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Ground Support

WORLDWIDE

EQUIPMENT – SERVICES – HANDLING

WHEELS

ON THE GROUND



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Can't Wait to See You

There's plenty to look forward to in 2018, including the International Airport GSE Expo in Las Vegas this October.

feel like I have been living in 2018 for six months, but in reality it has only been one.

Ground Support Worldwide is starting our year off with travel and trades shows. First up is NBAA Schedulers and Dispatchers followed by the Fuel Handling Training Symposium, MRO Americas and then off to Doha, Qatar for the IATA Ground Handling Conference.

Before you know it, it will be time for the International Airport GSE Expo.

This year, our show is going to be bigger than ever. More equipment, more services, more everything.

Make sure to register early for free using promo code GSW18. We have also opened our room block at the Rio in Las Vegas.

And don't forget about our GSE Leaders Golf Outing. If you are planning to attend, reach out to me about golfing or to become a sponsor. The golf outing is a great time to connect with other people in the industry while enjoying a round of golf.

I hope to see you on our many trips in the coming months. As always, thank you for reading.

Make sure to **register early** for free using promo code **GSW18**.

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GROUND SUPPORT EQUIPMENT

Pushing Forward

► Upcoming Events

March 6-8

Fuel Handling Training Symposium
Los Angeles, CA

March 13-15

IATA World Cargo Symposium
Dallas, TX

April 10-12

MRO Americas
Orlando, FL

April 14-18

International Aviation Snow Symposium
Buffalo, NY

April 15-18

AAAE Annual Conference and Expo
San Diego, CA

April 22-25

IATA Ground Handling Conference
Doha, Qatar

May 1-3

NBAA Maintenance Conference
Albuquerque, NM

May 7-9

Airport Show
Diecec, Dubai

INTERNATIONAL AIRPORT GSE EXPO

OCTOBER 2-4, 2018 AND OCTOBER 20-22, 2020

RIO ALL SUITES HOTEL AND CASINO LAS VEGAS, NEVADA

BUSINESS BUZZ

► TOP NEWS

A4A and CANAERO Join Efforts to Strengthen US-Mexico Air Transport



Airlines for America (A4A), the industry trade organization for the leading U.S. airlines, and Mexican counterpart association Camara Nacional de Aerotransportes (CANAERO), signed a Memorandum of Understanding (MoU) in December to join efforts to promote air travel and tourism, facilitate the movement of goods and strengthen the development of air transport between the two countries.

The associations' coordinated advocacy actions will seek to promote the adoption of international best practices on legislation and economic regulations, security, passenger rights and the environment, among other topics.

"The U.S.-Mexico transborder market is increasingly important, with the number of passengers carried daily between our two countries increasing more than 50 percent since 2010," A4A President and CEO, Nicholas E. Calio said. "We look forward to this bolstered partnership with CANAERO as we work toward our shared goal of air transport development and sustainable safety that matches this growing demand."

Oman Air Receives ISAGO Accreditation

 Oman Air SAOC has been awarded the IATA Safety Audit for Ground Operations (ISAGO) registration by the International Air Transport Association (IATA) at Muscat International Airport (MCT) and Salalah Airport (SLL).

ISAGO is an internationally-recognized audit program for ground-handling companies. Oman Air was awarded ISAGO registration following a comprehensive audit that was carried out by IATA-approved auditors from April 24 to May 1, 2017. During the audit, the headquarters and stations of Muscat International Airport and Salalah Airport were assessed on over 300 ground operations standards and recommended practices.

"We are very pleased to have been awarded the Safety Audit for Ground Operations registration by the International Air Transport Association and it is especially rewarding to know that we are the first company in Oman to have achieved this important accolade. We always strive to follow the best practice and this registration demonstrates that our committed ground handling team is achieving this across the board. I would like to take this opportunity to congratulate the team and thank them for their hard work," said Eng Abdulaziz Saud Al Raisi, acting CEO of Oman Air.

London Oxford Airport's FBO Achieves IS-BAH Stage II

London Oxford Airport has been formally awarded Stage II of the International Standard for Business Aircraft Handling (IS-BAH). This industry accreditation is the global standard for best business aviation safety practice. Oxford Aviation Services Limited, OASL with its OxfordJet branded FBO, is one of only a handful of FBO's in the world to have received the Stage II endorsement and only the second in the UK, after TAG Farnborough.

The FBO passed the highly stringent safety management audit in November following an external assessment by an IBAC-accredited (International Business Aviation Council) auditor. The Stage II achievement represents a higher standard of safety management system compliance and control than Stage I as well as a broader awareness of the safety systems amongst all of London Oxford Airport employees.

"We are very proud to have achieved Stage II IS-BAH accreditation. It's an important international endorsement for our FBO and its ground handling services which has been achieved by the sheer hard work and dedication of our great team. Importantly, it's an acknowledgement of the highest standard for managing risk and ensuring quality which will undoubtedly be valued by our operators and welcomed by our customers," said London Oxford Airport Managing Director Andi Alexander.

"I am delighted to congratulate the



team at Oxford Aviation Services Limited on this great achievement and thank them for their support and dedication to safety and customer service. We now have 100 FBO's worldwide who have achieved IS-BAH status and we continue to see more professional operations like London Oxford embracing the SMS culture that not only takes the organization beyond compliance but builds on our excellent safety record goal established by business aviation," added Terry Yeomans, IS-BAH program director.

IS-BAH incorporates the National Air Transportation Association (NATA) Safety 1st Ground Audit Program and follows the structure of the IS-BAO program. It is part of a joint initiative run by IBAC and NATA.

CIMC Makes World's First Unmanned Jet Boarding Bridge

China International Marine Containers (Group) Co. (CIMC) has developed an unmanned intelligent boarding bridge, which is set to go into large-scale operation in the Netherlands' Schiphol Airport by the end of 2019.

When the bridge comes into use, the operator need only install the program in the system and press the remote execution button, whereupon, the passenger boarding bridge automatically berths with aircraft doors, reducing the docking process to one minute from the current three minutes. The movable gangway also comes with a data management function which can intelligently analyze abnormalities to predict the failure of the jetway in advance and assist managers in maintaining and operating it.

CIMC and Schiphol signed the first order contract for the jet bridge in October.

NAS Afghanistan Renews ISAGO Certification for Kabul Operations

National Aviation Services (NAS) has renewed its IATA Safety Audit for Ground Operations (ISAGO) certification in Kabul. NAS Afghanistan passed the ISAGO audit with a perfect score for the second time.



"Our latest ISAGO certification in NAS Afghanistan demonstrates our continued focus on high levels of service quality, safety and security," Hassan El Houry, NAS CEO, said. "As we continue to grow our reach and expand our portfolio of products and services, we remain committed to strengthening our presence in and contribution to the countries that we operate in."

TIACA Strengthens Presence in Latin American Markets

TIACA has signed three Memoranda of Understanding (MoU) with key Latin American organizations and has appointed a sales agent to further grow its presence in the region.

The MoUs are with Buenos Aires, Argentina-based Americas Alliance (AA), Bogotá, Colombia-headquartered Federation of National Associations of Cargo Agents and International Logistical Operators of Latin America and the Caribbean (ALACAT), and Santiago, Chile-based logistics provider AGUNSA. AGUNSA has also been appointed as TIACA's sales agent for Latin America, to encourage companies in the region to attend and exhibit at TIACA's events and to grow membership.

"Latin America is an important growing region where up until now TIACA did not have that much exposure," said Sebastiaan Scholte, TIACA Chairman and Chief Executive Officer of Jan de Rijk Logistics.

ASD Avia Consulting Handles Successful IS-BAH Accreditation for Falcon Aviation

Falcon Aviation's FBO facility in Dubai, UAE, chose ASD Avia Consulting to handle their IS-BAH Standard (International Standard for Business Aircraft Handling) accreditation from the International Business Aviation Council (IBAC), and has

thus obtained the certification and are now IS-BAH accredited. The auditing of the FBO took place on November 2017 on their Dubai grounds.

"We are very proud that Falcon Aviation, a leading FBO in Dubai and a company that ensure its clients the highest standard of safety and providing a premium service through its FBO, has chosen ASD Avia Consulting to implement the IS-BAH Standards and to support the organization in improving the high standards in safety and quality," said ASD Avia Consulting managing director Amir Dadgar.

ASD Avia Consulting is an independent Audit company specialized in Part-145 Audits for Maintenance Organization, Audits for FBO and Operators.

Exports to Asia Boost Schiphol Cargo to Record 1.75 Million Tons in 2017

Schiphol Cargo reported an increase of 5.4 percent on yearly tonnage in 2017 with strong demand in the Far East for European goods boosting total figures to 1,752,498 tons.

