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### **▲ COVER STORIES**

ITW GSE: 2020 Product Leader of the Year

The battery-powered 7400 eGPU can reduce emissions, eliminate noise on the ramp and cut maintenance cost for operators.

**Dana Perry: 2020 Team Leader of the Year** 

As senior vice president of operations at Total Airport Services, a focus on communication, collaboration and effective planning is paramount to success.

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**MAY 2020** 



### The WELL Building Standard May Soon Land at an Airport Near You

By Frannie Robinson, Jena Hall

With more time spent inside buildings and public facilities, including when traveling across the country or around the world, airport designers are looking for new ways to improve the passenger experience and quality of life inside airport terminals, parking structures and related facilities. www.AviationPros.com/21131996

### **PODCASTS**



AviationPros Podcast-The Post-**COVID-19 Airport Terminal** 

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### **BLOGS**



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By Lisa Archambeau

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### **FEATURES**

### **Maximize the Effectiveness** of a Program Manager

By Lou Russo

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### Stertil-Koni Debuts Heavy **Duty Shop Equipment Line** Tailored for Aviation

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### Why Upgrading GSE Is **Crucial for Airside Safety** and Efficient Service

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### TOP NEWS

### **WFS Launches Emergency** Response Cargo Handling **Operation at Liege Airport**

Worldwide Flight Services (WFS) took just 72 hours to launch a new 'emergency response' cargo handling operation at Liege Airport following a request from the airport to help increase its capacity to accept more freighter flights carrying urgent medical equipment into Europe to tackle the coronavirus crisis across the continent.

The cargo handling terminal is located within a brand new but previously unoccupied airside warehouse and has been made available to WFS by Liege airport authority.



"I am extremely proud of everyone involved in this project and of the WFS team globally who are making such a vital contribution to the speed and efficiency of medical supply chains at a time when the world needs these more than ever before," said Craig Smyth, CEO of WFS.

WFS expects to handle up to 14 freighter flights per week during this emergency response phase of operations, which is currently expected to continue until the end of May. WFS will also provide handling services for outbound cargo shipments from Liege.

"Liege Airport has played a vital role in the provisioning of personal protection equipment (PPE) since the outbreak of COVID-19 in Europe. Additional aircraft movements and the huge growth in the volume of humanitarian goods led us to make this request to WFS for an immediate response to the market needs. This could only be done with the kind cooperation of AirBridgeCargo that has allowed their facility to be temporarily used for this operation. We are grateful to WFS for accepting this challenge, which means we are

now able to welcome cargo carried onboard ad-hoc charters and short term freighter operations in the temporary facility made available to them," said Bert Selis, VP Commercial Cargo and Logistics at Liege Airport.

### TaxiBot Semi-Robotic Towing Tractor to Trial at Schiphol **Airport**

Schiphol and Smart Airport Systems (SAS) announced its trial for sustainable taxiing at Schiphol airport in cooperation with the partners Air Traffic Control Netherlands (LVNL), the Ministry of I&W, Corendon Dutch Airlines, KLM, Transavia, EasyJet and handlers dnata and KLM Ground Services. The technology behind this trial, the TaxiBot, is provided by SAS, a sister company to the prominent designer and manufacturer of airport ground support equipment TLD and IAI (Israël Aerospace Industry).

"We are extremely pleased with this test of sustainable taxiing in cooperation with one of the world's most innovative airports. We are impressed by Schiphol's motivation which reflects in quality of the partnership they have created," said Maxime Mahieu, CEO of SAS. "All key stakeholders are aligned to show that SAS existing solutions can bring significant environmental improvements today."

"This study fits with our ambition to be the most sustainable airport in the world," added Hassan Charaf, head of innovation at the Royal Schiphol Group. "I am proud that together with our partners we are exploring what sustainable taxiing at Schiphol can mean."

Trials of the TaxiBot, a semi-robotic tow vehicle that is controlled by the aircraft pilot without the use of aircraft engines, is part of an on-going feasibility study on sustainable taxiing at Schiphol Airport. The trial is set to run until the end of June after which the study will conclude in Autumn 2020.



### **►** Upcoming Events

### **Canceled Events EAA AirVenture**

### Postponed Events

**IATA Aviation Data Symposium** 

**NATA Air Charter Summit and Aviation Business Conference** 

### Aug. 18-19

**NATA Ground Handling Safety Symposium** 

Ashburn, VA

### **Sept. 1-3**

MRO Americas

Dallas, TX

### Sept. 15-17

**GSE & Ramp-Ops Global** 

Istanbul, Turkey

### **Sept. 28 – Oct. 1**

IATA World Financial **Symposium** 

Dubai, UAE

### Nov. 23-24

**IATA Annual General Meeting** and World Air Transport Summit

Amsterdam, Netherlands



### OCTOBER 20-22, 2020

**RIO ALL SUITES HOTEL** AND CASINO LAS VEGAS, NEVADA



### **Aviramp Launches Solar Powered Boarding Solutions**

Aviramp has launched its solar powered range of patented boarding ramps and bridges. This product suite includes solar powered models of its Continental, Regional and Lite units.

"LoganAir is proud to partner with HIAL and Aviramp to bring this revolutionary yet simple device into service, to ease and speed the boarding process for the PRM (people with reduced mobility) and able bodied customers alike, across our Highland and Island network where many of our customers fly Logan Air to attend NHS appointments at mainland hospitals," said Maurice Boyle from Logan Air.

### **Jettainer Provides ULDs** for Repatriation and Cargo **Flights**

With usually defined flight schedules currently often being determined by short-term planning and ad-hoc changes, there is an increased over- or under-stock of loading devices at different locations. At some destinations, ULDs are required where none of the Jettainer customers



have their own stocks. Jettainer coordinates closely with the responsible task forces that were introduced to fulfill the need for short-term ULD handling. In addition to the containers, Jettainer also provides pallet stacks and nets for cargo securing on passenger seats.

"Especially in emergency and crisis situations, airfreight is of central importance. With our international network, we can provide the required unit loading devices quickly and flexibly. I would like to thank the entire team that is doing its utmost for days to meet the increasing demand for short-term solutions," said Thomas Sonntag, managing director of Jettainer GmbH.

### **PEOPLE**

### **Swissport Appoints** Miremont to Head Belgian

**Business** 

On April 9, Thierry Miremont assumed his role as the new **CEO** of Swissport Belgium. In this role, he leads Swissport's



ground services and cargo handling activities at the airports of Brussels and Liège. He reports to Luzius Wirth, executive vice president EMEA of Swissport Interna-

"We are delighted to welcome Thierry Miremont as the new CEO of Swissport Belgium," said Wirth. "He is very experienced in management consulting and has held several executive positions in family-owned, listed and private equity-held companies. We are happy to have Thierry on board to lead Swissport Belgium in these difficult times that are demanding all our efforts."

Miremont is an experienced senior executive with a proven track record in several industries. He has years of professional experience in transforming, restructuring and turning around organizations. He was a partner at McKinsey & Company, where he was the global

co-head for the airline industry business. Furthermore, Miremont was chairman of the executive board at French tour operator FRAM, president of TNT Express in France and, more recently, served as CEO of Euromaster Group, a tire and vehicle maintenance solutions provider.

### LUG Names Wittenfeld Co-Managing Director Alongside **Tschirch**

The Supervisory Board of LUG aircargo handling GmbH has nominated Rainer Wittenfeld co-managing director of LUG. In this role, he will support Patrik Tsch-

irch who has been leading LUG for the past eight years. In addition to his new role at LUG. Wittenfeld keeps his position as managing director of the Perish-



able Center GmbH & Co. Betriebs-KG at Frankfurt Airport, a company in which LUG holds a 40 percent stake.

In addition to the general management of LUG, Tschirch's field of responsibility covers all sales-related issues at the three locations, while Wittenfeld is responsible for all operational and administrative issues.

"Our company has grown considerably in recent years and so have the challenges," said Tschirch. "We had to strengthen the management team so that we can generate more thrust for the further expansion of our services and infrastructure and also achieve the ambitious goals that we have set ourselves. I am very pleased to have Rainer Wittenfeld on board."

"I am happy to take on the additional responsibility as a member of the management team at LUG aircargo handling," added Wittenfeld. "I have known the company and Patrik Tschirch for many years. In the past, we have worked together extremely well. Now we will collaborate even more closely. I am convinced that together we will be able to expand the existing business and operate even more successfully in the long term."





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### **ADB Safegate Appoints New**



The appointment of Laurent Dubois as CEO of ADB Safegate comes at a time of unprecedented challenges for

all organizations connected with air travel.

Dubois was previously the CEO of Zurich-based GE Healthcare Partners, where he launched and led GE Healthcare Partners globally and was a member of GE Healthcare's Global Executive Committee. GE Healthcare Partners is GE's business unit driving the development and commercialization of digital solutions, including performance partnerships and advanced analytics solutions. Previously, he held prime positions among others as a Partner at McKinsey & Company. Laurent is a Belgian citizen and holds a Master in Economics and a Business Economics Degree of the Vrije Universiteit Brussels.

He replaces former Group CEO Christian Onselaere, who remains with the company as chairman and board member and will support Laurent in his mission. Joe Pokoj will remain as CEO for ADB Safegate Americas, reporting to Laurent.

"It's certainly an exciting and challenging time to join the air travel industry," said Dubois. "I want to ensure that ADB Safegate is a big part of the solution when it comes to recovering from the impact of the current pandemic. By enabling improved efficiency and more accurate predictability, we can help our customers create smoother airport operations that will deliver a better passenger experience and encourage people to travel again, once it is safe to do so."

### Mikosz to Join IATA

The International Air Transport Association (IATA) announced that Sebastian Mikosz will join IATA as the association's senior vice president for member and external relations, effective June 1.

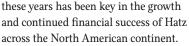
Most recently, Mikosz was group managing director and CEO of Kenya Airways, during which time he served on the IATA Board of Governors. Prior to that he was the CEO of LOT Polish Airlines and the CEO of Poland's largest online travel agency, the eSKY. At IATA, Mikosz will lead the organization's global advocacy activities and aero-political policy development, along with managing the association's strategic relationships.

"Sebastian brings with him a wealth of experience in the public and private sectors that will be critical in advancing the global aviation industry's advocacy agenda. At this time of unprecedented crisis, the airline industry needs a strong voice," said Alexandre de Juniac, IATA's Director General and CEO. "Sebastian's experience in launching and turning-around companies will be invaluable in helping IATA meet the expectations of our members, governments and stakeholders."

"I can't wait to get started at IATA. Aviation is in crisis and all industry and government stakeholders have high expectations for IATA to play a critical role in driving the recovery. From my experience as an airline CEO and as a member of the IATA Board of Governors, I know how important IATA is to the global connectivity that we usually take for granted. Today's challenges could not be greater. And, in joining IATA. I am determined to contribute to the efficient restoration of the links between people, nations and economies that only aviation can provide," said Mikosz.

