense to streamline the portfolio. Another comment has been ‘why only now – this could have been done before.’”

BUILDING ON SUCCESS

The change in brand positioning seems to have been made at a good time for ITW GSE. “ITW GSE ended 2017 with a strong performance in the GSE industry,” Elvstroem observed in the Spring announcement. “This is among other [things] a result of the constant trimming and adjusting of our organisation to fit the market demand.”

He added: “We have expanded our market coverage and strengthened the sales force – mostly in North and South America, but our offices in Europe, Middle East and Asia Pacific have also welcomed new colleagues to their teams.”

And looking to the move towards marketing all products under the single name, he said: “One of the objectives of the branding process has been to make the customer journey less confusing and smoother.

“ITW GSE will concentrate its efforts on the common platform range, ie all those products that are equipped with the same easy-to-use display. Those are the ‘400-series’ from the ITW GSE 1400 units over the 2400 – 3400 – 4400 to the most recent 7400 unit.

But also our cables and hoses,

formerly sold under the J&B brand, will be better integrated.”

Looking back over 2017, ITW GSE listed a number of major orders that it had secured during the year. These included GPUs, PCAs and cable retrievers at Algiers Airport and GPUs for Russia’s Platov Airport. Deliveries included PCAs and GPUs installed at New York La Guardia Airport and PCAs, power coils and GPUs installed at Minneapolis-St Paul Airport.

Plus, a multi-city programme of deliveries for United Airlines saw a number of PCAs installed at Cleveland, Portland (Oregon), San Francisco, Newark and Chicago Airports.

In addition, the project to serve the all-new IGA Istanbul New Airport project was also said to be “on track”. During 2017 ITW GSE began delivering the 147 2400 power coils and 114 3400 PCA units that have been ordered.

As of March, approximately 25% of the products ordered remain to be delivered over this summer; all the equipment will be installed and ready for the opening of the airport’s initial opening phase in October.

LOOK AHEAD

As for the rest of this year and beyond, Elvstroem expects a strong 2018 in terms of sales. “We will, among other things, intensify the introduction to the market of the new 7400 battery GPU – a ground-breaking GPU.

“Based on an ITW GSE 2400 solid-state converter powered by Nissan Leaf battery packs – both proven technologies – the benefits of the ITW GSE 7400 are obvious. And we have high expectations for this product which is ideal for gates without 400Hz supply. It’s just clean and pure and silent as our 2400 GPU.”

ITW GSE’s 7400 battery-powered GPU featured prominently in the Buyer’s Assessment of the Spring issue of *Airside International*, and, says Elvstroem: “The 7400 unit will definitely change how airports think about ground power. This clean and green product is ideal for gates without fixed 400Hz.”

He explains: “It offers great flexibility, zero emissions, silent operation and comes with a warranty that is far beyond what we know from the engine market today. For airports wishing to reduce their carbon footprint and to improve the working environment of their staff, the solution surely is the all-new battery-powered 7400 GPU. Already now, we are experiencing great interest [from companies wishing to be] among the first customers to receive this new product.” ■

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Menzies broadens its capability in the UK

In April this year, Menzies Aviation confirmed that it had acquired Airline Services Limited, the Manchester, UK-based airline services provider

Airline Services, which was established more than three decades ago, ground handles at several UK gateways, although its biggest operation is to be found at London Gatwick, where it handles the aircraft of more than 20 carrier customers. It is a specialist in de-icing, currently de-icing at a dozen UK gateways, as well as providing aircraft 'cleaning and presentation' services at those same airports.

The acquisition takes Menzies into four new airport locations – Exeter, Birmingham, Liverpool and Newcastle – while combining Airline Services with its existing business will “strengthen Menzies’ existing market position, allowing the company to continue

growing in the UK by expanding its service offering to new and existing customers at a wider range of locations”, the company says.

Menzies Aviation has brought under its wing 900 new staff, including Nigel Daniel, managing director of Airline Services, whom *Airside* interviewed for its recent Spring issue. Daniel will take up a leadership position on Menzies’ regional team.

Andy Lord, Menzies Aviation’s executive vice president, Africa and India, comments: “This acquisition has sound strategic logic and is a significant addition to our UK service offering.