Europe's third largest air cargo hub experienced an uptick in cargo throughput of 7.4 percent year-on-year between January and October 2017, with total figures for January to December 2017 reaching 1.75 million tons.

"We have continued to build on initiatives in 2016 and 2017 with the aim of enhancing the experience of our pharmaceutical, e-commerce, and perishables customers, and our continued commitment to quality is having positive results," said Jonas van Stekelenburg, Head of Cargo, Amsterdam Airport Schiphol. "The upswing in e-commerce shipments, both inbound and outbound, was a large contributor to the cargo volumes for this market."



BEUMER Receives Final Design Acceptance From TSA for Handling System at SFO

The U.S. Transportation Security Administration (TSA) has accepted BEUMER Corporation's final design of a CrisBag tote-based baggage handling system to be installed as part of the Terminal 1 Project at San Francisco International Airport (SFO). The SFO Terminal 1 project will be the first tote-based baggage handling system to go into operation at a U.S. airport.



"The TSA has stringent design and delivery specifications for airport baggage handling systems, and our team worked diligently to meet the planning guidelines and design standards," said BEUMER Senior Project Manager David Delaney. "The TSA is extremely supportive of deployment of the ICS (Individual Carrier System) and RFID (Radio Frequency Identification) technologies of the CrisBag system. The SFO design was accepted and allows our team to begin, which is a major accomplishment."

Presently, Terminal 1 at SFO has multiple baggage handling systems, each independently operated by separate carriers, which represents the legacy model of airlines owning, maintaining and operating their own baggage systems.

ULD Solution from ST Engineering and IAI Wins Aviation Challenge 2 Program

A team of ST Engineering and Israel Aerospace Industries (IAI) won the Aviation Challenge 2 Program (AC2) in Singapore.

IAI and ST Engineering presented the Civil Aviation Authority of Singapore (CAAS) with a comprehensive automated solution that improves build-up and breakdown of cargo Unit load Device (ULD)

pallets and containers, a labor-intensive process at Changi Air-freight Center.

The system will dramatically reduce the manpower and manual movements of heavy cargo around the terminal.

This is the second consecutive win for the ST Engineering and IAI team, following their August win of the Aviation Challenge 1 Program (AC1). Thirteen international and local teams/companies submitted proposals to the Aviation Challenge 2 (AC2). Two were selected for the final stage of building a full-scale "proof-of concept" demonstration system, with funding from CAAS.



► PEOPLE

Mark Whitehead Hands Over the Reins at Hactl

Mark Whitehead, Chief Executive of Hong Kong Air Cargo Terminals Limited (Hactl) will retire on March 7 after nearly eight years at the helm. Whitehead's place will be taken by Wilson Kwong.

Kwong is currently the Chief Executive of Jardine Engineering Corporation (JEC). He joined the Jardine Matheson Group in 1998, and has worked in Jardine Aviation Services, the Jardine Matheson Head Office, and Hongkong Land.

"I welcome Wilson to Hactl, and I am confident that Hactl will flourish under his proven leadership. He will be supported by our unique team, and I wish them all the best," said Whitehead, who led Hactl to become the largest freighter ramp handler in Hong Kong. "I look back with great satisfaction on what we achieved at Hactl and am clear that our extraordinary progress has only been possible through the drive, support and hard work of our workforce. I am proud to have led the team, and to have been part of such a strong 'can do' culture."



Bailey Welcomes Kilpatrick, Selden

Bailey Specialty Cranes & Aerials recently announced two new hires.

Craig Kilpatrick has joined the company as director of materials. He previously worked for Man Lift Mfg.

Co. as materials manager. Kilpatrick has 26 years of experience in the materials purchasing industry and has a bachelors degree in geology.

Charles Selden has been hired in technical sales. Selden was previously with Man Lift Mfg. Co., focusing on custom aerial work platforms. He started his career with Met-con Construction. He has a bachelors degree in marketing communications.



Thomas Joins Trojan Battery as President and CEO

Trojan Battery Co., LLC has announced the appointment of Neil Thomas as president and chief executive officer (CEO) for Trojan Battery, succeeding Jeff Elder. Elder, who has announced his retirement, will be available as a consultant to the company and will continue to be an investor in Trojan Battery.

"I am pleased that we have such an accomplished executive as Neil Thomas to succeed Jeff Elder upon his retirement as CEO, and to lead Trojan in our next chapter of growth," said Rick Godber, chairman of the board for Trojan Battery. "I look forward to working closely with Neil to achieve our overall strategic goals."

Thomas joins Trojan following a prestigious career with Wayne Fueling Systems where he most recently served as CEO, as well as in other executive management positions.

"This is an exciting time for Trojan Battery, particularly with the increased global demand for cost-effective and reliable energy storage solutions as many industries transition to new technologies to meet cus-

tomers needs,” Thomas said. “I look forward to leveraging my experience to work alongside the talented and experienced team at Trojan to expand the company’s existing business and to position Trojan for future global growth.”

Evans named Production Manager of TCS

Total Control Systems (TCS), a manufacturer of positive displacement flow meters, accessories and electronic registration, announced that Steve Evans has been named production manager. Evans has been a product manager and sales engineer for more than 15 years.

“TCS’s success is due to our customer and quality focus,” said director of sales and marketing Shawn Kiefer. “Steve’s understanding of our customers’ needs combined with his deep technical and systems knowledge make him the ideal fit.”

“During my time with TCS, I’ve enjoyed helping our distributors and OEMs best meet the needs of their customers,” said Evans. “I’m excited that this new role will enable me to insert that knowledge into the way we manage our meter production.”

Diana Einterz Appointed to Lead SITA Team in the Americas

SITA, a global provider of IT and communications to the air transport industry, has announced the appointment of Diana



Einterz as SITA President, Americas. She will be responsible for developing and driving the strategic direction for SITA in the region,

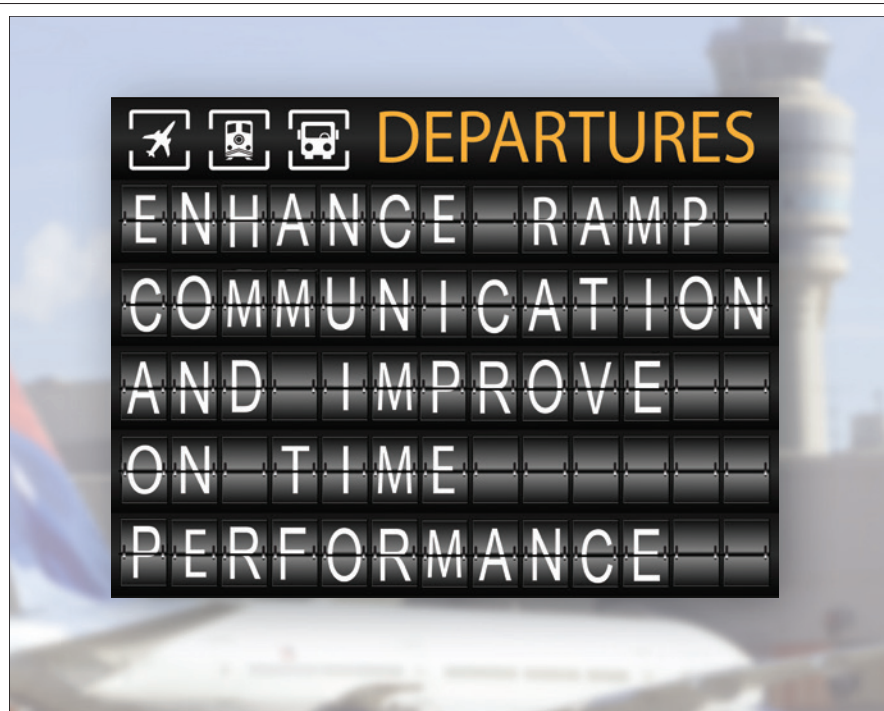
leading SITA’s team that manages the delivery of solutions to airlines, airports and governments across the Americas.

Einterz comes to SITA from Orange Business Services (OBS), a key SITA partner, where she was Executive Vice President of the French Major Clients Division.

“Technology is transforming the air transport industry and SITA is partnering with airlines, airports and governments

across the Americas during this transformation. Diana’s depth of experience delivering technology and network solutions to support businesses as they evolve and meet competitive challenges will be instrumental in this role. She will lead our team in the

Americas as we continue to drive greater efficiencies and create a more seamless passenger experience for our customers throughout the region,” said Barbara Dalibard, SITA, CEO.



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Lamberty Joins Solares

Solares Florida is pleased to welcome Luis Lamberty to its sales team. Lamberty is an accomplished sales professional with 30 years experience, primarily in the aviation fueling market.

