**Product Hangar: Passenger Stairs & Boarding Bridges** 



No 'let-up' for ground operations as airlines and airports push to improve passenger experience and cut the baggage mishandling rate in half.

RAMP

### INTERNATIONAL

### Swedish Voc-Tech School Trains Tomorrow's Ramp Agents

"Through continuous development, we can train our students to become responsible ramp workers, making the transition from student to employee as smooth as possible.' Page 12

FEBRUARY 2014

**AviationPros.com** 

# THERE'S SOMETHING IN THE AIR...

BE SURE TO VISIT US AT BOOTH #301!

And it's more than just another flight departed on time thanks to a Hobart GPU. Maybe you've experienced our enhanced customer support department, where we are not done making improvements yet. Maybe you've heard about the next-generation Hobart GPU, for a new, advanced generation of electric aircraft. Whatever you've heard, rest assured that Hobart has good news to announce at this year's AviationPros LIVE in Las Vegas.



Headquarters: 11001 US Hwy. 41 North Palmetto, FL 34221 U.S.A.

Phone: 941.721.1000 • Fax: 941.721.1087 E-Mail: Sales@HobartSystems.com

Editor Steve Smith

920.563.1644 steve.smith@AviationPros.com

Associate Publisher/

Sales Missy Zingsheim 920.563.1665 missy@AviationPros.com

International

Sales Manager Lutz Krampitz +49 0 203 456 82 66 fax +49 0 203 456 85 38

krampitz@krampitzVv.de Germany, Switzerland, Austria, Turkey, Scandinavia

International

Sales Manager Stephanie Painter +44 1634 829386 fax +44 1634 281504

Stephanie@painter-lowe.com

United Kingdom, France, Netherlands, Spain, Ireland, Italy

List Rental Elizabeth Jackson 847.492.1350 ext. 18 ejackson@meritdirect.com

**Production & Circulation** 

Art Director Rhonda Cousin

Media Production Rep. Carmen Seeber

920.568.8373 carmen.seeber@AviationPros.com

Circulation Manager Debbie Dumke Production Director Steve Swick

AviationPros LIVE

Trade Show Director Michael Sasso

920.568-8389 michael.sasso@AviationPros.com

Published by:





#### **Cygnus Aviation, Technology** and Transportation Group

Gloria Cosby - Executive Vice President

Gerry Whitty - VP, Marketing

Larry Greenberger - Group Publisher/

Transportation Group

#### Cygnus Business Media

John French - CEO

Paul Bonaiuto - CFO

Julie Nachtigal - VP, Audience Development

Eric Kammerzelt - VP. Technology

Ed Wood - VP, Human Resources

Curt Pordes - VP, Production Operations

#### Published and copyrighted 2013 by Cygnus Business Media, 1233 Janesville Ave., Fort Atkinson, WI 53538 USA. All

rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording or any information storage or retrieval system, without written permission from the publisher

#### Cygnus Reprint Services

To purchase article reprints, please contact Wright's Media at 877.652.5295 or email info@wrightsmedia.com.

Subscription Policy: Subscriptions are free to qualified businesses. Others may purchase subscriptions at these rates: US, 1-year \$45, 2-years \$85; Canada & Mexico, 1-year \$65, 2-years \$120; All other countries, via airmail, 1-year \$95, w-years \$180. Single copies \$10.

Ground Support Worldwide (USP 015-386, ISSN 1934-2861 print, ISSN 2150-4016 online) is published ten times annually in February, March, April, May, June/July, August, September October, November and December/January. Periodicals postage paid at Fort Atkinson, WI and additional mailing offices.

Change of address or subscription information: Toll Free-877-382-9187, Local - 847-559-7598, circ.groundsupportww@

POSTMASTER: Please send address changes to Ground Support Worldwide, Cygnus Business Media, PO Box 3257, Northbrook, IL 60065-3257. Printed in the U.S.A.

Canada Post: PM40612608. Return undeliverable Canadian addresses to: Ground Support Worldwide, PO Box 25542, London, ON N6C 6B2. Canadian GST #842773848.







### CONTENTS



### 8 The Digital Ramp

No 'let-up' for ground operations as airlines and airports push to improve passenger experience and cut the baggage mishandling rate in half.







### **Swedish Voc-Tech School Trains Tomorrow's Ramp Agents**

'Through continuous development, we can train our students to become responsible ramp workers, making the transition from student to employee as smooth as possible.'

**Powering Aviation From The Ground Up** 

Two-day conference and exhibition brings the 'aviation pros' to the Sands

### DEPARTMENTS

- In The News
- **Product Profile**

KCI Develops Solar-Powered Passenger Ramp

**Product Hangar** 

Passenger Stairs & Boarding Bridges

- **Classified Advertising**
- 34 Editor's Note

Expo Convention Center, Las Vegas, NV, March 25-26.

### 20 SAE Offers A Wealth Of GSE Technical Information

AGE-2C currently maintains a library of 85 documents consisting of design specifications and practices, recommended practices and test procedures for a wide range of GSE and subsystems as well as maintenance recommendations.

### COLUMNS

### 22 Ramp Safety

The Need For Comprehensive Safety Risk Management

### **25 Maintenance Matters**

Airside GSE Puts dnata's Equipment Through A 'Through Examination'

### IN THE NEWS

### **Major Events in 2014**



### **Business Buzz**

San Antonio, TX

### **FCX, PAGE announce** marketing partnership:

FCX Systems and PAGE Industries announced an exclusive agreement that allows PAGE to market and sell the FCX 400 Hz, 270V DC and 28V DC full product lines to both the commercial and military markets.

### **Eagle to become Envoy:**

American Eagle Airlines announced it would change its name to "Envoy." The name change will happen this spring.

### **Qantas lays off 35** ground handlers:

Qantas will cut all 35 of its ground-handling staff at Hobart International Airport as it shifts the operations of services to the Tasmanian capital to its regional offshoot, QantasLink. The airline said it would outsource the work.

### **Baltic expands ground** handling training: Baltic

Aviation Academy, which added ground handling training programs last December to its wide range of services is now expanding the program with additional services. Baltic Aviation Academy's ground handling training programs are designed according to the IATA and EASA Ground Handling Training requirements

### Great winter for deicing industry: A report

Bloomberg Businessweek recounted "the blistering good year," deicing manufacturers are enjoying during this year's winter in North America. Kilfrost has already shipped about 70 percent of the deicing fluid it expected to sell this winter, with two-thirds of the season remaining. Airlines at O'Hare have used 1.06 million gallons through Jan. 15, compared with 1.1 million gallons for all of the 2012-13 season.

### Airfares rise for fourth straight year: The price

to board an airliner in the United States has risen for the fourth straight year, making it increasingly expensive to fly almost anywhere. The average domestic round-trip ticket, including tax, reached \$363.42 last year, up more than \$7 from the prior year, according to an Associated Press analysis of travel data collected from millions of flights throughout the country. The 2 percent increase outpaced inflation,

which stood at 1.5 percent. Airfares have risen nearly 12 percent since their low in the depths of the Great Recession in 2009, when adjusted for inflation, the analysis showed.

### Airlines on a buving

**Spree:** Airlines are on the largest jet-buying spree in the history of aviation, ordering more than 8,200 new planes with manufacturers Airbus SAS and The Boeing Co. in the past five years. There are now a combined 24 planes rolling off assembly lines each week, up from 11 a decade ago. And that rate is expected to keep climbing. Southwest Airlines, JetBlue Airways, Spirit Airlines and just about every other U.S. carrier has a large order in place. Domestic carriers spent \$11.6 billion last year on capital improvements including new planes — up from \$5.2 billion in 2010.

### **CHC** wins AAGSC safety award: Christchurch

International Airport won the 2013 Safety Award from the Australasian Aviation Ground Safety Council. According to AAGSC Chairman Keith Butler, the airport won for many deciding factors including the installation of CCTV monitors, lights which are lit when aircraft are about to push back and a monthly FOD "parade."

### SeaTac bosses to consider wage issue: The

Port of Seattle Commission will consider the wage issue at Seattle-Tacoma

### **Advertiser's Index**

Advertiser	Page #
A T Juniper	31
ASIG	11
AviationPros LIVE	35
Columbus Jack	6
David Clark Company	y5
Engine Distributors	36
Global Ground Suppo	rt18
GSE Intl	32
<b>Hobart Ground Syste</b>	ms2
Hydraulics Intl	20
Lektro	30
Maxpro Companies	15
Mercury GSE	32
Par-Kan	28
PF Fishpole Hoists	30
Phoenix Metal Corporation	19
Premier Engineering Manufacturing	& 14
Rampmaster	21
Rotorcraft	10
Servicore	31
Starline GSE	28
U.S. Airmotive GSE	17
Wasp	13

International Airport after a judge's ruling that a ballot measure that raised the minimum wage could not be enforced for airport workers. The commission made no specific promises about the 4,700 workers at the airport, saying it will act by June after public hearings.

### **Back and forth for** Airbus, Boeing: Airbus

delivered 626 jets in 2013, 22 fewer than Boeing, but pulled in an estimated \$38 billion – nearly \$13 billion less than Boeing, which delivered more larger, expensive planes. On the orders side, however Airbus topped Boeing for the year, winning back the sales crown it lost a year earlier. Airbus booked a record

1,503 net orders vs. 1,355 net orders for Boeing.

**Logan Teleflex becomes Daifuku** 

Logan Teleflex has announced the rebranding of the company as Daifuku Logan. The name change reflects the global integration and consolidation of Daifuku's global ABH (Airport Baggage Handling) Division, which stretches from the USA - and includes world leading materials handling integrators such as Daifuku Webb and Wynright - across the globe to the Asia Pacific region, Japan and China.

### **New Deals**

### **Jetstream Ground Services**

announced a contract from Frontier Airlines for ground handling services at Charlotte Douglas International Airport and Memphis International Airport that include both under-wing and above-wing services. The contract starts this month at CLT and in March at MEM.

### **Aviation Ground Handling**

announced the company has been awarded the ground handling contract to provide services to Alliance Airlines at Miles Airport, Queensland, Australia. AVGH will provide a full range of ground support services to Alliance on its F50 and F70 aircraft servicing 13 fly-in/fly-out charter flights per week to Brisbane.

### **Aviator sold Røros Flyservice**

**RRS AS**, a company that operates aviation services at Røros Airport in Sør-Trøndelag, Norway. Aviator and Røros Flyservice RRS AS will continue to cooperate and look for areas of further cooperation.