### Hatz Diesel of North America Recognizes CFO, **Welcomes Treuer**

Andy Crownover, VP and CFO at Hatz Diesel of North America, Inc., marked 30 vears of service in April. Crownover's leadership over



Hatz Diesel of North America also announced Cassie Treuer has joined the company as an executive and marketing assistant to the CEO and marketing department.



With a degree in graphic arts and experience in merchandising, Treuer will be heading up Hatz's effort in advertising and marketing materials.

### **Edwards Chosen as ACL** Airshop's Managing Director - Asia Pacific Region

ACL Airshop announced Mark Edwards as the company's new managing director - Asia Pacific region for ACL Airshop LLC and its affiliate entities in Singapore and throughout Asia. Based in the Singapore office of ACL Airshop, Edwards will report directly to Jos Jacobsen, COO for those international regions and managing director - global leasing.

Edwards brings more than 30 years of exceptional qualifications to this leadership and customer service role, not least of which most recently in his five years of successful growth as the senior executive in Asia Pacific for dnata, serving scores of airlines customers across the entire region from their Singapore office.

Heretofore, Edwards has been a consultant to Ranger Airshop Holdings, Inc., the parent company of ACL Airshop, assisting the parent and its board of large institutional shareholders with assessing their continuing strategic growth and service strategies for Asia Pacific.

### NEW DEALS

### Vanderlande Selected as **Heathrow Airport's Strategic** Baggage Partner

Vanderlande has been formally selected as Heathrow Airport's strategic baggage partner for the next 10 years. The recently signed 'pan-airport' agreement, will encompass the design, build, operate and maintain programs across the Terminals, as well as the baggage control room operations.



"Planning for the long-term has always been a priority for the aviation industry. Our sector is currently grappling with the unprecedented impacts of COVID-19, but aviation will play a key role in helping economies across the world rebuild once we enter the recovery phase," said Helen Elsby, finance director - procurement, Heathrow Airport Limited. "Heathrow is taking steps now to ensure we have the infrastructure in place to support Britain's growth when the time comes and we're delighted to work with Vanderlande once more to deliver one of the most innovative and resilient baggage systems in the world, as we continue to deliver worldclass passengers experience."

"We are extremely proud to have been selected as the airport's preferred strategic partner," added Andrew Manship, Vanderlande's executive vice president of airports and board member. "It provides us with an exciting opportunity to deliver against future challenges such as growth, as well as the airport's continuing expansion. We are looking forward to cooperating with Heathrow in order to reduce its costs, improve performance and offer long-term value and support."



### Carolina GSE Expands Relationship with FDS

Carolina GSE announced a new affiliation with Flight Data Systems (FDS), a manufacturer of end-to-end flight data solutions. As a result, Carolina GSE will become an authorized reseller for flight data recorder (FDR) and cockpit voice recorder (CVR) testing equipment.

"We are very excited to become the first reseller of Flight Data Systems' suite of products. With our current expansion into test equipment, Flight Data Systems is a perfect fit for Carolina GSE, FDS has been in business for 25 years and I am looking forward to seeing our teams work together closely in the coming months," said John Werner, president at Carolina GSE.

### **Etihad Cargo to Deliver Critical Airfreight Services** to Australia

Etihad Cargo has partnered with the Australian Government to provide critical international airfreight assistance to Australia. Under the agreement with the Australian Trade and Investment Commission (Austrade), Etihad Cargo will provide dedicated cargo services between Abu Dhabi and Australia, leveraging bellyhold capacity of its fleet of Etihad Airways passenger aircraft to deliver essential supplies into the Australian market, and facilitate bi-directional trade to further ensure continuity of fresh imports to the UAE from Australia including meat, fish and seafood, fruits and vegetables.



"In this time of crisis, the facilitation of international trade and delivery of essential supplies is more important than ever," said Abdulla Mohamed Shadid, managing director cargo and logistics at Etihad Aviation Group. "Australia has been a longtime and vital trading partner for the UAE and we are pleased to be able to continue to provide this lifeline connecting our countries and enabling the movement of goods that is helping to save people's lives, supporting Australia's produce exporters and continuing to support the UAE's food security program."



### **ABM Industries Joins Cleaning Coalition of America**

ABM announced it has joined six other organizations in the contract cleaning sector to establish the Cleaning Coalition of America. The Coalition represents the needs of an industry playing a vital role to keep essential services operating during the coronavirus crisis (COVID-19). As the United States works to recover from this pandemic, the contract cleaning sector will continue to be on the front lines.

"Now, more than ever, America needs the support of the cleaning industry, which has become an essential workforce due to the impact from COVID-19," said Scott Salmirs, president and CEO of ABM Industries. "We are proud to be a founding member of the Cleaning Coalition of America and seek to give a voice to millions of frontline workers within the cleaning sector."

ABM is also excited to announce that its executive vice president and chief strategy and transformation officer, Josh Feinberg, has been elected president of the Coalition.

# **How Airport Design Could Influence PCA Use**

Airports weighing a centralized pre-conditioned air system over point-of-use units could shape how the ground support industry services aircraft at the gate.

By Dominic Cacolici, Kevin Keiter

s airports are rapidly growing and using more natural resources, aviation leaders are aggressively seeking opportunities to increase efficiency and cut costs. The ongoing search for airlines to save operating cost include saving fuel while parked at the gate. Taking a critical look at the airport's internal systems and the relationship between the building, the aircraft and the external support infrastructure can reveal opportunities to save energy and, therefore, cut costs in the day-to-day operation of the facility.

Aviation fuel represents 40 percent of an airline's costs, prompting the transition away from using auxiliary power units for heating/cooling at the gate.

> Pre-conditioned air (PCA) systems either point-of-use or central systems - are the preferred solution and a strategy to improve an airline's bottom line.

> A water-cooled central system can consume 60 percent less energy than point-of-use, reduce lifecycle costs and keep valuable components indoors, extending equipment life. A PCA system can improve air quality and reduce noise around the airport and increase ground service equipment energy efficiency, resulting in jet fuel savings and

reductions in carbon dioxide and other gas emissions. But implementing such a systemic change requires thoughtful consideration and savvy planning.



▲ Sea-Tac Airport PCA Plant - Secondary Pumps to all gates Photo courtesy of TLC **Engineering Solutions** 

**▼ TPA Airside C – Outfitted** with Central PCA Air Handler and PBB Cooling Photo courtesy of TLC **Engineering Solutions** 



### Centralized vs. Point of Use

Airports, rather than airlines, are increasingly funding terminal construction. Airports are discovering central systems are beneficial for lowering energy costs over the life of a terminal. This is especially true if the airport doesn't already have a central system. Composing a clear picture of the life cycle

> cost - shared by the airlines and the airport – helps foster the buy-in required to navigate a new, better path. To do this accurately, project teams use flight schedules for the specific airport to "right size" equipment, minimizing first

cost. Careful, data driven analysis then quantifies the increased efficiency resulting from central systems.

Many decision makers reach out to project teams because they have some familiarity with the benefits of centralized systems and are asking for more specific, technical information. They may have visited or previously worked in a facility that had a centralized system or have simply done research. Regardless of their current knowledge level, the key is for decision makers to see performance-based data. Reviewing lifecycle cost analysis specific to the project often demonstrates the potential savings to decision makers.

With the guidance of an aviation savvy expert, decision makers can see the benefits of such an installation, understanding first costs in context. Once project stakeholders see the full range of performance-based ROI data, they realize the long-term benefit of a higher initial investment. When airports go to central systems, they also have the opportunity to create diversity by combining systems. This diversity aids in future expansion and long term planning.

For instance, not every plane is at the gate at the same time, so if a group of aircraft are cooled and heated by a central system, it isn't running at full load all the time, allowing for smaller equipment and mechanical piping.

Project teams must take a holistic approach, assessing how building systems, coupled with the PCA system, can benefit the project as a whole. Team leaders discuss their findings and a series of options - the result of a multi-disciplined project team synthesizing system design and flight operations. This holistic, solution-focused process empowers owners to understand the true energy, emissions and maintenance savings that these systems can provide.

### Quantifying Data Underneath **Energy Savings**

From an energy savings perspective, centralized systems provide a significant advantage. The kW per ton difference between an auxiliary power unit (APU), point-of-use and centralized systems is reduced from approximately 5.5 to 2.3, down to 1.1 kW/Ton. Project team leaders are encouraged to consider implementation in the context of evolving LEED criteria for energy consumption.

The United States Green Building Council (USGBC) is considering including ground service equipment energy for aircraft as part of the building's total energy consumption. In the past, aircraft energy was considered a process load that was not reviewed or considered in building energy consumption from a heating and cooling standpoint. Using building utilities to feed the aircraft has a tremendous impact on total energy consumption. Considering this energy conservation measure of using the central system can potentially provide up to a 28 percent energy savings on average.

Although this utility is for the aircraft, and is considered ground service equipment, and therefore not part of building energy consumption, it is recommended that the project team explore considering this system as an innovation credit.

Digging deeper into how this opportunity developed, it was driven by engineers who were looking for a way to realize the energy savings gained by using central systems towards the project overall benefit. To raise awareness of this issue and to drive industry—wide change by promoting the credit, project team experts in conjunction with USGBC leaders objectively define this credit for airports.

To accomplish this, the project team worked with manufacturers to create a list of 100 airports and categorized them by number of passengers per year and whether they used a centralized or point-of-use system. The team factored the 10 most similar in size to the example project and compared the numbers for centralized systems against the point-of-use examples. These figures provided quantitative data to the USBGC about energy usage by size of facility for the Energy and Atmosphere (EA) credit, which informs project planning and decision making.

The purpose of the exercise was to validate that since point-of-use systems are more common. When the airport invests in a central system, it should be considered as an additional energy conservation measure, and not industry standard.

Because LEED criteria apply to many building types, part of the underlying intent of this logistical analysis for the innovation credit is to show how airports have different energy needs, distinct from other buildings. After the analysis, the team found that airports have a substantial process load compared to other buildings and should have different performance standards, similar to data centers and other facilities with a higher than average load.

It is inevitable that airports will use more energy, but they should get credit for finding innovative ways to reduce consumption, even if they still use more energy than a school or office building.

The idea is that, although energy consumption is relatively higher and fluctuates more as planes come and go, airports will continue to make progress and set the energy savings bar higher as time goes on and technology improves. Recent LEED certified projects that have taken advantage of central pre-conditioned air are receiving EA credits for optimized energy performance.