He is a US Navy veteran with a number of citations, including National Defense Service medal and the Kuwait Liberation Service medal. Lamberty is based in Miami, Fla., and will be supporting the company's aviation clients as well as its terminal clients throughout Florida, Caribbean, and Central America.

Solares has been a hose assembler and systems integrator for close to 100 years. Solares is ISO 9001 certified, as well as a Hose Safety Institute and NAHAD supplier member.

► NEW DEALS

WFS Signs 15-Year Lease on JFK Cargo Terminal

Worldwide Flight Services (WFS) has demonstrated its confidence in the New York air cargo market by signing a 15-year lease on a new 346,000 square foot cargo terminal, the first phase of the Port Authority of New York and New Jersey's comprehensive Vision Plan to enhance the international reputation of John F. Kennedy International Airport.

WFS is already one of the largest handlers at JFK, handling more than 650,000 tons of cargo a year for nearly 70 airlines at its nine facilities at the airport.

"We have been working on this project for some time and it is a proud day for WFS and for JFK to see the commitment Governor Cuomo, the Port Authority of New York and New Jersey, and AeroTerm are making to this wonderful airport and this magnificent new cargo facility," Michael A. Duffy, WFS' Americas Chief Executive Officer, said. "As a major supporter of the New York cargo community, WFS is delighted to witness the



ambition for JFK's cargo future, which will reinforce its position as one of the world's leading freight airports and gateways."

The Aero JFK II facility will be built on a 26-acre site following the demolition of two 40-year-old and vacant cargo buildings at the airport. It will also provide ramp space for three wide-body aircraft.

Menzies Secures Contracts in Oceania Region

Menzies Aviation announced new business wins and contract renewals in the Oceania region in the last quarter of 2017.

Included in the new contract wins are: Cathay Pacific in Adelaide, Perth and Christchurch, Samoa Airways in Auckland and Sydney, Corporate Air in Sydney, Air Canada in Melbourne, Air China in Brisbane as well as Vietnam Airlines Cargo in Sydney and Melbourne. Contract renewals, meanwhile, included: Korean Air in Brisbane, British Airways Cargo in Sydney, AirAsia X Cargo in the Gold Coast, Royal Brunei Airlines in Melbourne, China Eastern Airlines in Auckland, Air North in Darwin as well as Fiji Airways in Sydney, Melbourne and Brisbane.

"We have had tremendous success of late with airlines having increased confidence in the high level of service that Menzies Aviation can provide. The professionalism and appearance of our well trained staff make it much easier to enter negotiations with potential customer airlines. A big thanks to my team for their hard work and dedication," said Stuart Key, Vice President Commercial - Oceania & SE Asia.

Panalpina to Acquire Adelantex and AD Handling

Panalpina will acquire the Belgian companies Adelantex NV and AD Handling NV, subject to conditions. The companies reached a respective agreement on Dec. 18, 2017. With a presence in Brussels and Liège, Adelantex handles approximately 75,000 tons of air freight imports per year, and manages ground handling at

Brussels Airport, customs clearance and the onward distribution in Europe.

"This latest acquisition in the perishables arena is another example of how we are building our end-to-end capabilities on the destination side in Europe. Adelantex' ground handling operations in Brussels are best in class and will serve as a blueprint for similar operations in other countries," explained Stefan Karlen, CEO of Panalpina.

The companies have agreed not to disclose any financial details of the deal.

Lanmei Airlines Becomes the Latest Addition to AAT

Effective from Dec. 20, 2017, Lanmei Airlines has been the latest Cambodia-based carrier to operate direct air services to Hong Kong. In particular, the carrier is the first airline to launch a new air link between Sihanoukville in Cambodia and Hong Kong. Asia Airfreight Terminal is pleased to be appointed by Lanmei Airlines as its cargo terminal operator in Hong Kong.

Lanmei Airlines was established in 2016, and has expanded its international network to Vietnam, Macau and Palau. It now launches three direct passenger flights per week to Hong Kong using A321 aircraft.



"It is with great pleasure that we welcome Lanmei Airlines to the AAT family. There is great potential for cooperation between Cambodia and Hong Kong to grow tourism and trade, and AAT is keen to work closely with Lanmei Airlines to further develop its business in Hong Kong," said Kuah Boon Kiam, General Manager of AAT.

Alpha Flight Services to be Rebranded dnata catering

dnata commenced the rebrand of its Australia flight catering business, Alpha Flight Services, to dnata catering. Alpha's 11-unit operation in Australia employs more than 1,700 people, and provides onboard meals and retail services to 39 airline customers.

"The Alpha Flight Group was acquired



by us in 2010 and Alpha in Australia is the last location outside the UAE and the UK to be rebranded to dnata,” said Robin Padgett, Divisional Senior Vice President, Catering. “Bringing our global brands under the dnata name allows us to better leverage the strengths and synergies that come with being a group. We can capitalize on the reputation we’ve built up elsewhere, as dnata, to grow in new markets and to better engage our employees, customers and others in the dnata way.”

The project, which will last three to six months, includes uniforms, vehicles, buildings and documentation. Roles, positions and employment contracts are not impacted.

Leading Edge Aviation Acquires Professional Air

Leading Edge Aviation has acquired Professional Air, parent company of Pro Air Services, Inc. and The Flight Shop, Inc., operating out of Bend Municipal Airport (KBND). The purchase includes the FBO, maintenance, avionics and flight school divisions of Professional Air.



Leading Edge Aviation is now the sole fuel provider for both Bend Municipal Airport (KBND) and Roberts Field Airport (RDM), following their recent

acquisition of Butler Aircraft Services in September of 2017.

“We are thrilled to announce this acquisition which will continue to drive growth in Central Oregon’s aviation industry. First and foremost, we have a tremendous opportunity to continue to serve our customers well with our expanded facilities and our growing team. This has always been our primary concern and we are excited to place the bar even higher,” stated Brad Fraley, President of Leading Edge Aviation.

The acquisition has substantially grown Leading Edge Aviation’s operations, incorporating 26 staff members and inheriting approximately 32 students from Professional Air’s fixed wing flight school, a partner of Central Oregon Community College.



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Taiwan Airport Selects Vanderlande for Baggage Handling Contract

The Taoyuan International Airport Corporation (TIAC) has awarded Vanderlande a contract to supply a baggage handling system (BHS) at its new terminal. TIAC is constructing Terminal 3 (T3) at Taiwan Taoyuan International Airport (TTIA). This will boost capacity and enhance the overall quality of service.

For this project, Vanderlande has formed a consortium with its local partner Kenmec. Upon completion, the BHS will provide a maximum capacity of 19,200 bags per hour.

Vanderlande's solution in T3 will comprise 206 check-in counters distributed over six islands. Baggage will be transferred from the check-in area via the transport

conveyors connected to four tilt tray sorters located at the main baggage hall. Bags will then pass through security screening before transfer to either the designated make-up carousels, EBS (early bag store) area, or other terminals via TUBTRAX.

"We were delighted to be awarded the TTIA T3 project," said Vanderlande's Executive Vice President Airports and Board member Andrew Manship. "This project will be an important step in developing Vanderlande's ICS capabilities in the Asia Pacific region, and we look forward to delivering this project successfully."

EVA Air Returns to Hactl

EVA Air has appointed Hong Kong Air Cargo Terminals Limited (Hactl) as its handling agent, with effect from Jan. 5, 2018. Hactl will provide all cargo handling services for the airline's operations from



Hong Kong, which include more than 60 passenger and eight wide-body freighter flights per week.

"It is a pleasure to return to Hactl, extending our long-term and highly-successful previous collaboration. We particularly look forward to using the Hactl road feeder services system to maximize our capacity utilization," said EVA Air's General Manager, Hong Kong, Peter Chang.

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Sovam Changes Hands, Eyes Market Growth

With new leadership in place, the France-based GSE manufacturer is hopeful its product line and rental options will allow the company to build its reputation worldwide.

By Josh Smith

Under new ownership, officials at Sovam Airport Equipment are looking to increase the company's exposure in the ground support arena, and the French GSE manufacturer began that process with a successful exhibition at inter airport Europe 2017 this past October in Munich, Germany.

Tim Rane, the company's new president and CEO, purchased Sovam in July, 2017. With Sovam having difficulties providing enough working capital to support operations, the company went into administration and Rane was asked to help find a buyer for the manufacturer. However, he soon realized Sovam would be a good way to enhance his GSE rental company, airGSE. So less than two months later he purchased Sovam.

"In six weeks, we assembled a team, did the due diligence and made the acquisition," recalls Rane, who has more than 25 years of experience in the GSE market.