“Adding Airline Services to our existing network gives us the opportunity to share facilities and

expertise which will enable us to become even more competitive, I am also excited to be taking the Menzies brand and suite of services into four new airport locations.

“The Menzies Aviation team are eager to bring excellence, from touchdown to takeoff, to our newly expanded customer base.”

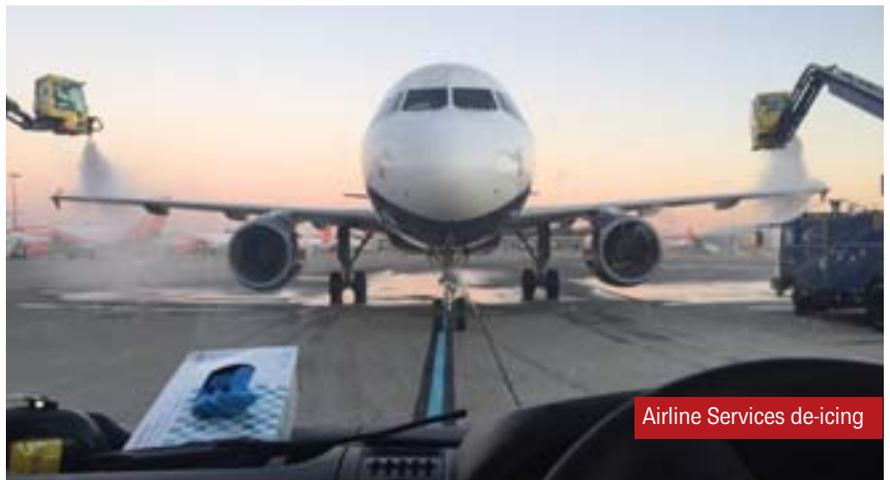
Lord points out that Airline Services’ de-icing capability was an important aspect of the decision to acquire the handler. “We’re keen to expand our de-icing capability, which made Airline Services – the largest independent provider of aircraft de-icing in the UK – an attractive proposition for us. While we have developed a de-icing business of scale in Continental Europe and the



Americas, this has not been the case in the UK until now; this acquisition allows us to become a serious player in the UK de-icing market.”

He continues: “Airline Services also provide cleaning and cabin presentation services, which is another part of the UK market that we have barely featured in to date. In both cases, the acquisition allows us to offer more services to our customers, which is a central element of our corporate strategy.”

Looking forward, Lord confirms that such acquisitions as this one represent a key element of Menzies’ plans for expansion going forward. “Our aim is to be the undisputed, premium airline services provider in the industry, and we believe that in order to secure that position, we must offer the broadest possible range of services across the widest possible spread of locations.



“Achieving that aim will require both organic growth and more strategic acquisitions, so we review opportunities on an ongoing basis as they present themselves.”

Lord concludes: “s part of our ‘Excellence Manifesto’, the strategic

plan that we launched last year, we aim to offer the deepest combination of service portfolio and geography in the industry. In practice, that means there are a number of markets and products in which we will seek to expand our customer offering.” ■



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De-icing in action at Southend Airport of easyJet aircraft

Centralised de-icing at Southend

In February this year London Southend Airport, in Essex in England, opened a centralised, purpose-built aircraft de-icing pad – not long before some unseasonably late snowfalls hit the UK

London Southend's purpose-built de-icing facility allows an aircraft to be de-iced away from the stand, instead receiving its precautionary de-icing treatment at the centralised pad while its engines remain running. Once it is fully de-iced, it will then taxi for take-off. The process is expected to save time and ensure that aircraft are away within their scheduled turnaround times.

The de-icing fluid used on the pad is also collected in the pad's drainage system, from where it is transported away for specialist treatment and subsequent disposal. Thus, the pad offers a significant environmental benefit too.

Glyn Jones, CEO of airport owner Stobart Aviation, enthused at the time of the pad's opening: "This new de-icing facility is another example of London Southend leading the way within the aviation industry, using innovative, brand new technology to provide a much better airport experience for our partners and passengers."