**Swissport** signed a multi-year ground handling contract with Germanwings at four locations, Birmingham, Geneva, Helsinki and Madrid. The network will be further expanded over the next

two years. Germanwings, a part of the Lufthansa Passenger Airline Group, is taking over all of Lufthansa's direct European flights that do not use the Frankfurt or Munich hubs. The airline is expected to operate a flight network of more than 100 destinations within Europe by the end of 2014. In other news, the company announced that the acquisition of Servisair from the Derichebourg Group was finalized Dec. 23. With the closing, Swissport now



### IN THE NEWS

employs more than 55,000 people, and the company's network exceeds 255 stations in 46 countries.

JBT AeroTech business won a contract valued in excess of \$19 million for

a major airport in Asia. The contract includes the supply of boarding bridges, GPUs and PCAs. In other news, JBT Aerotech also announced additional contracts valued in excess of \$22 million for aviation support equipment by

a global airframe manufacturer. Also, crews at the Quad-City International Airport, Moline, IL, will replace half of the jet bridges with new equipment manufactured by JBT AeroTech.

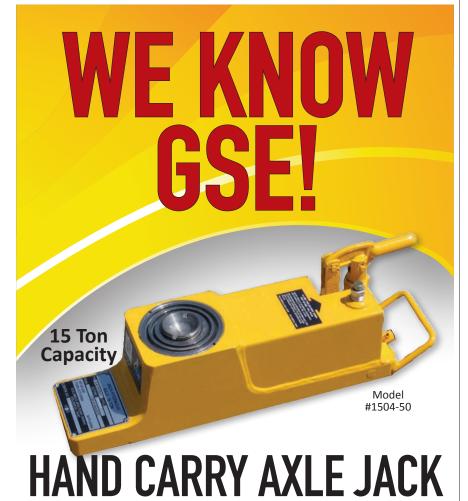
AAR announced that its Nordisk Aviation Products division has begun delivery of 900 Nordisk lightweight cargo containers to Vietnam Airlines. Vietnam Airlines currently has approximately 2,000 Nordisk containers already operating in its fleet.

### **ARGUS International, Inc.**

announced a new partnership with the Independent Fixed Base Operators Association that will enable its members to receive special pricing on the TRAQPak FBO tool and the new Safety Management Systems (SMS) for MRO and FBO Course.

**Jetex Flight Support** announced the opening of three stations in airports of Turkmenistan: Ashgabat, Turkmenbashi and Turkmenabat.

Airport ground handling services firm **Décor Aviation** is setting up a new low-cost carrier which would start with regional flights in the south India under the banner of Air Pegasus. The carrier, which is expected to commence operations in the next two months, will have Bangalore as its hub.



Our Hand Carry Axle Jacks are designed to meet jacking specifications for normal tire/wheel and brake replacement. These self-contained jacks come with a manual hand pump and provide maximum capacity within a lightweight and compact configuration for ease of carrying and transporting to



AviationPros.com/company/10134078

### **People**



Dave Burkadin joined JBT Corp. as vice president and division manager, JBT AeroTech. Burdakin joins JBT with more 25 years of experi-

ence in industrial manufacturing and leadership. Most recently he served as non-executive chairman of Mayline Corp., a private equity owned industrial company. Burdakin holds an MBA from Stanford University Graduate School of Business and a Bachelor's

the jacking site.

degree in Industrial Engineering from Lehigh University.



Daniel Setz was appointed senior vice president/cargo operations for Swissport International. Setz has substantial international

experience with more than 20 years working in the transportation and logistics industry. Over the course of the last decade, he held several general management positions, lastly for the Panalpina Group as country managing director and senior vice president for Brazil. Earlier, Setz worked in various positions with country responsibility in Panama, Italy, Ireland and Mexico. Setz directly reports to Nils Pries Knudsen, head of global cargo services at Swissport.



In other company news, **Tommy Watt** was promoted to executive vice president for the United Kingdom and Ireland, also becoming a formal

member of Swissport International's Group Executive Management.
Watt is directly reporting to Per H.
Utnegaard, group president and CEO.
Watt joined Swissport following
the completion of the merger with
Servisair last December. In his new
position Watt is responsible for all
ground handling and cargo handling
activities of Swissport in the region,
with a focus on a successful merger of
the two companies as well as the con-



solidation and further expansion of the business in this region. Also, the company appointed **José Canales** as senior vice president for Latin

America. Canales is reporting to Juan José Andres Alvéz, executive vice president for Europe, Africa & Latin America. Canales has 18 years of international experience working in the transportation and logistics industry and is joining Swissport from Panalpina, where he held various senior management positions.

William R. Long has joined Sasser Family Holdings Inc. as managing director responsible for operating the company's new GSE finance division. Sasser will provide equipment financing and asset management services to the aviation industry across all GSE asset types for North America (United States & Canada). Services will range from short-term rentals to long-term leases and traditional fixed purchase option structures. The company also provides trade-in services and purchase of excess GSE assets from its clients.

Jason Maga, general manager in Honolulu for ASIG was named Fuels Station Manager of the Year by the National Petroleum Management Association. The award recognizes those individuals who have made significant achievements in the aviation fuel industry. ASIG is contracted by the Hawaii Fueling Facilities Corp., a 22-member airline consortium, to manage and operate the various jet fuel facilities that comprise the fuel distribution network for the Hawaiian Islands.

After more than 30 years of service to



the Australasian Aviation Ground Safety Council, founding member **Norm Hogwood** retired from his current position as press officer. Hogword

retired from Air New Zealand in 2002 after 41 years of service, the last 27 of which were spent in the Safety Department specializing in ground safety. He helped start the AAGSC in 1982 and served as its first chairman.



Allan McArtor will take over as chairman and chief executive of the Airbus' North American business unit when current chief Sean O'Keefe steps down in March. O'Keefe, is resigning to address medical issues stemming from injuries he sustained in a 2010 aircraft crash in Alaska that killed five people, including former U.S. Sen. Ted Stevens. McArtor is currently chairman of Airbus Americas, which is the company's commercial aircraft division in North and South America.

Elliott Aviation hired **Scott Noack** as regional sales manager. Noack will be responsible for maintaining and building Elliott Aviation's customer relationships in the South Central United States. He comes from a nearly 20-year career in aviation, including positions at Gulfstream and West Star.

Kelly Hicks, a Texas-based corporate flight attendant and student pilot received a \$2,000 scholarship to put toward continuing aviation education. Each year, Avfuel Corp. provides the scholarship, which is part of the company's AVTRIP pilots reward program. A \$500 semi-finalist award was given to David McColl, a veteran of the British Army Parachute Regiment. Two additional applicants, Caitlin Connors and Anna Anderson, were awarded 10,000 AVTRIP bonus points as scholarship runners-up.



Ron Oshorne was named managing director of Daifuku Logan. Osborne, who is based at the company's UK headquarters in Hull,

England, was previously director and general Manager. Throughout his 22-year career with Daifuku Logan and its predecessor firms, he has held a number of senior management posts covering all aspects of the business. He takes over from Mike Jeffery, who is stepping down after 40 years with the company, 13 of those as managing director, to take on a new role with Daifuku Logan in an advisory capacity.



# an the turns at Southwest Airlines get any better?

Evidently so since the airline that built its business on how quickly its ramp agents can get a plane at the gate airborne again announced a deal last month with PASSUR Aerospace, Inc. to use the data management company's integrated traffic management system at 35 U.S. airports to, in part, streamline turn times, but also reduce fuel burn and enhance on-time performance.

The PASSUR Surface Management solution assists Southwest in achieving shorter taxi-in and taxi-out times, and a quicker transition from arrival to departure for an aircraft, resulting in lower costs and emissions from engine fuel burn, less time for passengers spent on the ground in the aircraft, and greater "aircraft utilization."

The surface solution is part of an integrated, gateto-gate traffic management platform that optimizes the entire life-cycle of a flight.

"We're doing everything we can to enhance the customer experience while reducing costs, and this contract falls right in line with that strategy," says Dave Wotton, director of automation and support for the airline's operations coordination center.

#### IT INVESTMENTS

The Southwest deal is just a recent example of how airlines as well as airports are boosting their investments in IT to better serve their customers, according to two annual SITA surveys both of which were released last year.

All the airlines surveyed planned to invest in what SITA labels "business intelligence" solutions, or BI, which will provide real-time information to make better decisions throughout their operations.

The need for investment in BI is apparent since only 9 percent of the airlines currently rate data quality as meeting all their requirements, while just 7 percent have achieved the necessary integration of different data sources throughout their companies.

"All airlines are investing in business intelligence to improve their operations and boost revenues," said Francesco Violante, CEO of SITA when the airline survey was released last June. "We see a strong desire to increase revenues using techniques borrowed from the retail industry, including personalization. Nearly three-quarters of airlines rate business intelligence for sales and marketing as a high priority. The airlines' investment plans show the future of the industry is

smarter, more mobile and more personal."

Meanwhile, nearly 90 percent of airports expect their IT spending to increase or remain stable, according to the other IT survey SITA released last November. Those spending plans say even more considering that over the past three years the compound annual growth rate in IT spending was 12 percent, which far outpaced the growth in revenue itself, which stands at 3 percent over the same period of time.

There's a growing importance on BI for airports, too, based on the airport IT survey that came out last November. About 80 percent of the airports surveyed said they were planning to invest in new BI solutions for both revenue optimization and management by 2016.

Priorities for BI investment include airport operation, passenger flow monitoring and airport resource management. However, the survey points out that, like the airlines, the airports are far from where they hope to be with only 8 percent of the airports surveyed saying they've fully achieved the data quality requirements for their current BI initiatives.

Violante's prepared requirements included with the airport survey mirror much of the same sentiments as those he expressed for the airline survey.

"Our survey this year clearly shows that passengers are at the heart of this investment," he stated. "As passenger traffic grows and airports aim to improve the passenger experience, technology is providing essential solutions, despite fluctuations in airport revenue."

### **BAGGAGE SOLUTIONS**

While much of the IT presence of either an airline or airport is readily apparent from, say, a website, a check-in app or on-site kiosks, there is an increasing effort to differentiate passenger services with a new array of mobile functionality that goes behind the scenes and onto the ramp.

The result will be a much deeper integration of personalized mobile service at every step of the journey for passengers on the move.

On the airline side, the SITA survey reveals a rapidly growing adoption of mobile solutions not just for passenger services, but also for the airline workforce. The initial focus continues to be on improving productivity in the aircraft from moving from paper to digital. Over the next three years, around eight out

### **COVER STORY**



According to the SITA survey, the next "wave of services using tablets ... will focus on ground operations."

of 10 airlines plan to provide flight crews with electronic flight bags and automate crew services.