Following the purchase, Rane says the team put a 100-day business plan

in place to ensure there were no mistakes made during the due diligence portion of the process. He said it was important to evaluate the stock, get manufacturing operations running smoothly and prepare to exhibit at inter airport Europe.

They also visited major customers to introduce the key people appointed to the corporate management team, manufacturing group and sales force.

Sovam offers a large range of GSE, including pushbacks, tractors, water and lav trucks, passenger stairs, catering trucks, belt loaders and cargo loaders, among others.

The company also provides a line of GSE parts to support its products in addition to a range of military vehicles. What's more, following the recent acquisition, Sovam's equip-

ment can now be rented through airGSE.

Sovam received positive feedback from its customers at inter airport Europe, according to Rane.

"It went way better than I anticipated it would do," he says. "People knew about Sovam getting into financial trouble, but they didn't realize that we would be able to come back in such a way and have a really good exhibition."

The company displayed three new pieces of equipment during the trade show, including the K32 Kinetic cargo tractor as well as a pushback tractor suited for handling a Boeing 737 and a dual platform, 3.5-ton container loader.

Following the show, Rane is optimistic about the direction the company is moving. He notes Sovam has 10,000 pieces of GSE in the field, primarily serving French-speaking markets. However, he says the company lacks a "famous" name in many parts of the world.

"It's a challenge to do what we're doing, but we're really excited about the prospect," Rane says. "Sovam has got a long history and it's an important thing for us to keep them going." **GSW**



Photos courtesy of Sovam



Knowledge \neq Power

By Dr. Benjamin Goodheart

Knowledge is power. It's what we were told growing up – that we needed to gather knowledge in order to succeed. The trouble with that advice today is that we're surrounded by knowledge. The computing power in our pockets is pretty incredible, and knowledge is so easy to come by that it can be difficult to know where to begin.

From the safety perspective, we often talk about the importance of data, and it's worth pointing out the difference here between data and knowledge. More importantly, making a distinction between knowledge and intelligence is crucial. In the image, it's easy to see that data, information and knowledge *aren't* power. They are simply building blocks to gain insight and wisdom – intelligence, you might say – that gives us something to *act on*.

So often in the world of ground service, we

tell ourselves that when things aren't going wrong, they must be going right. Logically, that just doesn't hold up. Not being bankrupt doesn't mean we're flourishing any more than not having a stroke means I'm the picture of health.

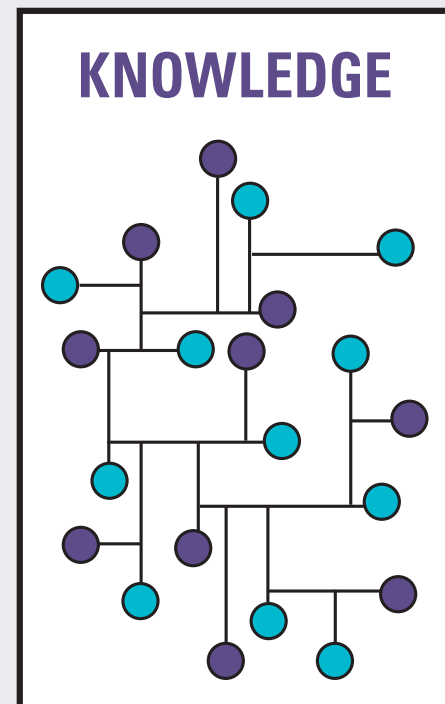
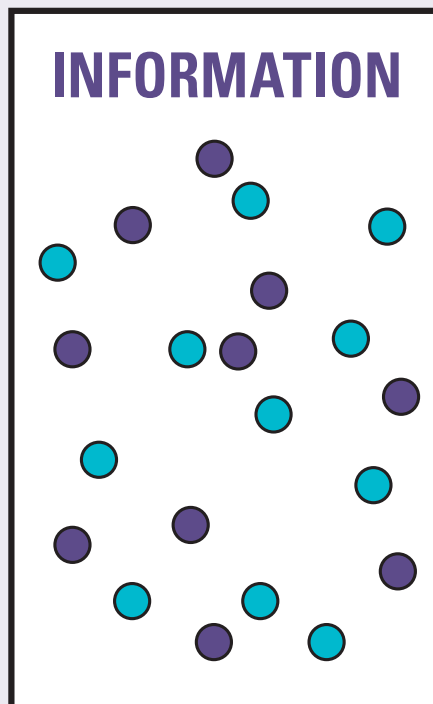
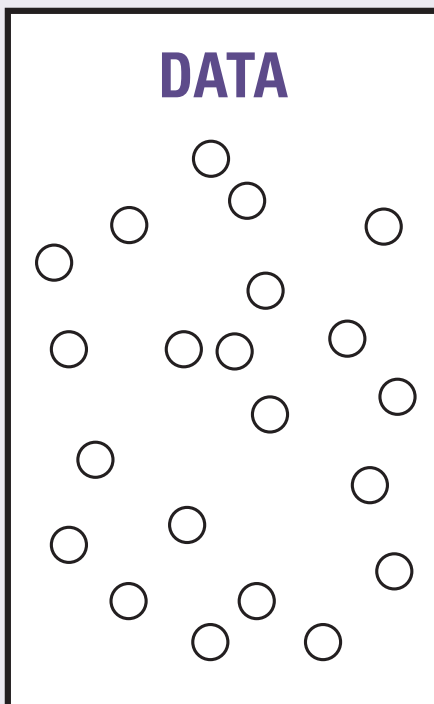
Data can help form a foundation for knowing not just that things *are* in fact going well, but it can help understand *why*. That last bit is critical.

W. Edwards Deming famously said, "If you can't describe what you are doing as a process, you don't know what you are doing."

Not surprisingly, Deming also said, "In God we trust, all others bring data."

Data can help us unravel the things we do that make us successful every day. That's a much different approach than simply hoping to avoid mistakes, and working to identify enablers of safety performance is something that takes practice.

If we agree that safety is broadly defined as our



ability to succeed despite uncertainty, and that safety management is really just a set of tools to support decision-making that helps to realize that success, then the need for data-based intelligence is clear. To move beyond simply reacting to failure, we have to seek wisdom within our daily operations.

Reactive tools aren't bad, but it is important to remember that they can only describe something that's already happened. To move beyond that – to inferential methods – we have to look at data a bit differently.

Accidents, injuries, incidents, and spills are all lagging indicators. That is, they describe a past event, and generally a negative one. While there may be something to be gained by understanding how a failure happened, it's hard to support decisions – and to identify what enables performance – by simply looking behind us.

Instead, lagging indicators work best when they are balanced with *leading indicators*. Leading indicators speak to those beliefs and behaviors in our business that help us succeed, build resilience, and understand risk.

Where lagging indicators are often quantitative (generally numeric) measures like incident rate, lost workdays, gallons lost to spills, etc., leading indicators often take on

Data can help us
unravel the things
we do that make us
successful every day.

qualitative characteristics. Qualitative data is interesting because its context is built in via narratives, observational information, stories, and so on. Neither is better than the other, but balance is crucial.

Unless we can support decision-making (wisdom and intelligence do this), collecting data is just an uninteresting hobby. Statistics are the key that unlocks data's power to inform, and though you may have heard that statistics can be manipulated to say anything, rest assured that like any tool, they have a purpose. I can hook up a tow head improperly, drive too fast in a refueler or even select the wrong settings on a GPU – and yet we don't discount the tool.

Used properly, and with healthy doses of skepticism and humility, statistical analysis can help us to uncover trends, themes and patterns that aren't visible by simply

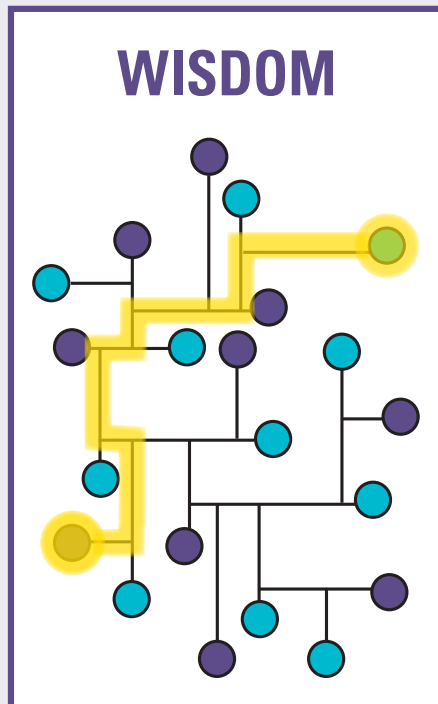
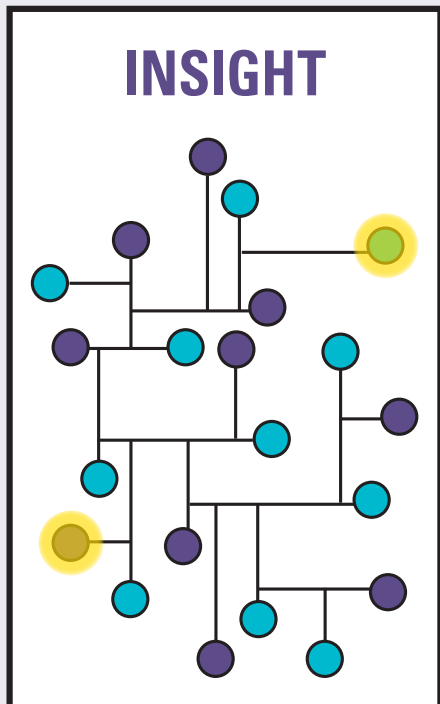
looking at the data from a system. That ability moves us to the realm of inferential statistics, where we can shift our thinking from reactive methods to more proactive and predictive decision-making.