### **Seizing Additional Efficiencies**

In addition to inherent efficiencies, consolidation is an optimal way to get diversity from a system, so leaders thinking of implementing a central system can further reduce costs by finding ways to link systems. The best approach is to start by examining existing systems to see where they can be expanded and joined with other systems. For example, two buildings of a similar size could potentially be tied together, resulting in both operating at a lower net capacity. The sharing of cooling and heating systems from a central plant across multiple buildings is another way to consolidate operations to increase efficiency.

Any opportunity to share resources – including space, chilled, condenser and hot water infrastructure, etc. – from one terminal or area to another is an opportunity to increase efficiency and reduce energy consumption while lowering costs. Industry leaders are increasingly creative about how they can achieve success in an airport application as the market demands it, while still providing the same level of comfort to airline passengers and others who use the airport.

### **Finding Space Solutions**

Locating space for the centralized equipment can be a challenge. Space at the ramp level is at a premium and the equipment itself is large. Stakeholders compete for the space at the ramp level: general storage and airline operations spaces with parts storage and workshops for the people who service the planes between flights. Electrical rooms, baggage belts, technology equipment and mechanical rooms that serve the terminal also compete for this space.

At the same time, the height of the ramp level must be high enough to accommodate centralized infrastructure equipment, and the overall area is generally crowded, often understandably resulting in resistance when additional infrastructure space is proposed. Some of this space would have been consumed by electrical gear regardless, because every system needs power, whether central or point-of-use. Point-of-use systems would have larger electrical distribution gear that has to go somewhere. Many are often surprised to find that the net area added is only about 30 percent more. Coupling the central PCA heat rejection to the building chilled water system can offset space by eliminating the need for cooling towers at the airside.

Airports inevitably consume significant quantities of energy, which comes at a high cost. As energy prices rise and the emphasis on sustainability and reduced consumption continue to strengthen as market trends, industry leaders are looking to invest in solutions that will reduce energy and costs for the long term, especially as airport funding models shift. Installing a central system in an airport requires data collection, quantifiable investment analysis and concise planning due to the complex nature of the system. However, the proven benefits of energy and emissions reductions, coupled with excellent return on investment, show the benefits that a centralized PCA system can provide an airport terminal. GSW



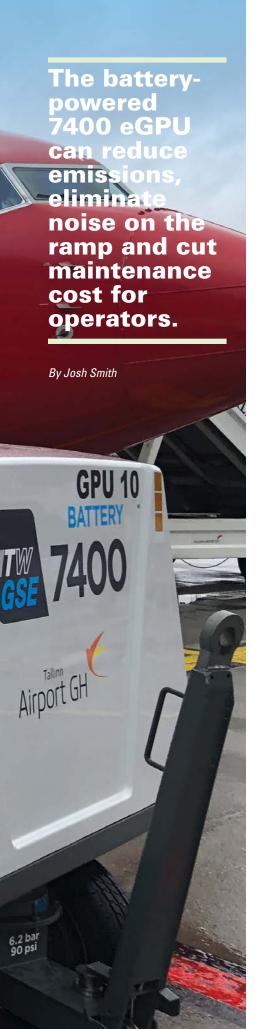
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ith a goal of providing green energy technologies to the ground support industry, ITW GSE sought to create a battery-powered ground power unit (GPU).

But rather than starting from scratch, engineers found a power source and applied it to proprietary equipment already in the field. With Nissan Leaf battery packs onboard, and the company's 2400 solid–state converter providing output, the 7400 eGPU was born.

The first eGPUs were introduced in Europe in 2018 and debuted in the United States in 2019.

In addition to significantly decreased noise and minimal maintenance, the eGPU reduces carbon dioxide (CO2) emissions by 90 percent and nitrous oxide (NOx) by 95 percent compared with traditional diesel ground power.

For these reasons and others, ITW GSE has been named the *Ground Support Worldwide* 2020 Product Leader of the Year.

# The eGPU's Introduction to the Market

ITW GSE sought a greener GPU alternative to avoid the amount of emissions coming from diesel-driven GPUs during aircraft turnarounds.

Poul Elvstroem, vice president of sales and marketing at ITW GSE, points out that many pieces of ground support equipment (GSE) used during the turnaround utilize smaller engines, for example, belt-loaders or passenger stairs. Other equipment may have larger engines but are in operation for a short period of time.

Engine driven GPUs, by contrast, have large engines and are in use throughout the turnaround, which requires a substantial amount of diesel fuel.

"When you look at the biggest power consumer when you have an aircraft going through a turnaround, it's by all means the GPU. It's the first thing you connect on arrival and it's the last thing that you disconnect," Elvstroem says. "So here, you need a lot more battery capacity than you do with any of the other electrical ground

support equipment pieces that are parked around the aircraft."

ITW GSE combined two well-known technologies to create the 7400 eGPU, which can be used anywhere that a 400 Hz supply is needed, including gates, remote parking areas and hangars.

The eGPU is being used throughout the world, with the first unit being put into service in 2018 at Amsterdam Airport Schiphol, Netherlands.

Elvstroem notes previous attempts had been made by companies in the industry to design an eGPU, but ITW GSE's 7400 is first to launch, go through the proper market testing and receive required certifications.

"We are definitely the first to introduce the eGPU," he says.

Since the first 7400 was put into service in the fall of 2018, units have been deployed across Europe, the Middle East, Asia, Australia and North America.

In January 2019, the 7400 eGPU was commissioned by United Airlines at Los Angeles International Airport (LAX).

"The challenges are the same, almost throughout the world," Elvstroem says. "We anticipated that Europe would probably be the most attractive market in the beginning.

"But our learnings have been that we have not been able to predict this," he adds, pointing to the product's adoption in the Middle East, Asia and the U.S.

### **Green Features**

Customers that utilize an eGPU can benefit from low emissions, reduced noise and limited maintenance, Elvstroem explains.

"It is running the most and it is also running with a lot of energy – a lot of power, because it is, of course, servicing everything that you switch on onboard the aircraft, during a turnaround," he says of ground power units.

According to ITW GSE, replacing one diesel-powered GPU with the 7400 eGPU

can bring down CO2 emissions by 90 percent, equal to 190,000 pounds, and the NOx by 95 percent.

"But many airports have hundreds of units and that is when it really starts to make a significant impact on things," Elvstroem says, emphasizing that customers who evaluate their operational needs stand to better reduce emissions and realize more savings.

In contrast to a traditional engine running at speeds of 2,000 rpm or higher, the electric 7400 emits almost zero noise. The reduced noise provides added safety in addition to comfort in the work environment.

"The engine drive GPU has a genset consistent of an engine and generator - a lot of moving and noisy parts. With the eGPU, there are no moving parts inside," Elvstroem says. "It's what we call a solid-state technology. It's quiet. It's only giving a little bit of a humming sound. But nothing compared to an engine drive."

Elvstroem says the unit is so quiet, a customer in Holland feared a new unit was not working. The station manager had to explain that it was working, although the ground handler was not used to being able to communicate near the previous GPUs.

"It's really a significant difference. It's like from really, really high levels to nothing that you hear out the ramp in an airport, where you basically have noise from all angles anyhow, with pushbacks and aircraft taking off and landing," Elvstroem says. "In that environment, consider it no noise."

With no moving parts within the 7400 eGPU, maintenance costs are also reduced. The only parts that need to be maintained are the tow-bar, the cable and connector and a few other consumables.



"It's designed in a way that you never need to access inside the battery packs themselves," Elvstroem says, adding Nissan offers a five-year standard warranty on its bat-

tery packs. "Therefore, there is very little maintenance."

What's more, with limited maintenance, fleet capacity can be reduced because each unit's in-service time increases.

"Apart from you saving heavily on fuel, on top of that you don't need the same number of units to accommodate the same work," Elvstroem says, noting the market traditionally has a spare capacity of 20-30 percent diesel GPUs to sustain operations.

### The Right Combination of Components

While just one battery pack is needed to power a Nissan Leaf automobile, the ITW GSE 7400 eGPU uses four packs in its standard 90 kVA unit.

"We need more power than what is in

one Nissan Leaf car to power maybe 10 or 15 aircraft turnarounds between charging," Elvstroem explains, noting the 7400 eGPU is designed to operate for a full day and can charge during an airport's lowest operational periods.

7400

"It's key not to charge during peak hours," he continues. "During peak hours, the entire infrastructure at the airport is stressed with all these other charging systems, anyhow. So with this, when you have a low peak, then you charge."

When recharging is required, the 7400's onboard charger allows recharging from any three-phase 50 or 60 Hz outlet. This eliminates the need for a charging station or frees up capacity at a charging station for other pieces of GSE. It takes 2-3 hours to recharge from nearly zero to full capacity.

"It has a financial cost to add these chargers and build them into the product, instead of having them externally. But the benefit is just as easily compensated because now you don't need to go out and invest in kinds of other charging systems before you start an operation," Elvstroem says, noting nearly 20 demos are taking place at airports

currently, due in large part to the onboard charging system being available.

The Lithium-ion battery packs can handle 10–15 turnarounds, subject to the aircraft's size and configuration. ITW GSE is building communication software into the 7400 to monitor usage in the field and better understand power requirements.

With the power input generated with Nissan's battery packs, the output is controlled by ITW GSE's 2400 solid–state converter.

"That is a converter that we have produced for many years. We have thousands and thousands of this product out in the field. That is the unit that are mounted under the passenger boarding bridges in many airports or used as fixed on remote parking, fixed inside hangars, what have you," Elvstroem says.

"We have taken our core product and combined it with a well-proven battery," he

adds. "This way, we are limiting the technological risk of trying out something that has not been proven or tested."

It shares common parts with ITW's other ground support units and the user interface of the 7400 is identical to other products, including diesel GPUs, pre-conditioned air (PCA) units and solid-state GPUs.

"It's very easy for the operators to recognize and find out how to operate this equipment," Elvstroem says.

### An Expanded Product Line

ITW GSE has expanded on its standard eGPU 90 kVA unit. The company has added the ITW GSE 7400 JetEx a 28 VDC battery-driven eGPU, which requires just one battery pack. Later in 2020, the company is launching a 180 kVA 400 Hz AC eGPU for the largest aircraft.

"By end of Q3 this year, we'll have a

complete range of battery-driven ground power units that can replace all the different engine-driven ground powers being used in the field today," Elvstroem says.

Elvstroem acknowledges that the initial investment in new technology can be significant.

"The first thing people say is, 'It's too costly. It's too expensive.' But they are basing it purely on capital investment comparison with the cost of a diesel-driven GPU," Elystroem says.

However, ITW GSE offers a calculating tool to customers to better understand a unit's total cost of ownership.

"I think we are the proudest of making a product that is both so much greener and at the same time so much cheaper to operate," Elvstroem says. "Technology put together in the right way, really makes a difference." GSW





2020 TEAM LEADER OF THE YEAR



# hen Dana Perry enrolled in art school, a future in the aviation industry wasn't the most likely career path. But the part-time job he took at Seattle-Tacoma International Airport to pay for school opened the door.