However, the next "wave of services using tablets for the airline workforce will focus on airport operations such as ground operations ... Up to now they have been a lower priority, with only a few airlines implementing tablets in these areas. but over the next three years that will jump to more than 70 percent of airlines," according to the survey.

And over on the airport side, the combination of big data and complex algorithms are opening the door to a more sophisticated use of BI.

Over the next three years, the survey says the focus of BI investments will shift to passenger flow monitoring and asset tracking designed to improve the use of resources at airports.

By the end of 2016, three-quarters of airports will be making some investment in these areas.

"In particular, monitoring passenger flow can ensure people move through the airport at an optimum rate to minimize delay," the survey states.

### BAGGAGE REPORT

To understand how these IT investments will affect ramp work, it helps to take a look at one other SITA survey. The group's ninth annual Baggage Report, released last May, showed a continued improvement in the baggage mishandling rate.

- The baggage mishandling rate dropped to 8.83 bags per 1,000 passengers, a drop of 44.5 percent in the past six years.
- Given the nearly 3 billion enplaned passengers, that means that for every 100 passenger less than one bag was reported as mishandled.
- Industry-wide, the baggage mishandling rate decrease has saved the industry more than \$2 billion in 2012.
- Delayed baggage, responsible for eight out of 10 mishaps, fell 2.4 percent.

Chances are those mishaps center on the transfer between flights.

"Handling of transfer bags remains the pinch point in the baggage handling process," the report states. "Not only does increasing air traffic place greater stress on bag operations, delays and unexpected changes to schedules can quickly have a negative impact on transfer bags. Despite the year's rise in passenger traffic, transfer bags accounted for 48 percent of all delayed bags, down from 53 percent in 2011."

The report highlights a few cases of effective collaboration to address how airlines and airports are taking effective control of transfer bags.

Iberia Airlines: The airline's "Agora" project is speeding up the transfer bag process by giving priority to one type of passenger over another, depending on real-time needs. At Madrid Airport, for example, that means sending non-priority baggage in low speed belts, while tight connections are processed on the fastest belts - which can deliver bags 8 minutes faster from the main terminal to a satellite terminal

"There are no more fixed rules for all flights," says Rodrigo Genta, Iberia's baggage handling manager. "Standardization is great under some circumstances, but we need to be flexible in our operation and do what is best for the customer whenever possible."

The airline has driven down the mishandling rate at its Madrid hub by 40 percent since 2009. And since the Agora project officially began in 2011, the mishandling rate has dropped 12 percentage

Helsinki Airport: A new baggage handling system that went online last March



was designed to achieve a transfer time of just 30 minutes. A transfer monitoring tool gives automatic notifications of delays of incoming flights that are carrying transfer baggage and allows the airport to implement special measures to ensure that the bags reach their connecting flight even when time is tight.

Esa Siponen, vice president of Helsinki Airport, says passengers totals of 15 million in 2011 helped solidify the airport's position as the leading long-haul airport for Northern Europe.

"The new baggage handling system will provide a foundation on which the airport can achieve continued growth by ensuring high terminal efficiency and ultra-fast connection time, which will make a significant contribution to the overall passenger experience," Siponen says.

Bangalore Airport: The airport reviews baggage delivery data with its airlines and ground handlers. Last year, the airport introduced a mobile solution to capture data from the time the aircraft lands to its turn and departure to enhance on-time performance of flights.

Last April, secured Wi-Fi enabled ground handlers to scan bags before loading, reconciling bags at the final stages of the flight. One month later, ground handlers began using a mobile-based solution to track baggage processes in real time to better meet performance targets.

"The intent is to pro-actively intervene and reallocate resources if there is a deviation to standards," says Francis Rajan, the airport's vice president.

London Heathrow Airport: The airport is currently in the process of creating a "bag factory," an integrated baggage hub that will is expected to be completed over the five years. A fundamental process is batch building, which relies on the logistics of empty baggage carts moved into the bag factory using "just-in-time" methodology more commonly used in manufacturing processes.

Along with greater efficiency and accuracy, the bag factory will reduce the time it takes to process transfer baggage and cut down on the time baggage handlers spend driving bags around the airport.

"Working in collaboration with the airlines and ground handlers," says John Beasley, head of the airport's baggage strategy, "we will be able to tailor the daily operational plans much more precisely

to the expected demand as we use the facility to manage the flow of bags to the ground handlers in segregated batches."

Looking forward, SITA's Baggage Report concludes that there will be "no let-up in pressure" on baggage handling operations.

"Passenger numbers continue to grow, even in these times of reduced economic activity," the report states. "There will also be no let-up in industry efforts to reduce the mishandling rates."

Additional new technologies and systems outlined in the report promise to reduce the mishandling rate to 4.5 mishandled bags per 1,000 passengers.

"It is a figure that is nearly half of where we are today, so there is still much work to do," the reports adds.

#### Professionals that get the job done right.

From conducting routine maintenance to responding immediately to a mechanical emergency, when time and reliability are critical, you can count on ASIG to deliver. Our Technical Service department is made up of a team of highly skilled and trained specialists. Because programs and procedures are only as effective as the people providing the actual services, ASIG emphasizes hiring the most qualified electricians, mechanics, HVAC and technical specialists. Proprietary asset management software and national bulk purchasing programs for parts and supplies allow us to provide timely, efficient and reliable service while maximizing our customers' budgets. Our programs cover routine and preventive maintenance for fleet vehicles, GSE equipment, baggage handling systems, jet bridges and other airport facility equipment such as escalators, moving sidewalks, terminal doors and more.



For professionals that get the job done right, call or visit us online today.

407.648.7373 • www.asig.com

Fuel Ground Technical









### **Swedish Voc-Tech School Trains Tomorrow's Ramp Agents**

Through continuous development, we can train our students to become responsible ramp workers, making the transition from student to employee as smooth as possible.'

By Steve Smith

y name is Mark Fields, and I am a vocational high school teacher working at Edströmska MFT in Västerås, Sweden. I work primarily with airport ground handling students, and am trying to reach out to ground handling companies around the globe in hope of finding work placements for these students. I would greatly appreciate any help you can give us so we can provide the highest quality of education for our students. The following is a short description of our school."

And so began our correspondence with Mark, which began about a week before we left for Germany to attend the inter airport last October and has continued in a series of emails ever since.

Currently, Mark is training eight students in the school's three-year "Airport Personnel" program.

"Students are given the required skills for working as ramp and refueling personnel, areas that are vital to a ground handling company's success," Mark later wrote us. "Given the Scandinavian climate, students also learn winter airport operating procedures, such as deicing/ anti-icing."

While Mark is always looking for more help, particularly with finding jobs for the graduates, the program already relies on ramp training from ground handling service providers, such as Nordic Aero and Menzies Aviation, as well as Swedavia.

a state-owned group that owns, operates and develops 10 airports.

### CURRICULUM

The curriculum combines classroom training with hands-on training on the ramp at three airports.

"We use our local airport, Stockholm-Västerås airport, as an introduction to our second-year students," Mark added. "By the third and final year, we expect that our students are capable of handling larger assignment so they are sent to the two larger airports in the Stockholm regions - Bromma and Arlanda airports."

The airports are the obvious "classrooms" to teach students how to operate GSE.

"We give them the chance to use all sorts of GSE and teach about the circle of safety," Mark added. "'Safety, safety, safety,' we repeat it all the time."

Swedavia plays a big part in providing the training and test administration required for the security/safety badges and airside permits ramp agents need to operate equipment.

Generally speaking, the training breaks down into three parts:

- Airport Field Operations: Largely taught in a classroom, students learn the structure and function of different activities at the airport, along with the knowledge of various national and international regulations that govern operations.
- Ramp Operations: This portion of the training runs the gamut from the fundamentals of airside traffic regulations and many of the technical systems operating at an airport to airport security and using telecommunications equipment to keep in touch.



 Airport Operations Airside: More on the meat of the matter. Students learn everything from safe driving of GSE and handling dangerous goods to flight planning and load volume and weight distribution and even firefighting and rescue operations.

"We provide a complete toolkit containing templates and documents, such as IATA, ICAO, AHM and DGR manuals," Mark wrote, "which allows our students to reach new heights in their professional training. Education should be used as a key to improve and better our lives in every aspect. Our hope is that through continuous development, we can train our students to become responsible ramp workers, making the transition from student to employee as smooth as possible."

### STRONG COMMITMENT

Mark, however, is more than a ramp trainer. While his position with the school is, in fact, full-time, he also works part-time



Again thanks for your help, spreading the news about our small high school in teaching ground-handling/airport operations since I work in this area by myself trying to get companies interested into giving our students a chance to learn on-the-job training. These past two weeks I have had four students working at Bromma Airport helping airport operations driving snow sweeper vehicles under the supervision of a team leader, one student at Arlanda Airport learning about tanking with SFS Stockholm fueling service, one student at Dalaflyget Borlänge, and one student at Västerås Airport doing ramp service. Positive feedback from all students and supervisors; they want the students back and to work for these companies after they are finished with the program in June.

Mark Fields, Ramp Trainer

P.S. Meeting with Menzies Aviaion to plan how we can work together in building up a good work relationship. Still waiting to hear from Swissport. Confirmation they will get back ASAP. Dnata is also interested in exchange students from Sweden to England. One of the students from my course told me today that SFS asked him back after he has passed his exams in June - that look in the student's eyes of joy. That warms the heart.



### INTERNATIONAL



Studies begin with "Airport Field Operations," during which students learn the structure and function of different activities at the airport, along with the knowledge of various national and international regulations that cover airport operations.

The "Premier" Model MT65P21 "Express Heat" Deicer utilizes the Versalift Extended Reach Model VST6000 Aerial lift, providing 65' of working height. More important, the MT65P21 incorporates the **Premier** boom forward design to provide the maximum amount of reach off the front of the vehicle utilizing the rapid deploy down riggers. During mobile operations, side reach of 34' and vertical reach ENGINEERING& MANUFACTURING of 46' can easily be Simple, Dependable and Affordab accomplished. "Express Heat" reliability, easy access maintenance, extend reach capabilities, and lowest cost of operation is why we are the "Premier" deicer manufacturer. Tel - 715-735-6440, www.premier-deicers.com

AviationPros.com/company/10117675

at Arlanda Airport for Menzies Aviation as a ramp agent.

"Why? To keep myself updated on what's happening airside and to make new contacts for the students," Mark explained.

He added that Menzies managers help by giving him updated training material and are planning to visit "and give our school a chance to build a relationship ... and see first-hand what we teach and how they can assist."

Born in Dublin, Mark, 45, lived in the San Francisco Bay area for a time before going back to Ireland to work with FedEx. He is a Gulf War veteran and served with coalition forces during Operation Desert Storm in 1990-91. Mark eventually moved to Sweden in 1994 where he worked as a station agent for DHL at Västerås Airport and joined the ground handling industry in 1994.