Balancing lagging and quantitative data like gallons sold, aircraft movements, employee turnover and accident or injury rate with leading, qualitative information like responses to climate surveys, training feedback, observational data, interview notes and comments from audits can help provide a balanced perspective on what we're doing well, and what can be improved.

Having trouble gathering enough data on your own? Join forces with other operators to aggregate the data you collect so that tools that rely on larger data sets, like regression analysis, are possible. Plenty of government agencies and trade groups also publish data sets you might use to supplement your own experience.

Operating successfully despite the dynamic aviation environment requires that we deeply understand risk, safety and resilience. Getting there means digging into our operations purposefully, and analyzing data in search of intelligent answers to questions that have a meaningful impact on our performance.

The advantage? Not only can data enable better-informed decisions about safety, it can support more efficient operations. In industries like aviation ground services, where competition is high, and margins are not, being more efficient – and supporting safer, more resilient operations – may just equal survival. **GSW**



Somerville, 2014



▶ ABOUT THE
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Dr. Benjamin Goodheart is the Managing Director of Versant, a global safety and risk management firm based in Colorado. He has extensive experience in aviation safety management, planning, and accident investigation. He is an ATP-rated pilot and flight instructor, and he holds a Ph.D. with a research focus on aviation safety and organizational performance. To learn more about how Versant can help manage risk, visit www.versantrisk.com.



WHEELS

ON THE



Next generation forced air deicing technology allows ground handlers to improve efficiency and reduce glycol waste, which offers environmental and financial benefits.

By Josh Smith

GLOBAL

To the delight of pilots, passengers and others in the aviation industry, deicing technology has progressed significantly since the early days of knocking accumulation off the wings with brooms.

Along with improved techniques, fluids and equipment, the method of forced air deicing has continued to evolve.

Lee Williams – president at Avia Enviro, has been on the forefront of forced air technology, working with others in the industry to improve this deicing process. As a result, third generation technology is now patent-pending and taking the final steps towards production.

“This is the beginning of a more powerful, more adaptable system,” Williams says.

Forced Air Advancements

Williams began working on forced air deicing technology in 1983 while employed at FMC (now JBT), and continued his work later at Trump and eventually at his own company, Avia Enviro.

When the EPA came out with a hazardous material ruling on deicing fluid (diethylene glycol) in the late 1980s, Williams

felt there was an opportunity to address the issue by reducing its usage.

“I had some contacts and had seen, in my travels, some systems that the Air Force had built,” Williams says, recalling the first generation of forced air deicing as simply a hot air blast. “We could see the potential in this. Even back then, in its infancy, I could see the potential.”

Rudy Yates, president of Ground Support Specialists, was working for FedEx at the time, and also saw potential in the emerging technology.

Williams and Yates collaborated on a prototype for second generation forced air technology that incorporated fluid injection.

Williams also partnered with Dr. Keith Numbers, a senior aerospace engineer for the Aeronautical Science Division of the Air Force Research Laboratory, to make improvements to the second generation equipment.

Throughout the duration of a nine-year research agreement, Numbers and Williams made notable upgrades to the nozzle and the compressed air source. Global Ground Support, among other GSE companies acquired the rights from Williams to use the nozzle and began manufacturing improved forced air deicing units.

“We kept coming up with more efficient and better ways to build the forced air unit with smaller components,” Yates recalls, noting there were several rounds of testing with Numbers’ nozzle design.

The second generation technology was designed to be a proactive approach to deicing, but Williams observed it being used in a reactive manner in the field.

At that time, ground handlers in Europe were putting thickened fluid on the wing, Williams says. Then, after snow fell on the wing, pilots would use a take-off roll down the runway. At 80 knots the fluid would shear and the ice would blow off the wing prior to take-off.

“The FAA prohibits you from beginning a take-off roll with anything on the wing,” Williams notes. “So we knew that the European methodology wouldn’t be allowed here.

“So we figured that we would develop a machine – and we got specifications for all the thickened fluids to see what it took to shear those, as far as wind speed and air and so forth, and we developed the machine that’s out there now to shear that fluid,” Williams continues. “The specification was set by Dr. Numbers and me because that’s what it takes to shear Type 2 fluid off the wing the same as running down the runway.”

Although the second generation technology was designed to remove snow after using thickened fluid, many users operated the forced air deicers similarly to traditional deicers. Williams and Numbers took note of this and adapted the latest technology, accordingly.

“The design that he and I now have is the actual design to be used for the way they’re using it,” says Williams, adding the third generation unit is designed to blow coverage off the wing, when it’s actually adhered to it. “We misjudged how the industry was going to be using thickened fluid.”



All photos courtesy of Global Ground Support

Technological Improvements

According to Williams, the third generation forced air deicing technology offers significant enhancements.

While the second generation system had an upgraded nozzle and air source, both were fixed. The new system, however, features an adjustable nozzle and air source.

This feature provides better “knock-off” power and usability in different weather conditions.

“We have these operators out there, at the end of these booms, trying to deice these aircraft in all kinds of different weather conditions,” Williams says. “The weather is never the same twice, they say. Yet, we send these guys out there with very few tools to do the job.”

What’s more, the fluid injection capabilities are also adjustable.

“If we want to penetrate ice that’s frozen on the wing, we can put fluid injection into a supersonic beam and shoot right through the ice,” Williams explains. “When the fluid hits the wing down below, it spreads out underneath the ice.”

These adjustments are made by the operator, similar to how the second generation technology works.

For example, an operator may address the aircraft, and observe what looks like dry snow. The operator could attempt to remove the snow with forced air and no fluid. If there is little movement, the operator can increase the air velocity. And if the snow is much heavier than expected, the operator can, in turn, add thin or thickened fluid to the air stream.

“What this allows the operator to do is to feather in the air and fluid only to what’s needed. Instead of seeing a hoarfrost on the

airplane and spraying 65 gallons a minute on it, which is way overkill,” Williams explains. “This system will allow the operator to address the aircraft with the minimum fluid necessary to get the job done.”

Williams notes the latest generation technology can treat composite materials as well. Forced air replaces the need to spray hot fluids onto cold wings during a quick turnaround, which can cause structural issues for composites.

Forced Air Benefits

According to Williams, reach and effectiveness are the two issues that have kept forced air deicing technology from being more popular.

“We identified that and have addressed both,” Williams says. “The distance that you can shoot air through air is relative to the diameter of the air stream that you



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begin with. If you start with a bigger diameter, it takes longer for the still air to peel away all the moving air. That's how you can control reach.

"Even with fluid injected, air doesn't have

the same mechanical power as a liquid," he adds. "Effectiveness has been considerably improved because we have a larger diameter."

With a smaller amount of fluid needed

to deice aircraft, forced air deicing offers several benefits.

"Before forced air, all we had was heated fluid," Williams recalls. "It got to the point where we were spraying mass quantities of this heated fluid."

That prompted EPA's hazardous material ruling.

"Instead of spraying between 40 and 60 gallons a minute to clean an aircraft, you can spray a reduced amount – especially with forced air – of 7 to 11 gallons per minute, and you're still cleaning the aircraft," Yates, of GSS, explains.

"A forced air deicer is an expensive option. To recover the expense, you have to use it to reduce your fluid usage – which in turn, doesn't take long to pay for forced air deicing."

Yates says few drawbacks have been realized while testing the forced air deicing technology, mainly because several experienced people had a hand in its creation.

"The evolution process on that kind of eliminated the problem because they had



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done their homework," he says. "The air simply cleans, and with fluid injection it cleans better."

Yates points to reduced glycol use as an immediate benefit, given the cost of the fluid. Plus, less waste is better for a ground handling operation's bottom line.

"To me, it makes very good sense," Yates says. "One of the biggest issues I've seen throughout the years is getting the operators to believe in it, rely on it and trust it."