Since then, his capacity to digest black—and—white data and metrics coupled with his ability "to see in color" has allowed him to advance his career, where he now leads nearly 1,700 people across eight stations nationwide for Total Air—port Services (TAS).

In the last year, Perry has led TAS' most recent start—up station in Houston – the first for TAS at George Bush Intercontinental Air—port. His leadership allowed a customer to bring a station from one of the worst performing to achieving No. 1 station performance within one quarter. What's more, his mentorship resulted in a single station turnover of 4 percent.

Silvio Tano, CEO at TAS, says Perry's knowledge and approachability has made him the go-to person at TAS.

"Dana has a down to earth 'keep it simple' management outlook and is a good, ethical person – as all true leaders are required to be," Tano says, noting Perry is respected at all levels of the organization. "He also has an uncanny ability to build trust across many disciplines."

With a supreme talent to communicate with and set an example for his team, Perry is distinctively qualified to be *Ground Support Worldwide's* 2020 Team Leader of the Year.

### Part-Time Job to Career

Perry has always been near aviation, including his childhood home directly below the flight path of Sea-Tac. While he watched the planes above and felt the windows of his bedroom rattle, he believes this experience unknowingly guided his path toward aviation.

After high school, he took a part time job washing and detailing planes for Jack Reed Aircraft Sales at a small regional airport in Auburn.

"That was really the first time up–and–close touching airplanes," Perry says.

When he was back in school, he took a part time job at Sea-Tac, working for Aviation West - a small, one-station operation. "Basically, it empowered me to do everything and challenge me, giving me roles that I wasn't necessarily comfortable with," Perry says, adding he spent 16 years at Aviation West.

He began as an agent in the warehouse, building up for CargoLux and Air France and did the handling for those flights. He advanced to be ramp lead, then supervisor and later assistant manager.

"Then I got full control of the office and warehouse," Perry says. "I was in sales and service. Then assistant station manager and eventually station manager.

"That company was sold to a little bit larger company – Aviation Ground Services in '98," he adds. "Then in 2000 is when I ended up taking over the station leadership."

Perry says the rest is history.

"That part-time job I took at Sea-Tac was just to pay the bills while I was in art school," he recalls. "I was going to be an artist and here I am today. I still like to draw, but my time is focused at the airport."

### **Total Airport Services**

Perry was promoted to his current role of senior vice president of operations after three years at TAS.

In his role, he is responsible for the company's complete operational portfolio, which includes passenger handling, cargo warehouse and ramp operations, GSE fueling and maintenance, in addition to other support services at eight stations, representing 1,700 employees across the US.

"When I came on to TAS mid-2016, I came from Swissport – a very large company," explains Perry, who joined TAS as director of operations support, following stints as general manager at Swissport and a regional director at Servisair, having managed a portfolio of \$50 million and 1,500 employees across nine stations. "What excited me about TAS is it kind



of got me back to my roots - a smaller, more agile, operation, closer to the decision-makers. But, TAS is also supported by CCR, one of the largest

infrastructure companies in the world, that also does the design, finance, build and management

of airports. It's the best of both worlds. "I really came in just

supporting procurement and maintenance," Perry continues. "We've had significant growth over the last three years and I've been privileged to support that growth in my three years here."

> When Perry moved into a more aggressive role, tasked with

overseeing all passenger services and cargo warehousing, he became responsible for all locations, all financial performance, all operations performance and all safety.

"Dana has successfully led very complicated startups that required significant additions of staff and equipment with minimal lead times," says Tano, noting a massive and simultaneous multi-account start-up at LAX in 2018.

Perry directly manages five positions. Three are regional GMs that, between them, oversee eight stations. The company's financial analyst and director of GSE maintenance also report to Perry.

TAS' stations are split into regions. All station managers report to Perry's operations team; and they are responsible for station operations as well as regional profits and losses (P&Ls).

"So, I do have good coverage for oversight," Perry says. "I was definitely getting ran a little thin due to our quick growth, touching everybody as often as I had to, to run the organization. The organizational structure has actually grown since I've moved into this position, which was needed. We're still building for future growth."

### Communication and Accessibility

With eight stations across the country, employing approximately 1,700 people, Perry's leadership is critical to the overall success of TAS.

The company's CEO admires Perry's ability to communicate with his team, provide accessibility and display a willingness to teach.

"He also creates a collaborative environment with his reports and empowers them to lead and make decisions," Tano says. "Additionally, he delegates with full understanding of what specific efforts are required for successful outcomes. And, like all excellent leaders, he knows when to step into the fray when his subordinates need him to."

Perry says it is all about the people.

He believes developing relationships with staff better enables leaders to offer support and equip team members with the appropriate skills.

"To me, the first piece of success - or failure - is either communication or a lack of communication," Perry says. "I don't have a lot of meetings, but I do have a lot of conversations. I talk to all my direct reports daily."

He says his team will schedule formal meetings if that is what's required. But typically, his team doesn't wait for those moments. Instead, they pick up the phone and talk once or twice a day.

"I get tired of typing emails all day. I'd rather pick up the phone and maybe back it up with an email if it needs to be documented," Perry says. "That's my approach to how I communicate with my team."

To keep lines of communication open, Perry also emphasizes input from the field. He regularly visits stations in person to gather firsthand information and make himself accessible to the team.

"I'm definitely approachable to anything that's needed," Perry says.

According to Perry, efficient operations are a product of three fundamentals - planning, execution and accountability. While the nature of this business can often be reactionary, if those three elements are established, Perry says his team can handle anything.

"Unfortunately, the nature of this business is that there's still a lot of reaction to things," he says. "But with those three key things in place, we're definitely more prepared for anything that can be thrown at us."

With those fundamentals in place, Perry can tailor his leadership style to get the most out of specific employees' strengths and mitigate weaknesses.

"I expect managers to run their business, but I'm always there to support them. They can always escalate something up to me, and I'll put that on my shoulders and work with them on any challenges," Perry says. "I always ask them to come up with some ideas, and then we'll work together on those things."

He has discovered that keeping his team involved in the decision-making process has been valuable.

"I learned that early on because I'm not someone who keeps information in and I don't want to be the controller," Perry says. "I'm not the best at everything. I like to have people that can do things a little better than me as well."

"I like when it's feasible to have as much input from them. I like them to be vested in decisions," Perry says. "They know they can speak up if they have a better idea. I'm always open to it."

He says leadership trickles down. He likes to see the things he does for his direct reports be passed along to their reports.

"Even starting from an agent, to a lead, to a supervisor, hopefully I wouldn't have to tell them how to do it. All they would have to do is watch what I do and learn from what I do, and then pick those things up," Perry says. "My example is important."

Perry is also willing to help his team members outside the parameters of work, if it's

"That's something that kind of comes with time," Perry says. "A lot of managers like to keep it pretty stiff on how they interact with their employees.

"I've just found that it's easier to not only be their boss, but to be their friend to a certain extent."

Perry experienced similar friendships from his mentors early in his career.

Jack Michalek shared many of his personal experiences with Perry, from working his way through Continental to opening Aviation West. Because it was a small operations and Perry spent 14 years working side-by-side, their relationship grew. Perry benefited from that and tries to pay it forward with his current colleagues.

"I do like to know my reports a little outside of work, too. What they do and what their interests are and support them at work or maybe out of work to, if need be," he explains.

Perry continued to learn from others after

Aviation West was purchased. He says Joe McConnell was instrumental in teaching various aspects of overseeing a station.

"He kind of brought me up that next step," Perry says of McConnell. "He moved me down to Phoenix where he was actually based and I spent four years with him. It was financing and refining some of our planning tools."

Perry adds that McConnell really hammered home the importance of planning and helped Perry shape the way he formulates a plan.

"I always say I see things in color. But I do like numbers, so black-and-white is good. But numbers don't always tell the whole story," Perry notes.

### Guidance for the Next Leaders

The aviation industry is never boring to Perry. There are new challenges every day, and those challenges require strong leadership. Perry is currently leading his team through the COVID-19 pandemic and it is unknown what the next day holds. So, he places an importance on forecasting, leadership skills and staff development.

"If I can equip my staff with those tools, I know they can face any challenge," Perry says.

"The most challenging thing is keeping all the managers engaged, keeping them positive, making sure we're sharing the right information with employees and making sure everyone is kept safe."

No matter what external factors are in play, Perry focuses on TAS' three daily missions – ensuring the safety and wellbeing of its employees; ensuring quality service to its customers; and ensuring a financial responsibility to its shareholders.

"No matter the situation, we need to be equipped and agile enough to successfully achieve those goals," Perry says. This is why Perry enjoys the position he is in at TAS, and being part of the strategic thinkers.

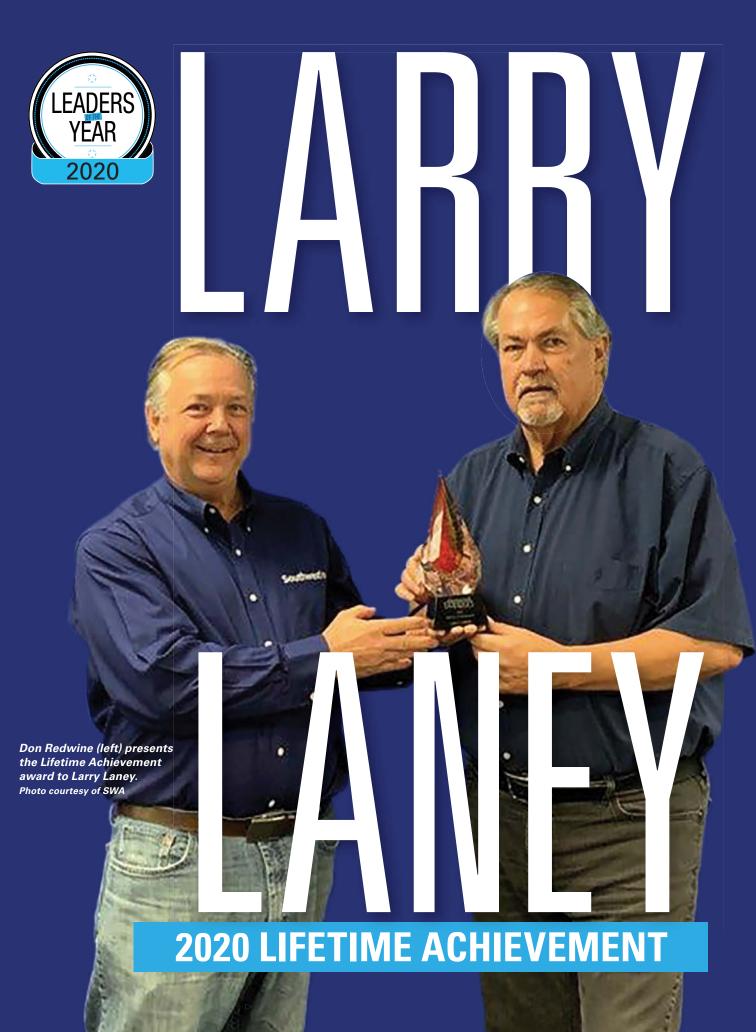
"I sit two doors down from the CEO," Perry says. "It's exciting being able to help steer and direct this company. With the amount of growth we've had in three years, if we continue that, it's an amazing place."