"Most of the students have stayed in the airport industry and are employed at

### **About The School**

According to its website, Edströmska Mälar Valley's Vehicle and Transport Education, Västerås, Sweden, is an automotive technical center for high school students, adults and businesses that opened in the fall of 2004.

Edströmska is run by the Municipality of Västerås in conjuncture with the automotive, construction, and transport industry. Edströmska is led by the trade and transport industry as well as the metal workers and transport unions. The Board of Directors is comprised of eight representatives of the trade industry and three representatives of the Municipality of Västerås. The chairman and co-chairman are two of the trade industry representatives. The school's principals are also part of the board.

The school develops through the daily work of the board and program council in cooperation with the trade industry in an attempt to keep up with current technological advances.



Swedavia is one of the ground service providers that provide real-life ramp experience to the students.

different airports around Scandinavia," he adds. "Feedback from all my former students is always on the long hours, but many are positive and continue to study in order to advance inside those companies. As many in the industry already know, this isn't a 09:00-17:00 job."

The last time we exchanged emails, Mark put in a request for donations of GSE. "We don't have anything at the school," he explains. "Everything is at the airports." He figures that having some donated equipment on hand at the school would help train students to operate equipment with an extra measure of safety.

"If students make a mistake, that's



A Menzies Aviation station is as good a place as any to give students a first-hand look at a variety of ground support equipment.



Mark Fields (shown at the bottom of the passenger stairs standing next to a manager from Nordic Aero) and his students from the "Airport Personnel" program.

OK," Mark wrote. "They can start over." From the sound of one of our last email exchanges, Mark had secured a deicing truck for the school.



To contact Mark, email him at mark.fields@vasteras.se.



### **AVIATIONPROS LIVE**

### **Powering Aviation** From The **Ground Up**

Two-day conference and exhibition brings the 'aviation pros' to the Sands Expo Convention Center, Las Vegas, NV, March 25-26.



**Powering Aviation from the Ground Up** 

By Steve Smith

e're putting the finishing touches this month on our annual trade show. Here are some ground support highlights for Aviation Pros LIVE, which takes place next month, March 25-26, at the Sands Expo Convention Center, Las Vegas, NV. For up-to-date information, log on to www.aviationproslive.com.

EXHIBITORS/BOOTH NU	<b>IMBERS</b>	(as of Feb. 5)
3M - Peltor	559	DFW Instrum
A&V Rebuilding, Inc	644	Eagle Tugs
ACES Systems	348	Eaton
AERO Specialties, Inc	317	Fastening Sy
Aerospace Maintenance		Internation
Association	552	FCX Systems
Aircraft Service International		Feel Good, Ir
Group (ASIG)		Flexible Lifel
Airport Technical Support, LLC	619	Fluid Dynam
Allen Energy / Enersys	605	Gammon Tec
Amptec Research Corp	632	Garsite
AMTSociety	250	Global Aviati
Anderson Airmotive Products Co	231	Global Grour
Aviation GSE	333A	Global Parts.
Aviation Institute of Maintenance	765	Hall Technica
BASE Engineering Inc	224	Harlan Globa
Beckman Coulter - Life Science.		Hewitt, A Hu
Betts Industries	226	Hobart Grou
Bosserman Aviation Equipment.	213	Howell Instru
Cameron Valves & Measurement	239	HSQ (Sichua
CamGuard	571	Equipment
Cannon Load Banks, Inc	623	Iscar Ground
Cavotec Dabico US Inc	701	Isuzu Comm
CLA-VAL Company	705	JBT Aerotecl
Clyde Machines Inc	611	JLG Industrie
Continental Specialty Tire	711	Keith Consol
Corvus Energy Ltd	333A	Kerrigan Cor
Cygnus Business Media	339	Lektro Inc
Daniels Manufacturing Corn	561	Lift-Δ-Loft Co

DFW Instrument Corporation	551
Eagle Tugs	.309
Eaton	.207
Fastening Systems	
International, Inc	.565
FCX Systems, Inc	.513
Feel Good, Inc	.734
Flexible Lifeline Systems, Inc	.712
Fluid Dynamics, Inc	.219
Gammon Technical Products	.204
Garsite	.201
Global Aviation Services, LLC	.519
Global Ground Support, LLC	.519
Global Parts.aero	.555
Hall Technical Services	.401
Harlan Global Manufacturing, LLC	.700
Hewitt, A Husky Company	.707
Hobart Ground Systems	.301
Howell Instruments, Inc	.735
HSQ (Sichuan) Airport	
Equipment Co., Ltd	.726
Iscar Ground Services	.423
Isuzu Commercial Truck	.731
JBT Aerotech, Jetway Systems	
JLG Industries, Inc	.225
Keith Consolidated Industries, Inc.	
Kerrigan Corp	.621
Lektro Inc	.507
Lift-A-Loft Corporation	.439

Liquid Controls Group	212
Liquip   Beta Fluid	
Systems Division	601
LockNClimb, LLC	567
Mantec Services	553
MCM Engineering Inc	401
Meggitt Control Systems	206
Mototok America, LLC	715
NAV-AIDS Ltd	630
OCV Control Valves	220
PAGE Industries	613
Par-Kan Company	501
Parker Industrial Hose Products	718
Parker Velcon	200
PEAR Corporation	312
PECOFacet	
PinPoint™ by HABCO/Sikorsky	525
Premier Engineering &	
Manufacturing	407
Protectoseal Company, The	216
Proto Industrial Tools	336
RF System Lab	330
Rotorcraft Enterprises LLC /	
Start Pac	333
Rousseau Metal Inc	344
Shure-Step.com	
Safety Step Stools	249
SkyMark Refuelers	
Snap-on Industrial	254



### Pre-Show Golf Outing

Ground Support Worldwide and PAGE Industries invite you to attend the 1st Annual GSE Leaders Golf Invitation, Monday, March 24, at the Revere Golf Club, Henderson, NV, with a 1 p.m. tee time. The event is the perfect way to start show week by meeting with other key people from the GSE industry.

All invitees play for free and will receive complimentary shuttle to and from the Vegas strip, along with lunch, dinner and an awards presentation.

The event is brought to you by the following sponsors: Airlinx Aircraft

Spencer Aircraft......571 Stertil-Koni......431 Therm Dynamics / Frend Therm Inc. .....713 ThyssenKrupp Airport Systems, Inc ......625 Total Control Systems ......318 Transhield, Inc. .....710 Transportation Safety Apparel ......228 Tribal Whips, Inc......719 Triumph Aerospace Systems -Wichita ......634 TUG Technologies ......727 Twist Aero ......534 Unistrut Fall Protection Systems ......631 Unitron Power Systems......325 US Air Tool Co. .....557 US Airmotive GSE......709 USSC Seating ......706 Victory GSE.....545 Waag.com.....244 WASP, Inc.....415 West Coast Industries......635 Westmor Industries ......334 World Fuel Services / Ascent Aviation.....213

Services, Inc.; Ameribridge; Charlotte America; Engineered Performance Ducting; FCX Systems; Gleason Reel; JBT Aerotech; and Oxford Airport Technical Services.

RSVP to Brian Piety, executive vice president, PAGE Industries at brian@pageindustries.com.

### **Ground Support** Leaders

Ground Support Worldwide will recognize three "Ground Support Leaders" during the Industry Awards and Networking Event, 5-7 p.m., Tuesday, March 25.

• Lifetime Achievement Award: This award goes "to the person who has demonstrated commitment to the industry through numerous years of dedicated service." In 2013, we honored Bill Biermann, who championed the use of electric ground

Miami Springs, Florida 33266

Tel: 305.885.4992 Fax: 305.885.9537

Email: sales@usairmotivease.com



Ground Support Worldwide will recognize three "Ground Support Leaders" during the Industry Awards and Networking Event, 5-7 p.m., Tuesday, March 25. Last year, Bill Biermann (center) received the Lifetime Achievement Award.

support equipment during a career that lasted six decades.

Team Leader: This award honors "an individual who has taken a leadership role with personnel." In 2013, we named Travis Blair, managing director, ground sup-



www.usairmotivegse.com

AviationPros.com/company/10017906

Redondo Beach, California 90278

Tel: 310.327.8407 Fax: 310.327.8439

Email: paula@usairmotivegse.com

### **AVIATIONPROS LIVE**

### **GROUND SUPPORT HIGHLIGHTS TUESDAY, MARCH 25**

10 a.m.-5 p.m. **Trade Show Hours** 

10:45-11.45 a.m. Town Hall Welcome Session with Industry

5-7 p.m. Industry Awards, featuring the winners

of Ground Support Worldwide's 2014

**Ground Leader Awards** 

### **WEDNESDAY, MARCH 26**

**Trade Show Hours** 10 a.m.-5 p.m.

5-7:30 p.m. Chili Cookoff and Networking Event Special Performance by Aaron Tippin 6-7 p.m.

port/administration for American Eagle Airlines, who has developed personnel from the time he started with the airline as a GSE mechanic. Product Leader: This award "celebrates the product, service and manufacturer making a difference in the industry." In 2013, Tronair won for its Softcapture Jetporter

designed to tow aircraft without straps, without touching any part of the nose landing gear and without the driver leaving his seat.

The event will also feature a key note speech from Airport Business columnist Ralph Hood.

### **NATA Seminars**

The National Air Transport Association FBO Success Seminar is for FBO owners, operators, general managers, new managers, finance personnel and other key FBO employees who are interested in building a more successful FBO. Attendees will be exposed to new FBO management techniques and will gain essential aviation operational and service knowledge while sharing experiences with new friends in the FBO industry. Log on to http://aviationproslive.com/FBO\_Success\_Seminar to register.

In addition to the FBO Success Seminar, NATA will also hold other seminars at the show:

- NATA Aviation Fuel Handling & **Quality Control Series:** Aviation fuel is a vital component to the success and safety of our industry. Delivering clean, dry and on-specification does not happen by accident, it is the result of an integrated system of equipment, maintenance and vigilance from fuel handling professionals. The NATA Aviation Fuel Handling & Quality Control Series provides you the opportunity to learn the ins and outs of aviation fuel handling from recognized industry experts. Topics will include quality control procedures, record keeping, best practices and industry standards as well as an introduction to aviation fuel filtration.
- NATA Safety 1st Operational Best Practices: FBOs and ground handling facilities around the world recognize the importance of implementing standard procedures for safe operations on the ramp. However, these procedures are only as useful in improving safety as the





The trade show is a great place to spot the latest GSE. At last year's show, for example, Harlan Global Manufacturing, unveiled the Trans-Con Model HTSB available with U.S./Euro emission-compliant engines.

processes that develop and implement them. In this presentation, NATA's Director of Safety & Training, Michael France, will provide insight into the creation of standard operating procedures as well as tips on effectively implementing those procedures. France will also review NATA's Safety 1st Operational Best Practices, a set of customizable standard operational procedures developed by the association's Safety 1st Committee.