Williams agrees, adding some have been hesitant to adopt forced air because they are familiar with traditional fluid methods and don't feel compelled to change.

Training programs for forced air can help overcome that issue, Yates says. However, a station needs to perform regular deicing for a change to make sense.

"The stations that deice three, four or five times a year, it's hard to justify the cost of a forced air deicer. But the ones that deice three, four or five times a week, they can certainly justify it," Yates notes, adding commercial operations with large aircraft

and heavy traffic volumes stand to benefit the most.

Both Williams and Yates view forced air deicing technology as another tool that can help ground handlers perform their job.

"Air is the free and clean medium that

will transport the appropriate fluid to the aircraft," Williams says.

"It's a good technology," Yates agrees. "It works. It's proven." **GSW**



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Mexico's Ground Handlers Plan for EXPANSION

As a response to rapid growth, ground service providers are investing in equipment and upgrading their fleets.

By Mario Pierobon

Like the rest of the aviation industry, aircraft ground handling in Mexico is experiencing significant growth. This is posing a challenge to the industry in terms of handling infrastructure saturation.

In order to respond to this growth challenge, ground service providers (GSPs) are responding by investing in equipment and upgrading fleets to keep up with the expansion pattern.

Expanding Industry

Mexico City International Airport (MMMX) is the most representative airport in terms of traffic, growth and development. MMMX in 1980 had 51 registered vehicles for ground services, whereas in 2016 it had 1,687 vehicles (including authority vehicles).

Moreover, since 2006, new low cost airlines have

been offering services, and the result has been an increase in passenger throughput requiring new ground services providers. While in 2003, there were approximately 12 ground services providers, over the years new companies have been created and some have specialized in different services – such as security, catering, cargo, ground handling, passenger services, etc. – and now MMMX has 82 registered companies operating at the airport.

“There is now a big concern by the airport authorities regarding the quality of delivered services. There are more options for the airlines, which are now joining forces to demand quality assurance programs like ISAGO (IATA Safety Audit for Ground Operations) and SMS (Safety Management System) implementation. This is also supported by Mexican CAA regulations. Many companies are also working with best practices published by IATA,

ICAO, ACI, etc., as well as sharing incident information and lessons learned,” says Jorge Alva, Regional Director, Latin America and Caribbean at Universal Aviation.

“Low cost airlines are increasingly expecting faster turnaround times and lower costs. This requires better staff and equipment planning,” he adds. “Airports now have more strict requirements in terms of training, maintenance programs, audits and supervision during operations as well as applying fines as necessary when in violation. Staff rewarding and recognition programs are also important to maintain team safety commitment and morale.”

Constrained Infrastructure

Mexican airline Interjet has been coping with the growth of the airline business in Mexico by establishing operational procedures that comply with international standards such as using the IATA Ground Operations Manual (IGOM) as a baseline in all procedures.

“The implementation of new technologies during the accomplishment of ground operations represents today a great window of opportunity for our airline, as it can make operations more efficient and accurate. However, the saturation of the airport infrastructure represents the biggest challenge to our operations,” say officials at Interjet.

“Certainly, the aviation industry in Mexico shows growth due to the new low cost or semi-low cost carriers which bring the opportunity to the Mexican people to have access to air transportation. Moreover, new carriers entered in the last years and some others are looking into the option to increasing their activity and fleet. From our perspective, besides business opportunities, this progress also generates huge challenges in Mexico, since there are only a couple of companies with the structure and capabilities to grow at the same proportion that is required to match the increase in traffic and comply with the industry requirements,” says Diego Ramirez, Head of Mexico and Central America Cluster at Swissport.

“Therefore, we have to be very attentive when it comes to organizational structure, infrastructure, investment strategies, etc. All this should be oriented in strict harmony with the carriers, governmental bodies and other third parties. In this way, we can ensure high

quality levels and be an integral part of the industry developments, based on a very strong and sustainable model.”

Ramirez notes that the most obvious example of infrastructure saturation is MMMX.

“This is quite a complex airport from an operational and infrastructure point of view. In order to counteract these challenging external factors, we have equipped ourselves with more than 60 percent new GSE and aligned the strategy to a systematic renewal of our fleet within the next two years,” he says. “This way, we can deliver high quality services and approved operational safety standards (Swissport Formula) to our customers and the airport. For 2018, we are directing our efforts towards our new growth plan, including several investments in our human capital and infrastructure. All these improvements will help us to be an active part of the current growth in Mexico.”

Technological Upgrades

Ground support equipment (GSE) fleet upgrades are indeed key to ensure that the industry best handles the challenges related to growth.

“Big and well established companies are investing in new technology, especially for towing,” says Universal Aviation’s Alva.

“New GSE plays a relevant role in aviation on-time performance and in passenger experience and airlines costs. Aeromexico Servicios, the largest GSP in Mexico, has invested \$15.5 million (USD) in the last four years to renew GSE equipment. The ground handling industry has focussed on new GSE technologies, especially on the development of electric vehicles. However, because of infrastructure constraints at Mexican airports – such as the lack of areas for charging electric GSE, not many companies have invested in this kind of technology,” say officials at Aeromexico Servicios, the airline’s ground handling subsidiary.

In order to operate in an environmentally friendly manner Interjet also opted for electric vehicles.

“This type of vehicle has several design improvements to increase reliability and performance, and it is designed for towing baggage, freight mail, carts/cargo dollies and pallet dollies. The unit features a proven

design, rugged front and rear axles, and the latest in AC controller technology. The standard unit used by Interjet is capable of a top running speed of 18 mph (29 Km/h) when empty, and has a drawbar pull of 4,000 lbs. (1814 Kg),” say Interjet officials. “Power for the main drive is supplied by a high-efficiency low maintenance AC motor that is directly coupled to the rear axle. Power steering is provided with a hydraulic accumulator, which provides quieter and smoother operation.”



“The new equipment accomplishes basically the same thing as older equipment, but the new technologies makes aviation a better and safer place to work. This is, of course, a direct benefit to the employees who keep the business running every day. And, of course, also to our airline customers,” Swissport’s Ramirez agrees. “We can now increasingly see offloading conveyor belts, which go into the compartment, making the offloading process easier to the employees and saving precious time. There is equipment with proximity sensors which avoid damages to the airplanes. There are new pushback tractors, which allow us to speed up the towing process. We now have access to ground power units with a combination of air conditioning units, which save fuel and are less harmful to the environment. In the past, we needed two separate units.”

Hot Temperatures

While there are normally nice weather conditions in most parts of the country, the stations in the north of Mexico suffer occasionally from extreme weather conditions.

“For those cases, we are well prepared. Next to approved operational procedures, we also have all the necessary safety measures in place to protect our valued employees – such

as specific personal protective equipment (PPE), the GSE and the infrastructure,” says Swissport’s Ramirez. “Furthermore, we have to deal with high temperatures in some areas or very salty environments as a result of the closeness to the sea. In those cases, the key is to have solid preventive maintenance to all our GSE and provide our staff with adequate uniforms in order to make their lives easier as much as possible. Also, at these locations, the hurricane season is always a threat, so different emergency plans are previously prepared and tested.”

A Positive Outlook

The outlook of the aircraft ground handling industry in Mexico remains one of positive growth.

“The International Monetary Fund (IMF) forecasts that the growth of the Mexican economy from 2018 to 2020 will be higher than

3 percent a year. This, of course, means good news for the aerospace industry as a whole, and therefore also for the ground handling industry. According to the Treasury and Economy Ministry, from a short and medium term perspective, it can be said that the aerospace industry has an immense opportunity to consolidate as a strategic sector with great potential to have pull effects on other sectors and the economy itself,” says Ramirez of Swissport. “According to short-term forecasts, the aerospace industry will grow much faster than the national economy.”

It is noteworthy that the new international airport for Mexico City will open in 2020 and

replace MMMX.

“With the implementation of the new airport, expectations for 2020 are high because of the growth opportunities that airlines will have and the potential for implementing new technologies,” say Aeromexico Servicios officials.

“There are big opportunities for growth in both passengers and cargo, especially with the new Mexico City airport under construction,” adds Universal Aviation’s Alva. “There is also important growth in regional traffic demanding new service providers. The challenge is to get good quality and pricing at regional airports where the traffic is not so intense.” **GSW**



▶ ABOUT THE AUTHOR:

Mario Pierobon is a safety management consultant and content producer. He currently is working on a research project investigating aircraft ground handling safety. You may reach him at marioprnb@gmail.com.

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Not All Bids Are Created Equal

By Josh Smith

There are numerous ways for ground handlers to make their bids stand out among others in order to win new business.