"For both travellers and airlines there is nothing more frustrating than bad weather leading to delays, so we've – quite literally – invented a solution to try and minimise that."

Graeme Buchanan, managing director of regional airline Stobart Air, added: "Stobart Air is dedicated to providing a convenient and seamless service to passengers and partners and this facility strengthens our position. In a UK first, the new de-icing facility is a demonstration of cutting-edge technology and we will continue to push the boundaries of innovation."

Southend Airport is primarily a short-haul gateway, although a total of more than a million passengers pass through its facilities each year. Its two key airline partners are low-cost carriers (LCCs) easyJet and Flybe, which together operate more than 30 domestic and European routes from the airport. Captain Chris Foster, flight operations performance manager at easyJet, commented: ►►

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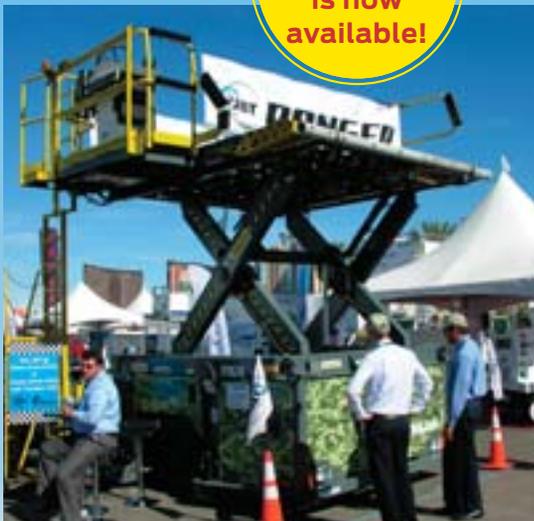
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The innovative new technology will assist us in delivering even greater efficiencies

Captain Chris Foster, flight operations performance manager, easyJet

► “We welcome the installation of the new de-icing facility as part of a UK first at London Southend Airport.

“The innovative new technology will assist us in delivering even greater efficiencies which ultimately mean we can improve our passengers’ experience when flying with us,” Foster added.

SMOOTH OPERATIONS

Construction on the de-icing pad started last year, in October 2017. It was tested and received the approval of both easyJet and Stobart Air, before going into operation earlier this year. Jon Home, chief operating officer of Stobart Aviation, talked to *Airside* about the thinking behind the investment required for the new facility: “This brand new technology will help in terms of providing a much better airport experience for the airport’s partners and passengers.

“For both travellers and airlines, bad weather can be very frustrating in terms of leading to delays. We thought we needed to invest a solution to try and minimise that. The new de-icing facility will help us deliver even greater efficiencies, which ultimately means that we can improve our passengers’ experience.”

London Southend is expanding, another reason for the change. “Given our current rate of growth (+25% more passengers during 2017) and the projected figure of handling up to a further million passengers in 2018 [the airport is expecting more than 2 million passengers this year], this is a facility we expect will be more heavily used in the coming years.

“We have a growing fleet of London Southend-based aircraft which will often be scheduled to depart within a short time window. Similarly this [2017-18] winter season has demonstrated why such weather resilience investment is worthwhile.”

Collaboration with the gateway’s airline partners was a key part of the process of developing and commissioning the new facility, Home recalls. “The de-icing facility was fully set up by the Stobart Group but it was tested and approved by London Southend Airport’s airline partners, easyJet and Stobart Air.”

Stobart Air describes the new facility as a ‘first’ for the UK. Home explains why: “All ground handling at London Southend Airport is run in-house by the Stobart Group and that includes the de-icing operations. This makes London Southend Airport the first airport in Britain to deliver a purpose-built aircraft de-icing facility.”

Although difficult to say exactly how much time will be saved by the new pad, it definitely saves “considerable time”, Home observes. “Compared to the way things were done previously, the facility allows for greater efficiency when bad weather hits. Now, instead of de-icing when the plane is on its stand – fully loaded with passengers keen to depart – an aircraft can simply push back and taxi to the Centralised De-icing Facility. Here, the plane will be efficiently de-iced with the engines running before taxiing for take-off. The new Centralised De-icing Facility complements traditional on-stand de-icing and helps reduce the risk of departure delays.” ■

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