Get to Know NATA Safety 1st: You probably are already aware that NATA Safety 1st is the industry standard in online training for line service professionals but that is just the beginning NATA Safety 1st is the safety and training outreach arm of the NATA and provides a wealth of resources and products to association members and the industry in general. From SMS resources to ground handling operational safety standards, NATA Safety 1st is there for your business. In this session, Michael France, NATA's director of safety and training, will give you an overview of all Safety 1st has to offer and answer any questions you may have.

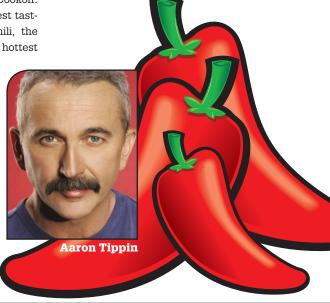
### Chili Cookoff

Join us for your last opportunity to network with all your fellow "aviation pros" at this year's show, 5-7:30 p.m., Wednesday, March 26. The event will feature the return of our Chili Cookoff. Awards will be given for the best tasting chili, the worst tasting chili, the questionable contents chili, hottest

tasting chili and best presentation! While everyone is welcome to eat, if you are interested in entering your chili, log on to http://aviationproslive.com/chilicookoff.

The event will also feature a performance by Aaron Tippin, a lifelong aviator Tippin says he "grew up on the flight line." In addition to his many musical accomplishments, including 33 singles that have ranked on the Billboard HotCountry Hits chart, five

gold and one platinum album, he holds a multi-engine commercial instrument and rotorcraft ratings, and is also a certified Airframe and Powerplant mechanic. Plus, he also owns an FBO. 🐼



### **VE HAVE STAIRS**

FROM RJ TO A340 CHASSIS MOUNTED AND TOWABLE















PNX-CMPPS96/150 NARROW BODY STAIR



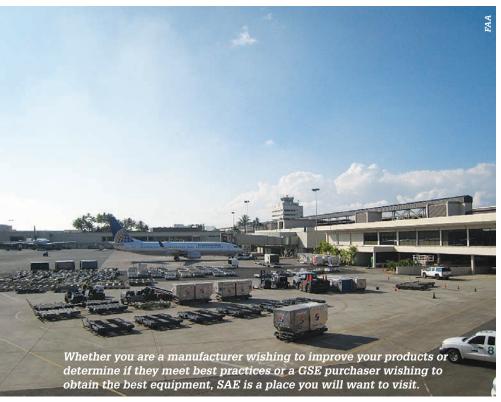






3000 INDUSTRIAL AVENUE 3 FT. PIERCE, FL 34946 PHONE: (772) 595-6386 / FAX: (772) 595-6389 EMAIL: phoenixgse@earthlink.net WEBSITE: www.phoenixgse.com

### **GSE STANDARDS**





www.hiigroup.com AviationPros.com/company/10017435

### **SAE Offers** A Wealth Of GSE **Technical Information**

AGE-2C currently maintains a library of 85 documents consisting of design specifications and practices, recommended practices and test procedures for a wide range of GSE and subsystems as well as maintenance recommendations.

By D. Scott Barninger

AE International, formerly the Society of Automotive Engineers, is a professional standards organization for engineering professionals in various industries. SAE is based in the United States, but active in the global market-

The principal focus of SAE is mobility industries including automotive and aerospace. SAE develops and publishes technical standards based on best practices identified and described by SAE technical committees.

SAE was founded in 1905 and counted Henry Ford and Orville Wright among its earliest board members.

Since 1988, I have participated on the AGE-2C Vehicle Maintenance and

HYD-3331



Aircraft Servicing Committee, which is a sub-committee of AGE-2 Air Cargo and Aircraft Ground Equipment and Systems Committee. Committee members are voluntary subject matter experts who come from both manufacturers of GSE and from airlines who use the equipment and are not acting as representatives of any company.

AGE-2C currently maintains a library of 85 documents consisting of design specifications and practices, recommended practices and test procedures for a wide range of GSE and subsystems as well as maintenance recommendations. These documents may be used by both manufacturers and airlines to place the best equipment possible on airport ramps.

Each published document is reviewed every five years for accuracy and relevance in a changing technical environment. A committee member will sponsor the review of a document or the creation of a new document that the committee believes is warranted. The sponsor will collaborate with other members or experts outside of the committee in writing or revising a document. The draft is then balloted to the entire committee who can approve or disapprove. All disapprovals must be accompanied by a detailed technical objection which must be resolved by the document sponsor before the document can be sent to SAE Aerospace Council for final approval and publication.

Here are but a few examples of the information which is available on SAE's website:

- Airline Tow Tractor Baggage/ Cargo Factors for Design Consideration.
- Ground Support Equipment Electrical Systems.
- Minimum Safety Requirements for Special Purpose Airline Ground Support Equipment.
- Ground Equipment Rebuild Program.

- Maintenance of Batteries and Battery Charging and Servicing Facilities.
- Maintenance of Ground Support Equipment.
- Method of Evaluating Pneumatic Ground Power Units.
- Design Guide for Aerospace Ground Air Conditioning.
- Selection Criteria for Internal Combustion Engines Used in Ground Support Equipment.
- Baggage/Cargo Trailer Requirements.

 Method of Testing Pre-Conditioned Air Equipment.

Whether you are a manufacturer wishing to improve your products or determine if they meet best practices or a GSE purchaser wishing to obtain the best equipment, SAE is a place you will want to visit.

The next meeting of AGE-2C will be held Sept.16-18, at the Delta Training Center at the Hartsfield-Jackson Atlanta International Airport. For more information contact Rossanna Nation, aerospace standards specialist supporting AGE-2C, at rnation@sae.org.

### **About the author:**

Since 1994, D. Scott Barninger has been the director of ground support equipment for Piedmont Airlines, a wholly owned subsidiary of the new American Airlines. In that capacity Barninger oversees the maintenance of a fleet of approximately 4,200 pieces of motorized GSE. Prior to joining Piedmont Airlines, Barninger worked as an engineer for ACE/Devtec (now TLD America) and Air-A-Plane Corp.

### The Data is In.

Rampmaster's Engine Management System (EMS)

Delivers Unparalleled Savings for Every

Gallon of Jet Fuel Pumped

An Independent Study by WVU's Center for Alternative Fuels, Engines and Emissions has confirmed that

DRIVES 78 % DIESEL FUEL DRIVES UP TO SAVINGS



See how EMS is innovating refueling at www.rampmasters.com/EMS.

### RAMPMASTER

CHAMPION OF EXCELLENCE

### The Need For Comprehensive **Safety Risk Management**

The effects of standardizing procedures will be limited without also implementing proactive safety management solutions, such as occurrence reporting and risk management, to identify the root causes of damage incidents and develop even more targeted measures.

By Mario Pierbon

**The Flight Safety Foundation** estimated that 27,000 ramp accidents and incidents one per 1,000 departures occur worldwide annually. **Ground damage is associated** with safety risks that cannot be underestimated. About 243,000 people are injured each year in ground occurrence accidents and incidents; the injury rate is 9 per 1,000 departures.

ircraft ground damage is a significant financial, operational and safety issue, particularly in view of the airline industry's thin profit margin. The Flight Safety Foundation several years ago estimated that "ramp accidents cost airlines worldwide at least \$10 billion a year. These accidents affect airport operations, result in personnel injuries and damage aircraft, facilities and ground support equipment."



## In the ground operations industry, on the other hand, there is considerable room for improvement with regard to the introduction of modern day proactive safety management tools and methods, as tested and validated in the flight operations side of the business.

The Foundation also estimated that 27,000 ramp accidents and incidents — one per 1,000 departures — occur worldwide annually. Ground damage is associated with safety risks that cannot be underestimated. About 243,000 people are injured each year in ground occurrence accidents and incidents; the injury rate is 9 per 1,000 departures.

### CURRENT INITIATIVES

Some improvements in ground safety performance have been attempted by the global airline industry over the past few years by consolidating handling practices to meet best industry standards. A number of programs and initiatives have taken shape:

- The International Air Transport Association has been promoting standard operating procedures with the IATA Safety Audit for Ground Operations and the IATA Ground Operations Manual.
- The Flight Safety Foundation has been promoting best practices with the Ground Accident Prevention program.
- In addition the Association of European Airlines has been lobbying for a revision of the IATA Standard Ground Handling Agreement in order to increase the loose liability limits imposed on ground service providers.
- The Australasian Aviation Ground Safety Council has also promoted safety awareness and safety programs over the last 30 years in the South Pacific rim.

The initiatives that have been implemented certainly have their merits.

However, the almost exclusive focus on standardization of procedures to date is of limited effectiveness unless proactive safety management solutions, such as occurrence reporting and risk management, are also implemented to find the root causes of damage incidents and develop even more targeted measures.

(It should be noted, however, that IATA has been collecting ground damage

data for benchmarking by developing its Ground Damage Database. This is certainly a proactive development stance being promoted in the industry.)

### RISK MANAGEMENT

Take a look at safety performance in the air operations of the aviation business rather than airside operations.

Air operations have seen the development of structured Safety Management Systems built on risk management and SMS has established a strong culture of comprehensive occurrence reporting, compliance monitoring, human factors and crew resource management training, accident and incident investigations and Line Operations Safety Audits. All these measures have contributed to make flying a remarkably safe experience.

In the ground operations industry, on the other hand, there is considerable room for improvement with regard to the introduction of modern day proactive safety management tools and methods, as tested and validated in the flight operations side of the business. The focus of current industry ground safety programs on best industry practices is necessary and beneficial, but it needs to be supported by hard evidence and lessons learned to target actual causes of ground incidents and accidents.

Many of the most typical and frequent causes of ground safety occurrences are often beyond the scope of current standardization programs. It is in fact the expert opinion of airline ground managers that ground safety occurrences are caused by a variety of factors including the following:

- The low sophistication of an average ground handling company's management system.
- The infrastructural constraints at airports
- The airline-enforced policies of fast turnarounds.
- The insufficient training of personnel.
- The lack of human factors awareness.

 The high turnover rate of personnel and, thus, the low motivation in the performance of duties.