Beyond the operation components, adds Tano, it is important that the person in this position can mentor the next generation of leaders. He points to Perry's multi-faceted skillsets that allow him to lead his team across several disciplines, including customer service, contracts, labor efficiencies, safety and financial reporting.

"Dana's mark on the organization is both present and future," Tano concludes. **GSW** 



AviationPros.com/10017340



The director of ground support at Southwest Airlines has been instrumental in developing the GSE department and advancing technology to keep pace with the airline's growth.

By Josh Smith

ince making the leap from the oil industry to aviation, Larry Laney has accomplished a great deal – a lifetime's worth, really.

Beginning as a ground support equipment (GSE) mechanic more than 30 years ago, Laney worked his way to director of ground support at Southwest Airlines (SWA), leaving a lasting impression on the industry.

"Larry is above all else a man of honesty and integrity and this is his most admirable characteristic," says Don Redwine, senior manager of fleet planning, reliability and warranty at Southwest Airlines. "Larry has helped me and all of us at SWA to recognize the importance of long-term strategic planning and patience. Having, and sticking to, a long-term plan until the goal is accomplished."

Set to retire this spring, Laney has applied his professional skills and ability to formulate sound plans to guide his teams through a myriad of experiences.

"Larry is a great mentor and loyal leader," Redwine says. "He has given all his direct reports opportunities to grow and flourish within the organization. His style is laid back but never out of touch."

Having applied decades of experience to develop and expand the GSE fleet to support Southwest Airlines' growth while positioning the next wave of leaders for success, Laney has been recognized with *Ground Support Worldwide's* 2020 Lifetime Achievement award.

### A Change in Career

Aviation has always been in the Laney family's blood. Laney's father had a private pilot's license, and the town they lived in had a modest general aviation airport.

"We would go out and just sit there and watch the airplanes," Laney says. "I kind of had the airplane bug as a youngster."

But prior to Laney's career in aviation, he established himself in the oil industry. He owned a small oil field construction company in Taft, Calif., but felt the effects of an oil crisis in 1986. When the business went under, Laney began looking for a new line of work and a different place to live.

"I took it as an opportunity to make a change," he explains.

"I was visiting some friends in Phoenix and looking for some work. That's when, of course, oil was tanking, so airlines were making a lot of money because of cheap gas," he recalls. "So, America West Airlines was growing leaps and bounds back in those days."

Laney started as a GSE mechanic, working the midnight shift, for America West Airlines on April 1, 1986.

"Within a year or two, I went from mechanic to lead mechanic to supervisor," he says.

Shortly after, America West's manager of the Phoenix GSE hub, the airline's largest hub, took a position in Tech Ops.

"It created an opening, and as one of the supervisors there, I was able to get the position of manager for GSE for America West Airlines," Laney says. "Within a year or so, they rolled all the shops underneath me. Back then, Phoenix was the main hub, Vegas was big for us, so we had a shop there and we eventually opened a

shop in Columbus, Ohio. So, that was the size of the department.

"The rest of the maintenance was contracted out at all the smaller stations, besides those three locations."

It was during his 11 year-tenure at America West Airlines that Laney experienced his first major challenge in the aviation industry, working through a bankruptcy during the first Gulf War.

"As we were parking a percentages of airplanes, we had to lay off the same percentage of employees. It was a very difficult time," Laney recalls. "I certainly got to learn a lot, going through my first crisis in the aviation business.

"We came out the other side a stronger company."

Soon after, Laney was ready for a change. He says he had met some of the people at Southwest Airlines, including Bruce Premier, who was leading the GSE department for SWA.

"He gave me the opportunity to come over to Southwest Airlines and I jumped on that opportunity when I had the chance," Laney says, adding the job included a move to Texas.

Hired on as a foreman on Aug. 1, 1997, Laney managed the Dallas shop and 11 other cities in the region. Before long, Laney was promoted to manager of GSE.

"I was the first manager of GSE, really, for Southwest Airlines," Laney points out. "I essentially managed the whole system and reported to him. He was the director over ground support, cargo and central baggage.

"I was the manager running the GSE department and reporting to Bruce."

When Premier was promoted to senior director, Southwest split up the divisions he oversaw. That's when Laney was promoted to director of GSE.

"I've been director of GSE for a little over 20 years for Southwest Airlines," Laney says. "I'm responsible for all the GSE nationwide, all the employees, the capital budget for the equipment, the sell of surplus when we're done – every aspect of GSE, from it coming in the door until it leaves, is our responsibility."

### A Big Machine

Laney has experienced a lot in his time in aviation and has learned important lessons along the way. He points out that he has had a number of influential people help him throughout his career.

"I think my first mentor, in the GSE world and the aviation business in general, was Dick Barba," Laney says. "He was who I reported to at America West Airlines. He was the one who hired me to take the manager's position.

"We became really close friends, hunting buddies. We hung out together a lot."

Laney says Barba gathered a lot of wisdom having come up through the industry in the early days of Trans World Airlines (TWA). When he took Laney under his wing, he shared experiences from his own career.

"I got to learn all aspects of the airline and how they operate - and from the senior leadership side because he became a VP before I left," Laney says. "He knocked the rough edges off me."

Laney is also grateful to Premier for hiring him at Southwest, helping mentor him and teach him the ins and outs at Southwest.

"I give those two guys a lot of credit for helping me in my career," Laney says.

Laney's mark on the industry is highlighted by growth. As Southwest Airlines has grown, Laney has ensured the GSE has grown with it.

> That growth includes more sophisticated equipment, including a broader range of electric GSE.

> > "Larry's impact on SWA GSE has been very broad," Redwine notes. "During his tenure, we have gone from a white board list of assets to an electronic fleet management system. We have built a world

class refurb department for rebuilding older equipment. We have built one of the largest electric equipment

fleets in the industry, taking advantage of numerous industry grants and partnerships.

"Under his leadership SWA has partnered with numerous manufactures develop innovative solutions for our business, such as the hybrid towbarless tow tractor, a provisioning van, electric conventional pushback tractor, plastic baggage cart and gate PCAir hose trolley, among others."

Laney recalls the very basic GSE in use 30 years ago.

"You had the Ford 6-cylinder C6 transmission and a Rockwell rear-end. It was just basic Ford axles and things in the belt-loaders, the same drivetrain," Laney says. "It was very simplistic."

Fast-forward to today, Laney points out, and more than 25 percent of SWA's fleet is electric.

"I'm really impressed with all the manufacturers and what they're doing - from the early days to what's available today; taking all the on-road technologies; all the smart transmissions; and all the different ways to control a vehicle to protect aircraft and our employees from injuries," he says.

"Certainly, they've done very well as an industry working with their partners on what that technology means and the best way to use it for the end-users," Laney says. "Over the long haul, I'm very impressed."

Laney recalls an example of his team working with a manufacturer to build a product. Southwest was buying pushback tractors from FMC, before the company became JBT. However, FMC had not made an electric pushback yet.

"We had a shop in Phoenix, where our guys had actually taken and done many pushback tractors - some Stewart & Stevenson pushback tractors, older ones - and took the diesel engines out and converted them in-house," Laney says. "We were one of the only airlines, that I know of, that was very aggressive doing that. So, we were converting the pushback tractors, diesel and gas belt-loaders to electric."

He began discussions with FMC about building an electric version of their pushback. Laney worked with Norm Kosciusko to get the desired components to FMC's manufacturing sites.

"He said, 'Look, if you guys want to do this, why don't you send us a rolling chassis with the axles in it, the steering system in it, minus the engine. You can send your engineers to our facility and they can work with our team to build a tractor," Laney says. "We worked real close together. They worked with our guys in the Phoenix shop, engineered their own and built that one. And they probably built us another hundred after that.

"So, it was a great partnership where I think it worked out well for both companies."

The aircraft being serviced with GSE by ground handlers are large and complex, serving as a microcosm of the industry itself.

"It's a big machine, an airline," Laney says. "A lot of moving parts. A lot of people. So, I think the biggest thing that I've learned is it takes a great team to make that happen."

Laney has always prioritized people and building strong, cohesive groups.

"Personally, I think one of the things I'm good at and give myself credit for is the teams that I've built while I was at America West and definitely here at Southwest Airlines," Laney says. "I think the biggest thing I've learned is surround yourself with the best people you can find.

"Get out of their way and support them. Certainly, that has worked for me in my career at America West and Southwest," he continues, noting nobody in his line of work runs an airline or a department by themselves. "It takes a lot of people to make things happen."

Laney also notes the importance of listening to his team. That has allowed him to learn people's personalities and put them in a position to succeed.

Understanding how someone will handle a role is part of putting a sound plan in place. And proper planning is crucial when experiencing the type of expansion that has taken place during Laney's tenure.

"If you have a good core plan, you just keep growing that plan with the right people and it works out," he says.

"In all the years of doing it, I'm still amazed at the complexity of putting everything together," he adds. "I certainly have a newfound respect for those top leaders to be able to pull off what we do to make those flights go every day.

"People just don't understand behind the scenes and what it takes."

Like any line of work, challenges are encountered. Laney has navigated his people through several difficult events, from the terrorist attacks of Sept. 11, 2001, to economic recessions and the current COVID-19 pandemic.

"In any crisis, you got to be positive - even when you're going through a challenging time," says Laney, who has been named Team Leader of the Year twice by Ground Support Worldwide. "You're going to get through it."

When a crisis ends, Laney says teams come away stronger and receive a lesson on what can be accomplished during hard times.

Adversity also builds strong relationships and Laney is proud of the partnerships he has forged.

"I think the biggest accomplishment for me is, obviously, the relationships that I've built throughout the GSE industry and the mutual integrity with all of our vendors," Laney says. "The relationships I've built are certainly major accomplishments to me. I think I'm well respected in the industry, and I think that's a major accomplishment, as far as I'm concerned.

### **Retirement Plans**

Laney is scheduled to retire on June 5. But given the current climate of the aviation industry, he is willing to stay on beyond that date.

"I still plan on leaving on the fifth. If they want me to stay longer, I will until we get on the other side of this crisis and things are looking better," Laney says.