Securing bids for ground handling operations is a competitive venture. With numerous factors shaping what a station is looking for in a ground handler, it is vital for a company's bid to stand out among others in order to win new business.

"As an applicant or a bidder, don't just send a generic bid in," says Stuart Matheson, Director at ASG, while discussing the topic of winning bids at the IATA Ground Handling Conference in Bangkok, Thailand. "The RFP (request for proposal) is designed for a specific set of circumstances and market conditions. Customers want to know you can fit their needs. It's what they want. It's what they expect of you.

"If you make an application, actually read the RFP."

An obvious detail in any bid is price. While submitting a bid with a competitive rate is essential, being a trustworthy, respected organization is more crucial.

Therefore, Matheson says safety must be the No. 1 priority.

Maintaining levels of service and providing longevity are more important than slashing

prices, he explains. If low prices are unsustainable, it ultimately costs more money long-term for all parties involved.

"It's not good for the ground handling industry. It's certainly not good for the airline customers, and it's not good for the reputation of the airport," Matheson says.

New Opportunities

Having a grasp on emerging market trends and new technology can be a great way to secure new bids. Paying attention to company mergers, carrier tendencies, opportunities in new geographical locations and improvements to ground support equipment can allow companies to shape their bids in an attractive manner.

Among these key opportunities, Matheson points to automation, which can improve safety for ground handling agents and provide reassurance to airlines.

"People are the most expensive commodity. It's important, from a ground handling perspective, to learn about how we can automate as much as possible," he says.

"Eighty-four percent of all aircraft damage happens to an aircraft when it's in custody of

"Be aware of what's going on, what the market trends are. Be aware of some of the IT changes. Know what you want – not just for now, but in the future."

*Stuart Matheson,
Director at ASG*

a ground handler, across the world. Therefore, anything we can do to improve that is a must," Matheson continues. "We have to look at better design, better automation."

There are also opportunities with legacy carriers. Some airlines that had previously self-handled are now outsourcing that work to third-party ground handlers, creating more work for interested bidders.

What's more, an increase in passengers



with reduced mobility (PRMs) presents openings for ground handlers to expand their business.

“In Europe, they’ve seen a 27 percent year-on-year increase in passengers with restricted mobility. That’s a good thing because what that’s saying is – most airports claim a 6 to 8 percent annual growth. That means half of that growth is going to come from PRM passengers – whether they be elderly, disabled or whatever else,” Matheson explains.

“It’s something, as ground handlers and airports, we need to think about,” he adds. “Certainly, the ground handlers are looking at that as a means of ... more ancillary revenue; but by the same token, also looking at ways they can improve the accessibility.”

With this in mind, a ground handler that is able to demonstrate its investment into ground service equipment, like ramps and ambulifts, can set themselves apart from others.

RFP Management

Matheson stresses the importance of fully understanding an RFP because once a license is granted, a ground handler must deliver what is promised.

Likewise, from an airline’s perspective, it is imperative to partner with a reliable ground handler because passengers expect the airline to deliver a positive experience – whether working with a third-party or not.

“Increasingly, what we are doing is, from an RFP perspective, we’re making the RFP a vehicle for the contract – certainly, from an airport perspective,” Matheson says. “It now becomes ‘this is what you signed up for.’”

“We design RFPs that are in line with the IATA Ground Handling Agreement (IGHA). Or in the case of more regulated markets, they reflect local regulation.”

Anticipate Changes

Matheson points out that aviation handling is changing rapidly. As the market moves quickly, ground handlers, airlines and airports must act quickly as well to avoid falling behind their competition.

He encourages all involved parties to be “future proof.”

“Be aware of what’s going on, what the market trends are. Be aware of some of the IT changes,” Matheson says. “Know what you want – not just for now, but in the future.”

It is also critical for ground handlers to do their due diligence before making a bid, fully understanding what capital will be needed to acquire the equipment necessary to fulfill an obligation.

Airlines are pushing ground handlers for a lower price. But it is important to avoid offering a low price and then not be able to deliver on what is promised. **GSW**

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Increased Traffic is Helping Spur Growth in Munich

Munich Airport is rapidly becoming Europe's "mega-hub" and building its infrastructure accordingly.

By Manik Mehta

Munich Airport is moving on the fast track to expand its infrastructure with the aim of becoming Europe's "mega-hub" hub, particularly after the German national carrier Lufthansa moved part of its traffic operations from Frankfurt to Munich.

Notwithstanding the transfer of part of its operations from Frankfurt to Munich, Lufthansa Cargo recently signed an eight-year agreement, from January 2018 to December 2026, with Fraport, which manages the Frankfurt airport operations, on ground-handling partnership at Frankfurt airport.

The new agreement covers aircraft ground handling, particularly the loading and unloading of all freighter aircraft belonging to Lufthansa Cargo. Transportation of cargo to and from the aircraft on the airport grounds is also part of the agreement.

Lufthansa Cargo's fleet consists of Boeing B

777 and MD-11 aircraft. The cargo carrier generates the highest cargo volumes of all airlines at Frankfurt Airport.

However, Michael Kerkloh, the chairman of Munich Airport, is pleased with the transfer of part of Lufthansa's operations to Munich, and pinpoints three major strategic Lufthansa moves which are expected to bolster the airport's status to a mega-hub.

"First, Lufthansa decided and started to station 15 of its 25 brand-new Airbus A350 wide-body jets exclusively in Munich. This will yield economic benefits and is also a boon to the environment," Kerkloh says. "Second, when the 2018 summer timetable begins, Lufthansa will have five of its 14 A380 aircraft stationed in Munich for the first time. Bavaria's hub will join London, Paris and Frankfurt to become the fourth European airport to be home to an A380 fleet. This



means that Munich Airport will become a mega-hub of Europe's largest airline group – Lufthansa. This is a decisive and moving moment for our airport. The gigantic Airbus will operate on routes to Hong Kong, Beijing and Los Angeles.

“Third, a further boost to Munich's competitiveness is the decision by Lufthansa's subsidiary Eurowings to station medium and long-haul aircraft here,” he continues. “With the foreseeable increases in continental and intercontinental traffic, our high-quality airport will attain a new standard of quality in the coming years. We will then be equally well positioned as a hub across all traffic segments.”

While Lufthansa has, for now, transferred its passenger aircraft to Munich, the Munich Airport chief is also confident about future cargo growth. Kerkloh points out that Munich airport's cargo business has been showing steady growth over recent years.

“Our cargo volume in 2016 grew by 5 percent to a total 334,000 tons. From January to September 2017 the volume increased by 9.6 percent over the corresponding period of last year, and totaled 269,200 tons,” he says, adding that, particularly, in regard to the perishable goods sector, Munich Airport provided a temperature controlled border inspection post and animal station of more than 1,200 square meters.

Other factors are also expected to strengthen Munich airport's cargo traffic.

“Further, Munich Airports cargo subsidiary Cargogate and Lufthansa Cargo have additional storage and cooling facilities for perishables. Cargogate operates five such rooms ranging from 25 to 75 square meters in size with temperatures ranging from -20 degrees C to 15 degrees C,” Kerkloh says. “In addition Aerogate, another Munich Airport subsidiary, owns temperature-controlled vehicles for the transportation of goods from and to the aircrafts. Lufthansa Cargo operates comparable facilities.

“Within the last years, Munich Airport has developed an important export hub due to increasing belly capacities and the growing engagement of forwarders on the airport's premises. Munich Airport's cargo traffic development team is very active to further expand the airport's cargo business, especially on the US and Asian markets,” he adds.

One way to popularize Munich's entry into major markets is by sponsoring events. Indeed, Munich airport sponsored in early October Lufthansa's “LCAG Oktoberfest” in Chicago.

With both passenger and cargo traffic poised to grow, the airport is keen to expand its infrastructure for ground handling services. In addition to the equipment that is currently used, newer equipment, based on



▲ **Michael Kerkloh, Chairman, Munich Airport**

the latest technology and innovations, will also be inducted. These decisions will be made based on various factors, including the overall needs of the airport and costs.

Kerkloh maintains that the “many expansion projects,” including the satellite terminal which was opened in 2016, bear witness to the rapid transformation from a “city airport” to an “airport city.”



“For sure, the unique joint venture between Munich Airport operating company FMG and Lufthansa to build an efficient and fast hub system drove the enormous growth and development. Munich Airport’s location at the center of Europe has been a factor that has become all the more important with the expansion of the European Union,” he says.

Bavaria’s largely export-driven economy is reliant on access to international air-transport services. The transformation brought an optimum choice of aviation routes and high-quality connections to places around the world, helping further develop and sustain the region’s economic strength, the airport’s chief executive says.