"Another factor is the transition of the responsibility of ground handling moving from the airline to purely ground handling companies," says Ivar Busk, manager of insurance at SAS Scandinavian Airlines and former head of airside safety at SAS. "Ground staff seem to have lost status by not working for an airline. The problem is that when evidence is requested by chief financial officers — as well as other top managers not dealing directly with operational issues - in order to substantiate these expert opinions, airline ground managers have limited evidence to substantiate their claims."

With the development of hazard reporting and risk management systems (or their refining where these are already in place), airline ground managers can have a factual basis to justify their requests of budget to implement safety performance improvement programs and are enabled to monitor safety performance over time and against industry peers, if standard systems are used and the participation to data sharing initiatives is ensured.

### ADVANTAGES AND BENEFITS

In order to understand the advantages and benefits to the airline ground operations industry of occurrence reporting and risk management systems it is important to clarify what such systems are.

The International Civil Aviation Organization defines a *hazard* as a "condition or object with the potential to cause injuries to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function."

The consequences of a hazard are the manifestations of the damaging potential of the given hazard. Reportable safety occurrences are those when the damaging potential of a hazard is fully or partially released by causing harm to people and/or equipment. In advanced hazard reporting and risk management systems occurrence

es are reported even when they are near misses, in other words when the damaging potential was about to be released but the situation went back to normal with or without corrective action taken.

"A number of 'near misses' indicates that a real case is waiting to happen if the near misses are not taken seriously into account and corrective action is initiated" Busk says.

### **OPERATIONAL EXAMPLE**

Let's go through an operational example.

In a ground operations environment, a typical hazard is a ground service vehicle operated around an aircraft, since it has the potential to cause damage to the aircraft it services. A possible consequence of operating a ground service vehicle around an aircraft is the collision of the vehicle with the aircraft. Ideally in a hazard reporting and risk management system each and every instance when an aircraft is hit - or close to being hit - by a ground service vehicle is to be reported.

"Unfortunately, up to 20 percent of all damages is 'unreported' when they are found on next arrival/departure or later," Busk says. "The reason could be management culture or typical behavior as well as a matter of company culture. This is a big threat to the safety awareness."

ICAO further defines risk as "the assessment, expressed in terms of predicted probability and severity, of the consequences of a hazard, taking as reference the worst foreseeable situation" and risk management as "the assessment and mitigation of the risks of the consequences of hazards that threaten the capabilities of an organization to a level as low as reasonably practicable."

Risk management. in other words, is the whole set of activities developed to better assess how often and how badly the consequences of a hazard are released and to bring down risk levels by developing mitigation actions.

In our operational example, risk management implies assessing how often and with what consequences a vehicle is likely to hit an aircraft and, based on this information collected in a database, developing policies and procedures which are adequate to ensure that the frequency and/or the severity of a vehicle hitting an aircraft is reduced by, for example, better

designing and planning the operations and by training personnel to adhere to safe practices.

"A good preventive measure has historically been the positioning of cones in front of engines and wing tips, which has decreased the number of damage events on this objects significantly," Busk says.

The availability of in-house safety performance data allows the development of corrective and preventive actions which are operator-specific; this practice is in line with the latest requirements for performance-based safety management.

Intuitively, human beings tend to make decisions so as to reduce the damaging potential of what they do. Risk management as a business practice differs from what individuals already do intuitively because it is a structured and documented process.

Abundant guidance on how to plan and implement a hazard reporting and risk management system can be found in ICAO's Safety Management Manual, other risk management standards exist, such as ISO 31000 and the Australia New Zealand Standard 4360:2004. It should be noted that ICAO's material is more suitable to an aviation service provider, as it was developed with the aviation industry in mind and it is the reference of new regulations on safety management systems, of which risk management is a significant, if not the main, component.

#### SMS REQUIREMENTS

In November 2013, ICAO released Annex 19 on Safety Management Systems, and aviation safety regulators worldwide are demanding an ever wider implementation of safety management systems by avia $tion\ service\ providers.\ Such\ requirements$ are already there for heavily regulated aviation service providers such as air operators, airports and maintenance organizations.

Ground operations are notoriously the least regulated segment of the aviation business and they have long relied on self-regulation and the pressure of airlines of which ground service providers are often a spin-off from the old days of highly vertically integrated state-owned international airlines.

Although in the SMS framework aviation service providers are requested to ensure that third parties under contract meet certain quality and safety standards, it is not very likely, at least in the short term, that ground service providers will be directly regulated for SMS implementation.

It is nevertheless important that the ground operations industry continues its self-regulation efforts and conform to SMS requirements. With this regard the ISAGO standard is leading the way, one of the main changes to ISAGO standard and recommended practices with the release of the third edition of the ISAGO Standards Manual, effective from January 2014, has been in fact the upgrade of the requirement for risk management from recommended practice to standard. This means that now an organization audited against ISAGO and found not compliant in relation to risk management implementation records no longer an observation but a an actual finding requiring corrective action.

"Airline ground managers may find it frustrating to deal with the additional complexity and associated increased workload brought in by a new compliance requirement such as ISAGO's risk management standard," Busk adds. "What should motivate and keep them focused are the advantages that airline ground managers can obtain in their organizations with the support of risk management in terms of better controllability and efficiency of ground operations and less cost."

### **About the author:**



Mario Pierobon holds a Master's Degree in Air Transport Management from City University London and works in business development and project support at Great Circle Services in Lucerne, Switzerland. Mario regularly writes about aviation safety and his main professional and research interests are in the areas of airside safety.

# Airside GSE Puts dnata's Equipment Through A 'Thorough Examination'

Legal requirements in the UK put GSE to stringent test every year, and in some cases, every six months.

By Steve Smith

hroughout much of the UK, car owners have to put their vehicles through an annual so-called "MOT test" once the cars are more than three years old. The Ministry of Transport test looks at safety, road-worthiness and emissions testing.

There are similar regulations on the books covering ground support equipment that require GSE to pass a so-called "report of thorough examination."

"The law for GSE is even more demanding," says Mike Cardy, managing director, Airside GSE Ltd, which has offices close to TAG London Farnborough Airport in Hampshire with a workshop

about five miles from the airport in Hook. "The examination is required as soon as the equipment is a year old – and may be needed once, twice or even four times a year, depending on the equipment and its use."

Cardy's company was set up specifically to conduct such tests on GSE. One of Airside's first clients is international ground handler dnata for its GSE fleet operating in the UK, primarily operating from London Heathrow Airport.

John Edmunds, business manager for dnata has initiated the procedure to ensure that the ground handling service provider's equipment not only meets, but exceeds the current requirements to have equipment thoroughly examined at least every 12 months and in the cases where equipment is used to elevate and transport passengers and personnel, at least every six months.

"Specifically, if a thorough examination is carried out on an aircraft elevator/loader we would envisage that the inspection



would take between 1 hour to 90 minutes," Cardy says. "The exam requires that the lifting parts of the machine are inspected under a regulation referred to as LOLER for "lifting operation and lifting equipment regulations" and the motive power, in other words, the engine, hydraulics and steering, are examined under the PUWER regulation for "power and use of work equipment regulations."

Cardy knows a thing or two about such regulations since he worked on the CEN (European Committee for Standardization) that was responsible for compiling and publishing some 20 legal standards that regulate the building, designing and testing of all GSE.

### **NOT AVERAGE MAINTENANCE**

Working closely with dnata's operational requirements, Airside staff of seven work under what Cardy calls a "quality assurance procedural code." The company's also developed dedicated documentation to support the thorough examination process.

"Not every inspection is a 'thorough exam,' " Cardy adds, "and it's important to know the difference."

### **Thorough Examination Basics**

- Two "statutory instruments," in the UK L.O.L.E.R 98, The Lifting Operations and Lifting Equipment Regulations and P.U.W.E.R 98, The Provision of Work Equipment Regulations - are the regulations that both dnata and Airside GSE Ltd. will be working with in order to meet the requirements covering the safety of GSE.
- · Airside will also be responsible to ensure the fitting of the C.E mark is correctly used.
- · Airside has also developed a "Quality Assurance Procedural Code" with the guidance and approval of the UK's Health and Safety Executive, an agency most commonly compared to the U.S. Occupational Safety and Health Administration, along with dedicated documentation to support the thorough examination process.
- For any further information on standards or the thorough examination, Mike Cardy can be reached at airsideairporteq@btconnect.com

Inspection is part of any routine service and maintenance - the emphasis is more on function. Upon completion of a thorough examination, however, the examiner will provide documentation that everything has been carried according to the strict standards demanded by the law. The documentation includes the following:

A report in accordance with LOLER.

- A checklist showing what has been checked and any comments made.
- · A certificate to keep with the equipment.
- A sticker placed on the equipment that shows the due date for the next thorough examination.

### **TCR Signs On ATS Euromaster For GSE Tire Service**

Mobile techs from ATS Euromaster will be working airside after winning a contract last year to inspect, fit and service tires on ground support equipment operated by ground handling service provider TCR.

Nearly 40 techs from local ATS Euromaster centers will work at nine of the UK's largest airports, including Heathrow, Gatwick, Stansted, Manchester, Glasgow and East Midlands.

Once monthly safety checks are completed ATS Euromaster compiles a report for TCR listing any service work needed, which is then completed by ATS Euromaster at the customer's fully-equipped workshops, or at the vehicle parking zones within the secure areas of the airport.

In addition to performing monthly inspections the ATS techs also provide a rapid response service for TCR's fleet of 2,000-plus pieces of GSE.

In order to service TCR, ATS Euromaster must comply with individual airport criteria, which includes airside-cleared technicians undertaking a specialist training course to receive an airport driving licence, allowing them to drive their mobile service vehicles which are granted access to the



Nearly 40 mobile techs from local ATS Euromaster centers will work at nine of the UK's largest airports, including Heathrow, Gatwick, Stansted, Manchester, Glasgow and East Midlands, to provide GSE tire service for TCR.

most sensitive parts of the airfield.

TCR was founded in Belgium in 1996, and offers expertise in rental and operational leasing of aviation ground support equipment, maintenance and ramp assistance, as well as fleet management. The company now works in nine countries at some of Europe's largest and busiest airports.

### PRODUCT PROFILE

### KCI Develops Solar-Powered Passenger Ramp

By Steve Smith

laska Airlines has been testing a solar-powered passenger ramp manufactured by Keith Consolidated Industries, White City, OR, at the Seattle-Tacoma International Airport and Norman Y. Mineta San Jose International Airport.

The ramp is charged by four separate solar cells strategically positioned around the ramp to allow for constant charging regardless of the ramp position and time of day, says Mike Keith, sales manager with Keith Consolidated Industries.