"After everything the company's done for

me, I'll hang out as long as I'm needed."

Laney is tremendously grateful for the opportunities afforded him by Southwest Airlines and credits the company's people-first approach.

"It's just a great place to work," Laney says. "I could rattle on like a two-dollar radio.

"I feel very, very fortunate to be lucky enough to come down here and be able to participate - especially at the director level - for over 20 years. It's been special."

He has applied those same characteristics to his team in order to develop the next generation of directors.

"We have programs where we're tasked with developing the next leaders," Laney says. "I've mentored the guys on my team. I certainly hope one of the senior managers on my team gets to take my place when I leave."

When Laney's last day at Southwest arrives, he looks forward to the having more time to golf, work on his 1969 El Camino and 1955 Ford F-100 and fly remote controlled airplanes.

"People keep asking me what I'm going to do. I keep saying, 'Whatever I want," Laney says. "I may even stay engaged a little bit in the industry."

He will also have more time to spend with his family, which he thanks for being willing to move from Phoenix to Dallas and being supportive of the time he spent on the road for work.

That support allowed Laney to achieve a great deal following his humble start as a mechanic.

"Essentially, I ended up working on GSE because that's where my skillset was. That was my way to get into aviation," Laney says. "Ground support equipment is a small industry, a tight-knit group. Once you get involved in that, you're kind of hooked. It's a small world with a lot of great friends." GSW

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# **Professionalism's Value to Africa's Ground Handlers**

In a region where large disparities exist in both training and service, a qualified approach can provide pronounced benefits.

By Mario Pierobon

rofessionalism, in general, is a good business practice. In a time-constrained and safety-sensitive industry such as aircraft ground handling, professionalism has strategic importance.

In general, professionalism entails several interconnected traits that include:

- · A positive attitude
- Safety consciousness
- · Knowledge of handling procedures and the airport environment
- Familiarity with the IATA Ground Operations Manual (IGOM) and Airport Handling Manual (AHM)
- · Attention to detail
- Quick response to emergencies

"The list is non-exhaustive, but a combination of these is crucial in realizing professionalism in the aircraft ground handling environment," say Fred Kiige, regional manager of East Africa at UAS International Trip Support, and Abdul Oricha, UAS' regional operations manager of Africa.



Photo courtesy of UAS International Trip Suppor

"It is important to be able to execute the handling in a safe manner, to make sure that aircraft handlers understand that all the services are clearly defined and that they make it clear to the people that are involved in the operation," adds Henry 'Duke' LeDuc, regional operations manager at UAS. "It is also important to make sure that there is clear communication and understanding of both the operating requirements and the regulations on the field."

### **Qualification of Handlers**

At UAS, vendors of aircraft ground handling services go through a qualification before being placed on the list of preferred handlers at all UAS locations.

"A physical audit of their capabilities, GSE and records is carried out at their location during the handling of a live flight. Their track record is analyzed from authentic, locally available information and confirmed before they can be engaged. International certifications like ISAGO (IATA Safety Audit for Ground Operations) are some of the priorities for qualification," say Kiige and Oricha. "During normal operations, UAS station managers keep a keen eye on activities to observe the level and quality of service. Any non-conformity noted is shared with the handler for corrective action or reconsideration."

According to LeDuc, in Africa there is a big disparity from one country to another in

relation to the level of training and of service that is available.

"It is important for anybody who is going to be operating in Africa to have somebody who is familiar with operations on the field and who is going to be capable of supervising, such as a supervisory agent to work alongside local operatives to make sure that they get the quality and consistent delivery of services as expected," he says. "It really varies very widely between individual countries and it is important to note that several countries have monopolies and government run facilities, which may make it hard to have the equipment and personnel standard in place to be able to deliver."

UAS has supervisory agents located throughout Africa.

"We are familiar with each of these countries' operations and we have got contacts and the ability to help facilitate these types of operations. They basically will go to the location, assuming that they are not already there, and they will work with the ground handler to ensure that everything is in place, so that the operator that goes there and uses local suppliers had a good consistent delivery of services," says LeDuc.

### **Best Practices**

Kiige and Oricha believe that human resource (HR) departments at ground handling service

providers should enforce a set of practices to support professionalism in the workforce, these include:

- Encouraging dialogue and consultation within the workforce as opposed to topdown escalation of orders
- Ensuring workplace rules and regulations are well documented and understood by the workforce by making them easily available and accessible
- Providing training and accessibility to self-development protocols. This will motivate staff and ensure they are up to date with the best practices
- Regular and recurrent training in handling procedures. These are continuously updated by IATA and staff need to be up to date
- Regular and recurrent training in safety and security awareness. Dangerous Goods Category 6 certification is a must for all ground handling staff and must be renewed every two years
- Displaying the company goals and objectives clearly in areas where all staff can see and internalize them
- Establishing a system to provide feedback to staff on issues that may be of concern to them
- Adopting corrective, rather than punitive, measures in dealing with incidents and accidents



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An HR-related example at UAS is its Shining Star initiative that was created to encourage professionalism and innovation.

"Through the initiative, employees could submit their ideas and innovations on procedure at UAS by explaining how a new process could enhance quality, efficiency and performance. The finalists were then chosen and could present their ideas to executive management. The initiative proved to be remarkably popular with employees as it gave them the opportunity to have their ideas implemented - it benefited the entire organization," say Kiige and Oricha.

UAS has worked with various handlers in Africa to help them establish and develop training systems within their operations.

"International operators operating to their locations want to make sure that there are standards in place such as IS-BAH (International Standard for Business Aircraft Han-



dling), so that they can have a standard that they can train to internally. It is important for the handlers to really be committed to the training that they deliver, because, although it is an investment that they make and that

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they may not see an immediate return on, they are going to see it over time as they are going to increase the value that they provide in the business," says LeDuc.

### **Career Prospects**

Having a career prospect is important to support professionalism in the aircraft ground handling industry as it gives individuals something to be vested in.

"If they develop themselves, if they believe they have an understanding that they can make themselves better, if they have open opportunities to grow within the organization, all this plays an incredibly important role in keeping the team engaged," explains LeDuc. "If they understand what the parameters are to move on to the next level, it gives them the opportunity to enjoy what they do and have the desire to be able to move higher up."

The ground handling company should detect an operative's interest to grow and it should encourage the person by placing at their disposal reference material for them to learn basics of the industry.

"The company should train and place them under the guidance of well-established ground handling staff who should walk the journey with them and encourage them to grow," say Kiige and Oricha.

"The company should encourage structured goal setting and provide motivational awards or rewards whenever a staff member attains their development targets. This could be in form of a promotion or extra responsibilities or/and even monetary."

It is well known that the aircraft ground handling industry has high turnover almost



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anywhere, however, according to LeDuc, there are things that management can do to control the turnover, such as empowering the team to identify ways to improve.

"One of the things that we found is very helpful is to have an internal safety council that finds potential issues with processes and it is only made up of the frontline individuals and of the first line supervisors that work with the aircraft," LeDuc says. "When one realizes that there are more opportunities to be able to make changes, they are more engaged, and they also feel like they made a difference. They are also the ones who come up with a lot of the best ideas."

### Role of Safety

In ground handling safety plays a significant role at all levels.

"Any safety lapse can cause the loss of the entire business while a good safety record is a magnet for customers and investors. Most importantly, a safety lapse can cause the loss of lives. Companies must reinforce safety awareness by ensuring mandatory periodical safety training and a monitoring system that ensures every staff member is trained at the appropriate time," say Kiige and Oricha.

"There must also be a system to ensure the quality and standard of the training conforms with the industry recommendation," they continue. "The company needs to develop a safety culture among staff so that it becomes part of their psyche and a guiding light to everything they do. This way the company develops a professional workforce."

Safety awareness can be reinforced as part of personal development.

"Safety is about having the understanding of the whole team engaged and not just having a safety officer and a group of people that are watching out for the safety officer. Safety awareness is to be incorporated into all of the processes. Everybody has got to feel like they have got to invest interest into ensuring that things go right from the very top. It is important to have a combination of the means of reporting and of rewards to encourage people to be involved in the safety process," says LeDuc.

"The UAS Africa team has a robust safety awareness program where members of the team are tasked with ensuring the entire team is continuously up to date with safety regulations and guidelines provided in the company SOP. Safety seminars are conducted regularly through various means ensuring the team understands the importance of the training and how to effectively react in a live situation," say Kiige and Oricha.

"During operations, our station managers are always mandated to wear personal protective equipment (PPE) provided by the company and to ensure the handler staff use the same," they add. "High visibility jackets, safety shoes, gloves for equipment operators and baggage handlers are mandatory for all staff on ramp during our operations." **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 marioprbn@gmail.com.



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erhaps not the most glamorous part of the job, the contract between a ground service provider and an airline might be the most crucial. Without it, there wouldn't be a job to speak of.

And like the work on the ramp, the process a ground service provider goes through in submitting a bid that is both competitive and sustainable requires a careful touch - a process compounded when regional companies are competing with global

For all, the process begins when an airline sends out a request for proposal (RFP).

"Generally, the carrier will send out an RFP to known qualified service providers when they have a new need. The need can be driven by new market entry for an airline, a significant change in service scope, ensuring that their current price is competitive or a necessary move due to an underperforming provider," says Mike Hough, CEO of GAT Airline Ground Support.

Brian Giacona, VP of operations at AccuFleet, says that over the years, airlines have begun using one vendor for multiple services, finding there is "synergy" in the method.

"Airlines, while they're trying to get the best service, are also working on being cost conscious," he says. "It all depends on what their needs are at the time. The carrier will provide a schedule. Sometimes they provide requirements as far as staffing and they will provide us with specifications of what exactly they're looking for. From there we will build our model based on all of their specifications."

Sometimes, carriers will put in minimums that might exclude service providers from getting on the bid list.

"They're not going to request service from a company with a total of five employees nationwide for a contract that requires 500 people," Giacona explains. "The large U.S. carriers, when it comes to ground handling, unless you're doing ramp service in another city for someone, they normally will not take the chance on you because they're not 100 percent sure



that you know what you're doing and they don't necessarily want to take a chance with a \$100 million airplane in taking someone who's green in that realm and putting them out on their ramp."

Each respondent to an RFP determines how best to staff the operational demand, what equipment will be needed to be provided and what unique challenges the given airport or service will present. Then the ground handler puts its best effort at a response forward. Hough notes, however, that price is often not the sole determining factor for an airline.

"Carriers will narrow it down to those that seem to be clustered around the best price point and have the greatest capacity to do a good job. Most of our partners do not consider price as the sole determining factor. We have seen an important shift to the level of quality they will receive and we consistently market this as the 'cost per quality unit' equation," Hough says.