“We are also planning the long-term optimization of our Terminal 1 facilities, including a new pier, in order to expand capacities and to guarantee and secure high

service standards,” Kerkloh explains. “The airport’s facilities are already ready for the new generation of aircraft.”

The airport is, meanwhile, already stretched to the limit as far as availability of traffic slots is concerned. Since its opening in 1992, the airport’s passenger volume has more than tripled to over 42 million. In the last five years, traffic has increased by nearly 20 percent.

This trend is expected to continue. Germany’s Transport Ministry expects air traffic to grow by about 60 percent by the year 2030 compared to 2010. This will have a “significant effect” on the Munich hub; the construction of a third runway is considered to be necessary for Munich and, indeed, Bavaria’s long-term growth.

Munich Airport’s runway capacity is currently at its limit during the eight to 10 operating hours each day. Airline requests

for additional slots and the corresponding flight connections have to be turned down.

“Due to current growth trend, the bottlenecks will get worse. The construction of the third runway, which has been officially approved and has overcome all the court challenges, is therefore necessary to enable the airport to expand the range of available services in line with demand,” Kerkloh argues.

The ground-handling services at German airports are regulated by the ground handling service regulation (BADV) according to the EU-guideline 96/67/EG, requiring two ground handling service providers per airport. One of them is AeroGround Flughafen München GmbH, the wholly-owned ground handling subsidiary of Flughafen München GmbH (Munich Airport). The second ground handling company at Munich Airport is Swissport Losch.

AeroGround offers all landside and air-side services relating to aircraft, baggage and passenger handling at Munich Airport.

Munich Airport, which has been elected President of the Airport Council International (Europe), with Kerkloh taking over the President’s role, is striving to bring more visibility to the issues affecting the airport industry and to the work of the association’s full-time team in Brussels.

“We are striving to continue with the positive developments in the European airport industry, evaluating different interests and needs. That said, Europe’s airports most pressing issues are quite diverse, ranging from the EU Aviation Strategy and Aviation Security to climate action, the airport capacity crunch and opportunities from digitalization,” Kerkloh says. “Further, we will aim at fair solutions with regard to airport charges.” **GSW**

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▶ ABOUT THE AUTHOR:

Manik Mehta is a New York-based journalist, who specializes in all the aspects of aviation and logistics, including airlines, aircraft leasing, airports, infrastructure, cargo and ground handling, as well as global markets, trade and business.

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PaxLift Production is Ready for Lift Off

Baumann's vehicle offers one-man operation, four-wheel steering and other safety features to protect passengers with reduced mobility as well as the aircraft on the ramp.

By Josh Smith

Having a wealth of experience in working with sideloader-based trucks and a desire to improve passenger comfort, representatives at Baumann set out three years ago to develop a purpose-built ambulift.

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That mission produced the PaxLift. The vehicle offers one-man operation, four-wheel steering and other safety features to protect passengers with reduced mobility (PRMs) as well as the aircraft on the ramp.

The vehicle is being adopted quickly, particularly in the United Kingdom, and was recently recognized for its ingenuity at inter airport Europe 2017.

The concept began after years of working with industrial sideloaders. Baumann officials were looking for new ways to provide safer, smoother and more practical ways to transport PRM and VIP passengers, according to Baumann's managing director, Dr. Klaus Pirpamer.

"We felt the most important aspects were speed of turnaround and passenger comfort - neither of which we felt were satisfactory with the sideloader-adapted design, and that prompted us to think again about the whole methodology," explains Pirpamer.

The company developed a concept of a vehicle that could raise passengers without a pantograph, mast or chains.

"The solution avoids the inherent problems associated with adapted PRM vehicles, such as chain maintenance, slow loading times and an uncomfortable, often manually intensive, experience for passengers," Pirpamer says. "There's also complete free movement with the cabin raised."



All photos courtesy of Baumann

There are three models of PaxLift available, allowing the vehicle to service all types of aircraft.

The range includes the PaxLift L, which offers a lifting height of 4 meters (approximately 13 feet); PaxLift XL, which reaches 6.1 meters (approximately 20 feet); and the PaxLift XXL, that extends to 8.1 meters (about 26 ½ feet).

"The PRM transporter provides floor to door access, reaching up to 8.1 meters, without the need for stabilizers or lateral movement at ground level," Pirpamer says. "It offers a completely stepless experience with no additional lifting attachments."

What's more, an electric PaxLift model, set on offering environmental benefits, is in development and is expected to be released in the second half of 2019.

Traditional ambulifts, especially those that are adapted commercial vehicles, may move laterally and sway at height or utilize a two-stage lift, which can cause discomfort for passengers. Conversely, the PaxLift cabin is spacious, bright and accessible for faster, smoother lifting, according to company officials.

"Every aspect of the product, including the tires, suspension, lifting and movement, puts the primary focus on comfort," Pirpa-



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mer says. “Unlike other ambulifts, there’s much more weight and, therefore, stability in the chassis. The dedicated design of the PaxLift means it is able to lift up to 2,000 kg (approximately 4,400 pounds) in weight capacity.”

Improved safety around aircraft is achieved through the vehicle’s four-wheel

steering that reduces the turning radius and one one-man operation that provides a driver with clear visibility.

“The driver’s air suspended seat is located within the passenger cabin, so the passengers and the driver are able to see one another. Every movement is managed carefully by the driver,” Pirpamer says.

“With laser guidance, all-around cameras and total control in the cab, the driver is able to approach the aircraft with complete confidence.”

A suite of cameras, sensors, heaters and coolers are available to customize the vehicle to a station’s need.

The first PaxLift will be delivered to Newcastle in the UK and another trial is slated to take place in Dusseldorf, Germany. However, the new vehicle was met with high regard at inter airport Europe this past October in Munich, Germany. PaxLift received an Innovation Award for the inter-RAMP category during the event.

With a positive response from the exhibition, Baumann has extended plans for the PaxLift.

“We are still very much at the beginning of our journey,” Pirpamer says, adding this year the company will open a dedicated production line for the PaxLift in Cavaion, Italy.

“The production hall will include a 35-ton capacity crane, reaching 15 meters high in order to be able to test the full lift of PaxLift in house,” he says. “We’re hoping we will be producing PaxLift in the new hall by the end of the year.” **GSW**





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Phoenix Metal Products

The model PNX-PAS228 Truck-Mounted Passenger Stair, from Phoenix Metal Products, offers a door sill height from 96 inches down to 228 inches up. The chassis is a Ford F450 SD with six stabilizers.

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TOWABLE STAIRS
Clyde Machines Inc.

The Model 15F2820 Towable Passenger Stair has a platform range of 88 feet by 161 feet. Upper platform size is a large 76 feet by 50 feet to allow the aircraft door to fully open when the stair is in position. Other features include a LED lighting with timer, onboard battery charger and battery level indicator. A solar-charging kit is optional.

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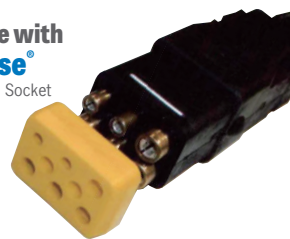
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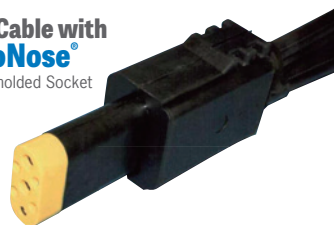
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What Type of Leader Are You?

When the person in charge takes a “we” approach, a team can achieve tremendous success.

Next month, we will kick off our annual series of issues spotlighting the *Ground Support Worldwide Leaders of the Year*.

We have received numerous nominations for many qualified people throughout the industry. It really is eye-opening to see how many talented people are dedicated to ground support.

While reading stacks of nominations, I've been reflecting on the word leader and giving thought to what it means to be one. Depending on who you ask, you might get different definitions.

I have discussed leadership at length with a good friend Mark Maas, who is an accomplished track and field coach and revered public speaker.

He identifies leaders as people willing to serve others, which may sound backwards to some of us. However, in a world of “me first” attitudes, a leader that takes a “we” approach can have tremendous success.

Leaders are often found next to his or her team, working side-by-side with them toward a common goal. A positive-thinking leader can

share a vision and facilitate others to take part in that vision.

A leader needs to hold his or her team accountable, but needs to be able to hold themselves accountable, too. After all, the team is trying to achieve the same thing.

So as leaders, let's focus on the “we” aspect of the industry. Start simply, and focus on using “we” in everyday conversation with your team, instead of “I.” Before long, that train of thought becomes contagious, and a “we” culture permeates throughout the team.

Positivity can cultivate an environment that allows the next generation of leaders to flourish. And I look forward to reading their nominations for our Leaders of the Year awards in the coming years.



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— Andreas Castro (attendee), SIACA

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