The four cells are capable of putting nearly 1 kw of input into the system. The two motors draw 60 to 80 amps under power each and the lighting system uses minimal power due to energy efficient LEDs and a computer system ensuring they are only active when needed.

If the weather doesn't cooperate, the solar ramps can be plugged into a regular electric GSE charging station, Keith adds. As a fail safe, the ramp can also be hitched to a tug if the drive motors ever fail

But Keith told us the ramps out on test have worked reliably on only solar power. A fully charged battery provides enough power to operate the ramp for about four days.

The aluminum ramp is driven up to the aft door of a 737 and is covered with nonslip material. Three switchbacks



The solar-powered is powered by four cells capable of putting nearly 1 kw of input into the system. The two motors draw 60 to 80 amps under power each and the lighting system uses minimal power due to energy efficient LEDs and a computer system ensuring they are only active when needed. Photo CREDIT: Alaska Airlines



Keith Consolidated Industries recently went one better on this solar ramp that's planned for Dreamliner service by outfitting the canopy with special lights to mimic the blue lights found in the interior of the 787's cabin.

provide a gentle slope easy to push up a wheelchair. Once the unit drives up to the aircraft, a self-leveling ramp is lowered into place forming a bridge to the door. Set at a right angle to the boarding door, it automatically guides deplaning passengers away from the aircraft to the terminal building.

While it may save money in terms of

energy cost, the ramp also cuts boarding time by up to 10 minutes.

San Jose was chosen to test the ramp because the employees have experience boarding passengers from both ends of the plane using ramps and a stair truck before moving to a new terminal with jetways in 2010. The test began in January 2013.

A second prototype was deployed at Seattle-Tacoma International Airport in July 2013 with improvements like better solar cell placement and a more robust energy system to support the upgrade. 🐼

### **Gate Maintenance Goes High-Tech At RDU**

A five-year, \$9 million contract between JBT Aerotech and the Raleigh-Durham International Airport to provide maintenance and repair service for gate and baggage-handling equipment features Aerotech's patented Intelligent Operations Systems.

According to the company's website, iOPS is the culmination of many years of monitoring systems technology background, and combines computerized maintenance management systems tracking, monitoring and equipment data into one real-time technology package. Any one of the products that comprises the iOPS system will deliver a

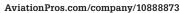
solid return on investment. However, when meshed together as iOPS, it is able to deliver ROI in a matter of months, as well as providing a range of intangible environmental and

operational benefits. In the short-run, the company says iOPS provides the following benefits:

- · Reduction in APU usage.
- Reduction in block time.
- · More equipment uptime.
- · Increased ramp personnel efficiency.









### PRODUCT HANGAR



### **Side Shift Cab** R.J. Design LLC

Side Shift Cab services all passenger loading bridges and aircraft, making it easier to dock without misaligning with the aircraft doors. The Side Shift Cab shifts 18 inches left or right from the center line of cab.

AviationPros.com/company11192233



### **Accessibility Airstairs Accessair Systems Inc.**

Accessair's equivalent-accessibilty airstairs with integrated wheelchair platforms facilitate the dignified boarding and disembarking of travelers with reduced mobility. Remote and stationary controls on each truck-mounted, non-motorized or fixed-height model, make it possible to start/stop the platform at any elevation thereby assuring that units are both passenger- and operator-friendly.

AviationPros.com/company10830091

### **Disabled Passenger Lift**



### **HAI Aviation Services Division**

The DPL99 Disabled Passenger Lift provides access to aircraft up to 126 inches (3.2 meters). The DPL99 has a

proven record of reliability and ease of operation that makes it the best choice for your ground level boarding operation. Simplicity, reliability and ease of operation.

AviationPros.com/company/10027620



### **Towable Passenger Stairs**

Wasp Inc.

WASP's Towable Passenger Stairs include models for regional aircraft (62-96 inch sill height), narrow-body aircraft (86-134 inch sill height), wide-body aircraft (132-160 inch sill height). Features Morton® non-slip surfaces; 12V timed lighting: ready-to-use towbar, movable by hand; movable platform handrails; auto-locking deck stabilizer; hydraulic stair stabilizer and optional canopy.

> AviationPros.com/ company/10026635

### **A380 Boarding Bridge**

ThyssenKrupp Airport Systems

ThyssenKrupp Airport Systems Inc. manufactures state-of-the-art A380 Passenger Boarding Bridges. The ThyssenKrupp solution applies two, or more, bridges at the lower and upper decks to service doors L1/L2 and U1. The A380 bridge is available in steel or glass.

AviationPros.com/company10025952





### **Passenger Boarding Ramp Keith Consolidated Industries**

The BAR Ramp is a universal ramp designed to serve larger sized aircraft such as the MD80 up to the 757. The ramp allows for a seamless boarding process for all passengers.

AviationPros.com/company/10027352

### **Disabled Passenger Vehicle**

**DENGE Airport Equipment** 

Dengelift is a self-propelled unit with automatic transmission and diesel engine. Provides a minimum front service height of 1,300 millimeters up to 5,800 millimeters. Operator-friendly dashboard and control panels. Practical electrical and hydraulics installation. Easy to maintain and repair. The vehicle is an individual unit



completely custom made and with single complete warranty. Winner of the most innovative product for the ramp at the 2013 inter airport Europe.

AviationPros.com/company11245361

### Parts And Service **Ameribridge LLC**

Ameribridge provides parts and service for all brands of boarding bridges. From wheel bogies to limit switches; from lift columns and drive motors to solid tires, we can provide the right parts for your PBB. We have an extensive selection of drive motors and critical parts in stock for immediate shipment.



### PRODUCT HANGAR



### **Loading Bridge Canopies** Estex Manufacturing Co. Inc.

Loading Bridge Canopies are available from Estex Manufacturing Company, Inc. Custom designed using fabrics that meet NFPA 415-417 and FAR 25.853(b) specifications. The hood and side panel are sealed to provide a waterproof seam. Estex manufactures most all styles of loading bridges, including Jet Way, Stearns, Wollard, Mitsubishi and Inflatable Stearns Fore Mark.

AviationPros.com/company/10133102

### **Regional Aircraft Bridge**

JBT AeroTech, Jetway Systems

The JETWAY® TeleRadial Regional Bridge from JBT AeroTech, Jetway Systems®, is part of a complete line of



regional aircraft solutions that include fully integrated preconditioned air, ground power and provides improved safety and convenience for passengers, service staff and the aircraft itself. The longest expected life and lowest life-cycle cost of any bridge available, and the flexibility to handle all aircraft from Dash 8 through B757.

AviationPros.com/company/10024665

### **Passenger Bridge Lift** J&B Aviation Services -**Hobart Ground Systems**

J&B Aviation Services. Inc. provides a means of transporting excess carry-ons. wheelchairs. strollers and oversized bags between the terminal and the ramp. The lift may be placed to the right or left of the

face of the build-



ing. The cart may be placed inside the terminal entrance to the bridge or inside the rotunda of the bridge.

AviationPros.com/company/10024658





### **Modular Access Stairs Semmo Limited**

Semmco offers
a new wheelchair and galley
cart loader
that allows
single-person
operation
for the safe
and smooth
transportation
of wheelchair
passengers or
service/galley
carts from



ground level to a height of 3 meters. The aircraft loader incorporates a tail lift, scissor loader, interlock systems, is fully compliant with IATA requirements and is built to be compliant with customer safety and operational requirements.

AviationPros.com/company/10025267

### **Electric-Powered Stairs**

**NMC-Wollard Inc.** 

Popular CMPS - 170 Stair with a reach up to 170.5 inches (B-767) is available with electric power. Quiet, efficient propulsion system offers a proactive option (dieseland gas-powered units also available). Highly maneuverable unit is easy to position. Operator can see door sill during approach to the airplane. Model 170 is



designed to ARP 836 and shares design elements and parts commonality with several other NMC-WOLLARD products.

AviationPros.com/company/10857446

### **Mobile Lounge**

### **Catcon Technologies**

Mobile lounge for the transport of VIP flight passengers. As the cabin can be lowered to ground level, embarkation is easy and comfortable. Exclusive interior fittings according to customer request.



XL version for main deck service (6 meters), XXL version for B747/A380 upper deck (8.2 meters).







### PRODUCT HANGAR



### **Multiple Wheelchair Lift** Lift-A-Loft Corporation

The Lift-A-Loft WBDPL provides an efficient and safe means of boarding and deboarding passengers that require special assistance. The WBDPL can interface wide-body aircraft, such as Boeing 747, 767 and 777, as well as narrow-body and regional jets. The unit can accommodate up to three full-sized wheel chairs and one attendant at one time.

AviationPros.com/company/10027162



### **Towable Passenger Stairs Clyde Machines Inc.**

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

AviationPros.com/company/10441075

### A-380 **Passenger Lift Ground Support** Specialist LLC

The GS260 is an electrically powered disabled passenger lift that will service aircraft up to the A-380. This proven and simple design allows for single-person operation. These highly reliable units



have an excellent track record and require minimal maintenance.

AviationPros.com/company/10222703

### **Full GSE Line Phoenix Metal Products**

Manufacturer of a large line of GSE equipment, from small lavatory and water carts to 1.000-gallon trucks. Passenger stairs from RJ to A340 truck-mounted. Baggage loader and aircraft maintenance lifts.



AviationPros.com/company/10441312

### GSE International ERJ + CRJ GSE SPECIALISTS



AviationPros.com/company/10018176

### Mercury GSE Ground Support Equipment

### www.mercurygse.com

for current stock of air starts, bag tugs, beltloaders, bobtails, crew and passenger stairs, gpu's, loaders — main and lower deck, tow tractors and other items.

SALES LEASE RENTAL APPRAISAL

### **WE BUY SURPLUS GSE**

PH: (562) 653-0654 FAX: (562) 653-0665 E-MAIL: dtaylor@mercurygse.com 12519 Cerise Ave., Hawthorne, CA 90250

### **CLASSIFIED**

### **DAVIN Inc.**

SALES, LEASING, FINANCING

631/499-6363 Fax: 631/499-4222

www.DavinGSE.com

#### **AIR CONDITIONERS**

1991 TLD,Ace 802-620, F600 mounted 110-ton unit. 2006 TLD Ace 302-H-CUP 24-Ton Cooling, with Heat Option. (2) 2007 TLD Ace 802-H-CUP 115-Ton Cooling with Heat Option

#### **AIR START UNIT**

2007 Tronair, SA280G2 Stored Air Start. 260lb mass usable air 1992 S&S Model TMAC-250 PPM, powered by Detroit diesel.

#### BAGGAGE/CARGO TOW TRACTORS

2010 TUG, MA-40-27LP Ford LPG w/cab.

2001 TUG, MA-30-1 Ford 300 gas, w/cab (2 avail)

2003 TUG, MT-8-1 Ford gas 8K DBP, w/cab (2 avail)
2008 Harlan HTAB-40. Cummins diesel.

w/cab (2 avail) 2003 Harlan HTAG-80 Ford gas 8K DBP,

w/cab (2 avail) 1997 Toyota, Model 2-02TD25 diesel engine.