Reputation, Mark Rudkin, AccuFleet's director of sales and marketing, agrees is one of the critical factors.

"A lot of it comes from reputation. A lot of it comes from trust," he says. "Making sure that the flight isn't going to be late because of something that you, as the vendor, is doing is crucial. So, having the reputation and maintaining that level of experience and trustworthiness for our airlines is a big driver."

### **More Than Money**

With money not being as large of a deciding factor, the field between a regional and global service provider becomes more even. Both AccuFleet and GAT say they are never in the position where they must submit a bid that is too low to stay competitive.

"We guard against it [submitting unsustainably low bids] by being committed to our values. Everyone on the GAT team knows if



we cannot be sustainable, it will only damage our reputation in the long run. It is tempting to lower price to continue our growth trajectory, but we know that doing so will destroy the foundation of what we have built," Hough says.

"We don't submit a bid to just gain work," says Giacona. "Our first and most important thing that we do is we submit a bid that is realistic in the sense that we will not go to a customer or a potential customer and say, 'Hey, this is the lowest price I can offer and I'm getting to it because while you require five people, I'm going to put down three.'

"We would rather go to a customer and say, 'Look, we know we're not the lowest bidder, but this is realistically what we need to do the job,' and we'll explain to our customer exactly how we got to that point. We want to be upfront and honest when we do a bid."

Rudkin adds that AccuFleet drafts a detailed bid model for each proposal, popu-

lated with every assumption they are making for every market and every service line, which allows for their pricing models to be transparent and easily visible for carriers.

"They can have trust and peace of mind that it isn't just a number that we're throwing out to see whether or not it will stick, but rather it's a well thought out pricing model that comes from us actually looking at the numbers and doing the work," Rudkin says.

AccuFleet's ability to be transparent is achieved with the help of iRod, AccuFleet's proprietary in-house system that logs everything their employees do for a carrier.

"When the airplane arrives, we take photos of the entire airplane upon arrival showing that there's no damage to the airplane, showing that we're at the airplane providing the service. When we unload the airplane, we go onboard and show that all of the bins are empty, all of the bags have been removed, so



we're not leaving anything behind or sending it back to where that airplane is going," Giacona describes.

"We also, at the end of the flight, take pictures again of the airplane showing that we did not damage the airplane in any way, shape or form before that airplane pushes back and heads to its destination," he continues. "And all of that is uploaded into an internet-based system that our customer has a login for and they can log-in at any time and see all of those photos and see what we're doing with their airplane."

iRod also benefits AccuFleet's employees, streamlining worker communication and offering training, education and certification programs, which has helped AccuFleet keep turnover low. Rudkin says it is another benefit to assist AccuFleet during a bid process.

"We're driven by the idea of making ourselves a place that people prefer to work for. We want to be an employer of choice. Particularly with the ground handling world and working in airports, there's a big disadvantage in turnover if you have to wait for badging and certification to maintain the workforce that you have. So that's a big piece of it," Rudkin says.

Hough, too, says that while larger companies may be able to offer more competitive pricing, GAT's focus is on attention to customer satisfaction and the quality of service.

"While some of the larger ground handlers have the scale to offer more competitive pricing at times and much larger back office staff teams to aid on administrative tasks, our explosive growth is due to our commitment to quality and delivering a new kind of service provider experience. Our customers seem to be noticing the difference," Hough details.

"Over the last three years, GAT has transformed from a solid service provider with a good reputation into a top-level provider,"

Hough adds. "We have differentiated by starting from a deep cultural base focused on our team and our core values and layered in best in class safety practices, technology, and data management to become consistently ranked in the top one or two service providers by our largest customers."

### Don't Forget About the Airport

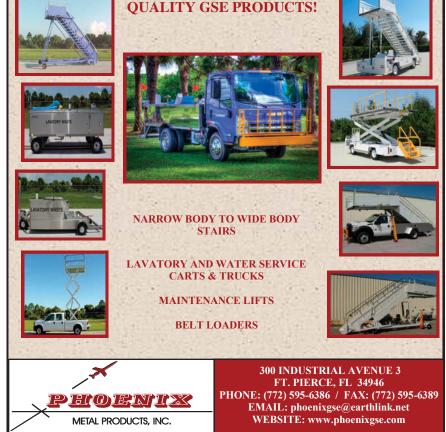
While generally not entering the process until a ground service provider and airline have agreed upon a contract, the airport where a vendor will be entering is still an important factor of the equation. Knowing an airport's nuances can set apart one bidder from another.

"Know the airport and its key players," Hough stresses.

Rudkin says AccuFleet incorporates the airport into their bid modeling when entering a new location.

"When we're looking at a procurement at a new airport that we haven't been in, part of the due diligence for us is to find out, what are the costs per square foot to rent office space, is it on the ramp or off the ramp? What does it cost for badging for employees?" Rudkin says. "We look at every part, whether it's a franchise fee or a service fee that the airport charges. We don't want any surprises."

Each airport is different, says Giacona, and the service that will be provided influences what a company will need from the airport to get up and running, but every vendor will need at least an operating permit.



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"Every vendor at every airport throughout the U.S. at least has to have an operating permit with that specific airport. Now depending on what type of service you're doing, the airport also may apply other restrictions to getting that permit. For example, you might have to have lease hold space, you may need to have a certain number of employees in order to operate on an airfield or at least be badged on that airfield to operate under your own permit," Giacona says.

One if the biggest hurdles is working with airport security; getting every employee through a process of fingerprinting and background checks, which must take place before any other work can be done.

However, to begin those processes a vendor must have their contract in hand.

"The first step to any airport is obviously obtaining a contract or at least a letter of intent from a carrier that operates at that airport or is going to operate at that airport saying, 'This is the vendor I want to use.' That process, depending on the airport, can take three months to a year to accomplish," Giacona says.

Giacona adds that it's possible do some checking beforehand on getting information, and that there is some due diligence that will be done ahead of time so when the carrier makes their decision, the vendor is ready to move forward. But even then the information is very limited.

"We recently opened up at a new airport back in March. Until I physically had a letter





of intent from the air carrier in hand, they wouldn't talk to me about anything," Giacona recalls. "They would not discuss the badging process or discuss rental prices on the airfield. As soon as I had the letter of intent from the

air carrier, they gave me all of the information I wanted. They set up meetings with us on a weekly basis. So, it moves rather quickly once you have some form of letter of intent in place." **GSW** 



# **An Electric Solution for Conventional Pushbacks**

Goldhofer has extended its line of BISON tractors to include two electric models.

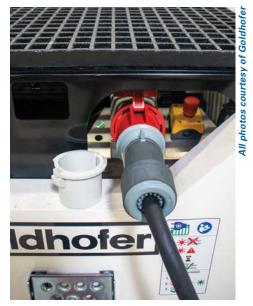
By Eavan McGrath

oldhofer has developed two electric models to complement its BISON line of pushback tractors. This family of conventional pushbacks now has six models, including the electric BISON E 370 and BISON E 620.

"At GSE Expo 2018 we presented the BISON family in the diesel versions D 370, D 620 and D 1000, plus the electric version, E 370," says Christof Peer, sales director of airport technology at Goldhofer. "The more powerful models BISON D 1500 and the electric BISON E 620 made their public debut at inter airport Europe 2019."

The redesign and modification of these models was dictated by the need to adapt the F series, which came into the Goldhofer portfolio when the company acquired Schopf. The objective was a uniform modular design for the BISON series, with a high proportion of carry-over parts and standardized operation.

"Users can choose between different sizes, drive trains, motor power and cabs for specific requirements. Identical parts save storage and costs, and flexible ballasting allows individual configuration," Peer says.



The two electric BISON models differ in battery power, weight class and the range of aircraft they serve.

"The BISON E 370 is designed for aircraft weight range until 100 tons, while the BISON E 620 is for aircraft weight range until 250 tons," says Peer.

The features that have been incorporated in the BISON E design combines the same reliability, safety and flexibility as the diesel-engine models.

Since this product has launched, updates to the batteries have been modified to run longer for a lasting experience.

"The highly efficient 400 V lithium-ion battery is designed for fast charging, including intermediate charging, and offers 30 percent higher availability than lead-acid batteries," Peers notes.



The lifespan of the battery depends on the number of charging cycles. At least 2,500 charging cycles are possible, Peer adds.

The BISON E can be charged with existing infrastructure if a 32-amp or 63-amp CEE socket is available. Goldhofer's proprietary IonMaster technology allows for intermediate charging, even during short breaks between turnarounds.

"The great advantage of our IonMaster technology is the use of high-performance lithium-ion batteries that allow for opportunity charging," Peer notes.

That means the e-tractors can be operated almost continuously over several shifts with active temperature management ensuring maximum battery life, Peer adds. With vehicles charged and available on a near permanent basis, the size of the fleet can be reduced as an individual operation allows.

"The IonMaster system is a powerful electric drive operated with high-voltage lithium-ion batteries. As an efficient modular long-life drive concept, IonMaster technology is the key to the highly economical use of the vehicles operated with a range of charging infrastructures," Peer says.

When working with lithium–ion batteries there must be training provided to ensure safe operation.

"Goldhofer accordingly offers not only dedicated training courses for users but also high-voltage equipment training courses for in-house maintenance personnel," Peer says.

In addition to user and workshop training, customers can also benefit from the company's extensive spare parts and repair service, Peer notes.

"When changing over to electric tractors, a number of factors have to be taken into account. In order to benefit from the entire e-mobility added-value package combining efficiency, sustainability and cost-effectiveness, changes in the ground handling infrastructure, for example, are a key issue, and Goldhofer Airport Technology accordingly offers a full range of advisory services," Peer says.

The services offered are important because decisive questions must be clarified regarding vehicle requirements, charging infrastructure, fleet size and management of the e-tractor fleet.

The Goldhofer Airport Technology division has a focus on the specific requirements of airport logistics as well as the Transport Technology division that delivers user-oriented heavy-haulage solutions and a full range of dedicated accessories for on- and off-road operations with payloads of up to 15,000 tons and more.

Another key consideration for ground handlers is cab capacity. The BISON's three–man cabin accommodates a driver and two others.

"The Goldhofer tractors are currently available cab-less and with enclosed cabs," Peers says. "Open-cabs models will soon follow."

The BISON E models require less maintenance, and identical parts save on storage and other costs while flexible ballasting allows individual configuration.

The BISON E can be used for long–range towing applications in addition to pushback operations.

"The first BISON E vehicles are still being tested, overall, it can be said that our customers are highly satisfied so far," Peer says.

Though a towbarless option is under development, the entire BISON range consists of conventional tractors with tow-bars.

"At last year's inter airport Europe we unveiled the prototype of



the PHOENIX E electric towbarless tractor," Peer says, noting the test phase for this tractor was scheduled to begin in March.