#### **BELTLOADERS**

2007 NMC-Wollard, Model TC-888 4-cyl.Deutz diesel engine. 2002 TUG, Model 440E, 48 volt electric with built-in charger.

#### **CONTAINER LOADER**

1988 LANTIS, Model 818-218-161-125, High & Wide 161" elevator. 2006 FMC/JBT Commander 15i with wide option.

#### **GROUND POWER UNITS**

2005 Hobart, Model 120CU24P5, 120 KVA 2008 TLD, Model GPU4090-T-CUP, 90 KVA 2001 Hobart, Model Jet-Ex5D 28.5 VDC

#### HEATED

1997 Air-A-Plane Model 5050D, Deutz diesel engine.

1994 Air-A-Plane, Model 5050GF, Ford 300 gas engine

#### **PASSENGER STAIRS**

2012 NMC-Wollard, Model CMPS170, 77.5" to 170.5" like new. 2001 Stinar, Model SPS-3518 GMC diesel 96" to 228" 1998 Stinar, Model SPS-7026 Ford F-Series diesel 184" to 314"

### PUSHBACK TRACTORS

1998 NMC-Wollard, Model 140, Perkins diesel, 10K DBP. 2005 FMC, Model B400 Deutz diesel, 4WS, w/cab, 35K GVW 2000 S&S TUG, Model GT-50DZH, Deutz diesel, 60K GVW 2010 JBT, Model B1200 Cummins Diesel. w/cab 100K GVW





New, Used & Refurbished Ground Support Equipment

### **HUGE EOUIPMENT INVENTORY**

Tugs
Belt Loaders
A/C and DC
GPU's
Water and

Lavatory

Passenger Stairs Baggage Carts

Air Start Units

**Tow Tractors** 

NEW GSE ARRIVING DAILY!
CALL FOR DETAILS

631-319-1800 WWW.PRIMEGSE.COM



JACKS 3 Ton to 100 Ton B-1, B-2, B-4, and B-5 Work Stands, Wheel & Brake Dollies, Tow Bars, Maintenance Stands, Engine Stands, etc. Overhauled, Reconditioned like New

AIRCRAFT PARTS &
GROUND SUPPORT EQUIPMENT, INC.
Tel: 305-871-2192
Fax: 305-871-6081

pdsgse@bellsouth.net



516 576-3200 fax 516 576-3221

info@fortbrand.com

#### **SALES**

### www.fortbrand.com RENTALS LEASING

#### ASING FINANC

### CONSULTING

### AIRCRAFT TOW TRACTORS

TLD TMX-150, closed cab (35,000 lbs GVW)
Tug MC-18 (22,500 lbs GVW)
Equitech B-250 (32,000 lbs GVW)
Tug MR (10,000 lbs DBP)

NMC-Wollard 6,000 lbs DBP cargo tractor Eagle TT-8 (8,000 lbs DBP)

#### BAGGAGE TRACTORS

Tug MA50, gas + diesel Harlan HTC 50, gas

#### **HEATERS**

Trilectron 5050D

MAINTENANCE STANDS B-4 stand - 37"-87" B-5 stand - 88"-135"

#### AIR STARTS

TLD 150 PPM

#### GPU

TLD 90KVA, 120Kva & 140Kva Trilectron 120 Kva

#### CONVEYORS

NMC- Wollard TC-888, diesel TLD NBL, diesel

#### WATER TRUCK

Phoenix Metal WT 450, wide body

### FINANCE (

LAVATORY TRUCK
Phoenix Metal TL 600 w/lift

#### PASSENGER STAIRS

Phoenix Metal PAS200 wide body Stinar SPS-2513 narrow body Clyde 15F2820 narrow body, towable

#### AIR CONDITIONERS

TLD 802 115 ton w/heat TLD 302 30 ton w/heat

#### **TOWBARS**

ERJ 145

Tronair RJ

FOR SALE OR LEASE



### **EDITOR'S NOTE**



Steve Smith

### **Airlines And Airports** Are On A Buying Binge

But what about GSE?

By Steve Smith

'Hare Airport has a yoga studio. So does San Francisco Airport. And if you're not exactly the downward dog poise type, you can always simply fall asleep inside nap-by-thehour suites at the Dallas/Fort Worth Airport.

Maybe you've read some of the same headlines we have lately. "Airports Race To Upgrade" or "Airlines Go On A Record Shopping Spree." The motivation for airports is to keep their airlines happy. For the airlines, new aircraft designs save big money on fuel.

### **NEW DIGS**

Take, for example, Charlotte Douglas Airport. The merger of US Airways and American Airlines accounts for 90 percent its daily flights. Construction projects planned or underway at CLT total nearly \$1 billion.

Elsewhere, other airports are spending billions on construction projects:

- In addition to those Minute Suites, DFW, American's biggest hub, is in the middle of a \$2.3 billion terminal renovation, adding improved baggage systems, more concessions and an in-house kennel.
- Los Angeles International Airport's modernization plan includes a \$1.9 billion new international terminal, a \$229 million renovation of its Terminal 5 and a \$270 million upgrade of escalators, elevators and moving walkways.
- At New York's JFK International Airport, Delta Air Lines is building a new, \$1.4 billion terminal to replace outdated facilities. The airport has also upgraded its terminals for American and other carriers.

#### **NEW PLANES**

Meanwhile, Airbus and Boeing will deliver nearly 1,500 new planes to U.S. airlines over

the next decade. Several hundred smaller regional jets are also on order with other manufacturers. Domestic carriers spent \$11.6 billion last year on capital improvements including new planes — up from \$5.2 billion in 2010.

By and large, there are two big reasons for making such purchases now:

- The new planes are designed to save fuel. U.S. airlines burn through 16 billion gallons of jet fuel a year. A decade ago, they were paying 84 cents a gallon. Last year, U.S. airlines paid more than \$3 a gallon, for a total of \$50 billion.
- Low interest rates and new Wall Street financing deals mean even American Airlines could borrow \$2.7 billion to buy new planes when it was in bankruptcy court.

Yoga studios and new planes are all good and well, we're sure. Less glamorous are purchases of GSE that may naturally follow. We heard some positive news about the industry that we reported last year after our trip to inter airport. Here's another interesting tidbit we recently noticed. While GSE is typically the decision of private ground service providers or airlines, a big trade show coming for AAAE features more and more GSE exhibi-

Speculations aside, let us know if you've heard more positive, substantial news.

### **EDITORIAL ADVISORY BOARD**

ASIG - Yvonne Coleman

AeroVironment/PosiCharge - Ryan Gibson AGERanger.com - Darryl Clark

Aviance - Alain Chapgler

Charlatte of America - Rob Lamb

Delta Air Lines - Joe Fugua Elite Line Services, Inc. - Dewey Kulzer Fortbrand Services - Fred DiBenedetto J&B Aviation Services - David Janis JBT AeroTech - Jim Cherrett, Virginia Salas

Sage Parts - Michael Bloomfield Triton Technologies LLC - Debra Guinand United Airlines - Jody Cope



# YOU POWER AVIATION. WE POWER YOU.

Power up your business with the latest tools, technologies and resources on the ramp at the ultimate event specifically designed for aviation professionals. Improve safety, boost efficiency and develop your skills with cutting-edge solutions from hundreds of exhibitors, high-impact education sessions and invaluable networking opportunities.



MARCH 25-26, 2014

The Sands Expo Convention Center Las Vegas, NV

FOR 50% OFF REGISTRATION PLEASE VISIT:

AVIATIONPROSLIVE.COM

### Go Green

With Ford Advanced Technology Engines.









Coming Soon!
NEW
3.70
Engine

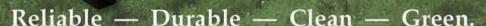
YOUR Tier IV Solution







FULLY ELECTRONIC MAINTENANCE FREE FORD 6R80 & 6R140



Featuring a complete line of EPA and CARB Certified 1.6, 2.5, and 6.8 L LSI Engines ranging from 20 to 200 hp. Available in Gasoline, LPG, CNG, Natural Gas and Dual Fuel. Our engines are the solution to high priced Tier 4 Diesels.

Secured Volumes, Longer Life Cycles, Dry Fuel and Flex Fuel Valve Trains –

You Can Find It At EDI. Performance you can count on!

### Contact One Of Our Distributors Today!

Our line of LSI industrialized Ford engines are serviced through a Global Dealer Network.

Anderson Industrial Engines Co. Omaha, NE 402-558-8700

Southwest Products Corp. Phoenix, AZ 877-779-3581

**Diesel Power Equipment** Chicago, IL 877-876-3732 Farmington, MO 800-876-3732

Engine Distributors Inc. Archdale, NC 800-220-7080 Blackwood, NJ 800-220-2700 Ft Lauderdale, FL 800-257-6605 Holliston, MA 800-220-2700 Jacksonville, FL 800-342-3575

Engines,Inc. Jonesboro, AR 800-562-8049 Powertech Engines Inc. Fresno, CA (800) 750-1776 Fullerton, CA (800) 784-1776

**Perkins Pacific** Ridgefield, WA 877-877-3311

McDonald Equipment Co. Willoughby, OH 800-589-9025 Portland, MI 800-445-5273

> M. G. Bryan Equipment Co. Grand Prairie, TX 972-623-4300

D A C Industrial Engines Inc. Dartmouth, NS, Canada 902-468-3765 **Marindustriel** Montréal, QC, Canada 514-342-2748

Oakville, ON, Canada 800-866-3831

Simson Maxwell Edmonton, AB, Canada 800-374-6766 Calgary, AB, Canada 800-374-6766

Port Coquitlam, BC, Canada 800-374-6766

Nanaimo, BC, Canada 800-374-6766

Prince George, BC, Canada 800-374-6766 All Marine Spares Mona Vale, N.S.W., Australia 61-2-99972788

Compagnia Tecnica Motori S.p.A. Milano, Italy +39 0245058238

> Fornaut Ehm Sa Le Pre St Gervais, France 01133148450394

Power Torque Engineering Ltd Binley, Coventry, UK 011-44-247-663-5757

> Sauer Motive Systems Sauer and Sohn KG Dieburg, Germany 011-49-607-120-6330

Engine Distributors Inc. • 400 University Court • Blackwood, NJ 08012 Phone: (856) 228-7298 or (800) 220-2700 • www.edi-dist.com