Geographic location, climate, traffic volume should all be taken into account when making a selection for a BISON E pushback vehicle size. The operational profile and battery capacity also need to be defined. **GSW** 



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### **TOW TRACTORS Timsan**

Timsan offers several tow tractors with drawbar pull from 17 to 120 kN. The company has several military customers including Turkish Army and military forces of Ally countries. The TIM 17 and 25 has electrical versions available.

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### **MODEL 140 LOW PROFILE PUSH BACK TRACTOR Wollard International**

The Model 140 has 8,000 to 14,000 lbs. DBP ratings in a low-profile, multi-purpose tow tractor with a low center of gravity, which is well established in pushback and cargo hauling applications. It has a planetary reduction drive axle, which reduces driveline stress, amplifies torque and places engine horsepower and RPM at usable ramp speeds. It features a plate steel, electric welded, unibody chassis. The tractor is ideal for corporate, regional jet and FBO pushback duties. Model 140 can be powered with gas, diesel, LPG or CNG, and can be customized with many factoryinstalled options.

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### SPACER 8600 Mototok America LLC

The Mototok Spacer 8600 is suited for pushback operations. The Spacer 8600 comes with a NTO license for 737s and 320-family, with others to follow. With low initial and maintenance costs, the eco-friendly electric drive and the one-man-operation (without the need of any driving license), users can utilize this tug for all apron and hangar operations.

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# B950 PUSHBACK TRACTOR JBT AeroTech

The JBT B950 pushback tractor is extremely easy to operate with a comfortable cab with great visibility and automotive feel with intuitive controls. It is easy to maintain with convenient positioning of components inside two side–access panels from ground level and reliable drive–line componentry contributing to durability and longevity of service. The B950 is targeted for customers that handle aircraft up to and including the B787 and A350. The JBT pushback tractor product line (B250/B350/B650/B950/B1200) can service all commercial aircraft fleets.

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# TUG ALPHA 4 Textron GSE

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(EL), electric with range extender (ELRE) or diesel powered.

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### **Textron GSE -Douglas Equipment Ltd.**

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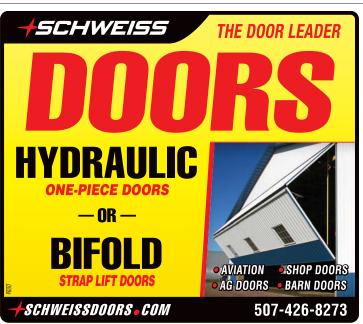


### **PUSHBACK PROCEDURES VR** TRAINING SIMULATOR **KBY Software LLC**

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### PEERLESS GEAR'S 2600 TRANSAXLE SERIES

### Peerless Gear

Peerless 2600 series hydraulic final drives provide performance, durability and ease of operation for commercial riding vehicles. Peerless 2600 series final drives coupled with a Peerless FDM-718 series hydraulic motor can provide up to 1,200 ft. lbs. of axle torque.

AviationPros.com/21112582

# TPX-100-E

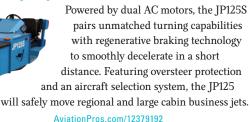
The TLD TPX-100-E is a fully electric towbarless tractor designed for the pushback of most commuters and single-aisle aircraft up to 100 tons. The TPX can now be fitted with a remote control feature, allowing single-person



operation over the entire pushback event to offer a faster, safer, more environmentally friendly experience. The ergonomic cabin also offers protection from the elements to deliver flexibility for the operator.

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### JP125S – 125,000 LB CAPACITY Jetporter, a Tronair Company



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# DAVIN Inc.

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CONTACT: David Zschunke - DavinGSE@att.net 95 Crooked Hill Road, Commack, NY 11725

### This Month's Featured Equipment:

### **PUSHBACKS**

- (1) 2005 FMC Model B400 35K GVW, 28K DBP Cab & AWS
- (1) 2007 TLD, Model TMX-150-15 33K GVW, Cab & AWS

### **DEICERS**

- (1) 1999 FMC, LMD2000 Freightliner Chassis, Open Bucket
  - (1) 1999 FMC LMD2000 Sterling Chassis, Enclosed cab, First Air

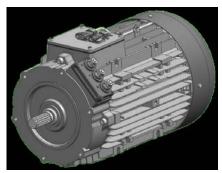
### CARGO LOADER

(1) 2006 FMC Commander 15l Wide Deutz diesel 9,100 hours

### **CABIN SERVICE TRUCKS**

- (1) 2000 Global, CT-22-228, High-lift, International 4700 diesel
- (3) 2005 Global, CT16-168, High-lift, Ford F650 diesel

Visit: www.DavinGSE.com 631-499-6363 • DavinGSE@att.net



### 30 KW AC-MOTOR FOR GSE APPLICATIONS ABM Drives Inc.

ABM has developed a powerful AC induction motor with a rated power of 30 kW and 300 Nm peak and breakaway torque. This motor is strong enough to push or pull heavy loads like airplanes and baggage tow trucks, self-propelled passenger stairs or belt loaders. High protection degree and the robust and maintenance free design allow a heavy duty usage in rough environmental conditions. Combined with commercially available gear boxes and ACcontrollers the system provides a very precise, smooth, powerful, reliable and safe operation and movement of the vehicles.

AviationPros.com/12371117

### **CHALLENGER 150E Trepel Airport Equipment**

Trepel's electric conventional aircraft tractor allows users to handle B737 and A320 fleets while also pushing out the B767-200/300 at maximum ramp weight. The hydro-pneumatic



front axle suspension provides driving comfort for the operator. Options include open drivers stand with side safety bars and solid tires.

AviationPros.com/12432218

### **EVA HD9500-D-CE AES Inc.**

The battery-operated EVA series is designed for short towing operations and the movement of fighter aircraft, GSE and equivalent equipment in congested areas. The EVA series tow vehicle is based on



six parameters: controllability, safety, ease of use, maneuverability, storability and no emissions. Tested to conformity with the following standard(s) or other normative document(s): EN ISO 3691-1:215, EN 16307-1: 2013 EN 1175-1+A1: 2010, Annex 1of 2006/42/EC EMC machinery Directive 2006/42/EC, Electromagnetic Directive 2014/30/EU Directive.

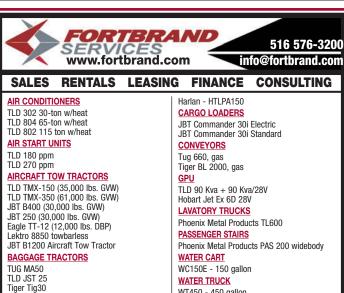
AviationPros.com/12434634

### CT5 BAGGAGE TRACTOR **Charlatte of America**

The CT5 comes with a choice of two gas engines – either a Ford four-cylinder, 2.5-liter engine or a four-cylinder Kubota. It also is available with a Kubota diesel engine. A Paillard axle is in front and an Newage axle







WT450 - 450 gallon



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Toyota - TD23/25

# 4,700LB MDP – LITHIUM BAGGAGE TRACTOR

### **Avro GSE**

Avro 'next generation' baggage tractors offer leading edge performance, design and functionality. Designed to exceed expectations and deliver extraordinary ROI, each



tractor features standard functionality such as hydraulic steering, front and rear towing couplers with cab control, complete cab enclosure including windshield and wiper kit, Curtis controller with self–diagnosis functionality, vacuum assist hydraulic brakes, complete telematics (Avro Tracker) for remote diagnostics and monitoring, along with the Avro Care managed maintenance program.

AviationPros.com/12425900

### ► EMOVER HYDRO Systems KG



HYDRO Systems offers an emissions–free electrically powered vehicle. The emover is able to push and pull several types of aircraft ranging from from the E170 to the A380.

AviationPros.com/21110416

# SIPSHITCH AERO Specialties

The SiPsHitch patented linear force monitoring system alerts tractor operators to overstress situations before they cause aircraft nose gear damage,



affording improved levels of protection in towing operations. SiPsHitch is a add on option for all makes of aircraft towbar type tractors.

www.AviationPros.com/12371122

# EAGLE TTR SERIESEagle Tugs, a Tronair Company

The Eagle TTR Series is the next generation of Eagle

tractors, implementing clean burning Tier 4 technology and improved design features. The Eagle TTR-6, 8 and 12 tractors were designed to tow or push rotorcraft and light to super mid-size business and regional jets in all weather conditions.

AviationPros.com/21112080

### TECKNOSIM PUSHBACK AND TOW SIMULATOR

### **Tecknotrove Systems**

The Tecknotrove Systems TecknoSIM Pushback and

Tow Simulator has been specifically designed for training and skilling of pushback operators. The simulator combines the original controls of pushback equipment with a high definition curved display screen and is mounted on a 3 DOF electric motion platform to create a realistic and



immersive training experience. TecknoSIM simulates both towbar and towbarless pushback equipment.

AviationPros.com/12349154

# 613 SERIES 12,000LB DBP TOW TRACTOR DRIVE AXLE

### **PRM Newage Axles**

The Newage 613 planetary double reduction rigid drive axle has been designed and developed to withstand the demanding range of applications encountered within the ground support equipment industry.



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JBT B650	Commander 15 Univ.	TLD 180kva	TLD ACU 115 ton
JBT B700	Commander 30i	Hobart 28.5V	Lebrun GF30
JBT B1200	Tug 660 Belt Loaders		
Bag Tugs	Air Starts	Dollies	Stairs
TLD JST-25	TLD ASU 270 ppm	Clyde LD3,	Maintenance Stairs
Tovota TD-25	Tug TMD 270 ppm	LD7. LD8.	Crew Stairs

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# When Leadership is Needed Most

A positive approach, clear communication and teamwork are important tools to help any group navigate turbulence.

n behalf of all of us at Ground Support Worldwide, we would like to offer our congratulations to the Leaders of the Year featured in this month's issue.

Additionally, we would like to extend our thanks to everyone who took the time to send us so many worthy nominations for this program.

Getting a closer glimpse of some of the leadership in our industry gave me a spiritual boost in light of the current economic situation facing aviation. These are trying times, to say the least.

In talking with both our Team Leader of the Year, Dana Perry, and Lifetime Achievement recipient, Larry Laney, both men emphasized the importance of remaining positive.

A leader's actions give others license to behave the same way. And leadership qualities become exponentially more important during a crisis. So, whether a leader is conveying positivity or negativity, it will spread.

A focus on the positive and helping the industry emerge stronger is far more useful than dwelling on details that cannot be changed.

Beyond positivity, focus on clear communication. Make sure your team has the information needed to be engaged, efficient and safe.

Adversity also brings people together. That is certainly taking place now as industry decision-makers are banding together to formulate plans that will help us weather COVID-19.

We don't know exactly what the future holds for aviation, but strong leaders will always guide their teams to success in the face of hardship.

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