

FUELING  
EQUIPMENT

DECEMBER 2015 / JANUARY 2016

# Ground Support

WORLDWIDE

Supporting Aviation from the Ground Up

## FUEL PRICE FORTUNES

### INTERNATIONAL Growing Inside and Out: dnata's Diversifying Culture

The Middle East, especially the Gulf region, is one of the parts of the world where the aviation industry is growing more than anywhere else. How are ground handlers keeping pace with an industry growing more quickly than their workforce?

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## Narrow Body Cart

BETA Fueling Systems offers the aviation industry the only green narrow body cart designed to operate in any weather and equipped with an advanced, interactive monitoring system. The cart is fully JIG and A4A compliant.

*Benefits of the BETA Narrow Body cart include:*

### GREEN POWER FOR ANY WEATHER

- Hose rewind accomplished by fuel pressure
- Uses fuel or solar power for all electrical operations
- Zero emissions towable cart

### TIME-SAVING OPERATION

- Flow rate up to 480 GPM/ 1800 LPM
- Dedicated equipment allows for quicker gate turns
- Towable between gates

### LONGER LIFE & LESS MAINTENANCE

- Eliminates maintenance associated with a chassis
- Manufactured utilizing corrosion resistant aluminum and stainless steel

### PRECISE METERING & SAFETY

- PRECI-control monitoring system with interactive interface, detailed help texts, and integrated diagnosis and service
- The PRECI-control monitoring system meets the most stringent safety requirements around the world



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## ► Upcoming Events

**January 19-22, 2016**

**NBAA Schedulers  
& Dispatchers**  
Tampa, Fla.

**April 5-7**

**MRO Americas**  
Dallas, Tex.

**April 20-22**

**GSE Buyers &  
Ramp Ops Conference**  
Istanbul, Turkey

**April 23-27**

**NEC/AAAE International  
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Buffalo, NY

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## BUSINESS BUZZ

### ► TOP NEWS

#### **Delta Announces Record Q3 Profits, Job Cuts**

Delta Air Lines announced a record third-quarter profit of \$1.3 billion thanks in part to lower fuel costs. The \$1.3 billion mark is more than triple Delta's 2014 number over the same period of time. But executives say revenue trends will soon force the airline to cut jobs at its Atlanta headquarters. Delta says it plans to cut jobs from the 10,000 management and salaried workers to boost productivity, but hasn't released a number for the number of jobs they will cut.

#### **IndiGo Parent InterGlobe Aviation Jumps 14.7 Percent on Listing Day**

Shares of InterGlobe Aviation Ltd, parent company of India's IndiGo, opened 11.8 percent above their issue price following their November IPO before closing their first day up 14.7 percent. Investors bet the company will benefit from weak fuel prices and rising Indian passenger traffic.

#### **Study Finds "Rear Seat Kickers" Most Infuriate American Passengers**

Expedia's third annual Airplane Etiquette Study named "Rear Seat Kickers" as the United States' most irritating co-passengers. The study was commissioned by Expedia and conducted by GfK, an independent global market research company. When asked to choose from a list of annoying behaviors, 61% of Americans cited seat-kicking as a top in-flight concern. "Inattentive Parents" – parents who exhibit little or no control over their children – rank a close second (59%). The "Aromatic Passenger," who exhibits poor hygiene or is in some other way giving off a strong scent, was the third least-liked passenger, cited by 50% of Americans. You can read an full analysis of the study, including an infographic, at [viewfinder.expedia.com](http://viewfinder.expedia.com).

### ► Correction

In the October 2015 Product Profile, we stated that Goldhofer acquired Schopf in January 2015. The correct year is 2013.

#### **Lawmaker Urges Airlines To Halt Bag Fee Hikes During Holidays**

Florida Sen. Bill Nelson, asked U.S. carriers to not increase checked bag fees this holiday season. Nelson also insinuated he may propose legislation next year forcing airlines to show a connection between fees increases and cost of travel. So far Spirit Airlines and Frontier Airlines have announced holiday baggage fee increases.

#### **United Enters Machinist Labor Talks Early, Promises No Outsourcing**

United Airlines and employees represented by the International Association of Machinists and Aerospace Workers opened contract negotiations more than a year early. The airline has promised not to outsource union jobs for at least the next three years. Talks affect nearly 30,000 members of the union in roles that include baggage handling, passenger service, reservations and retail.

#### **Three SFO Security Screeners In- dicted For Fraud, Smuggling Drugs**

Three security screeners for San Francisco International Airport have been indicted on charges for fraud and smuggling drugs. The three Covenant Aviation Security employees were arrested on charges of "defrauding the government and smuggling cocaine," according to a news release from the Department of Justice. The federal indictment accuses the screeners allowed passengers to smuggle both real and fake cocaine through SFO security.

#### **United CEO to Return in Early 2016**

Oscar Munoz, the recently-appointed CEO of Chicago's United Continental Holdings who suffered a heart attack in October just weeks after being appointed during a federal investigation, expects to return to work in the first quarter of next year. Brett Hart, United's executive vice president and general counsel, has been serving as CEO on an interim basis and was given a \$100,000-per-month raise. "I am excited to tell you that I am on the road to recovery," Munoz wrote in a company-wide note. "My time away will be a little longer than I would like, but based upon discussion with my doctors I will be back in the first quarter."



## American Airlines To Decrease Fares in Competition With Low-Cost Carriers

American Airlines plans to lower fare prices in order to compete with ultra-low-cost carriers like Spirit Airlines and Frontier Airlines. American Airlines Group Inc. President Scott Kirby announced the fare plan during a recent earnings report conference call in which he also announced American's \$1.7 billion of net income for the third quarter, an 80% increase over the same period last year.

## Fuel Leak Suspected in Dynamic International Fire

Aviation authorities initially said a Dynamic International Airways Boeing 767 suffered a fuel leak while on a taxiway at Fort Lauderdale-Hollywood International Airport on Thursday based on the large puddle of jet fuel around the accident, billows of black smoke and the size of the blaze. The National Transportation Safety Board, however, hasn't confirmed the initial cause as fuel or another source that spread to the fuel system.

## E-cigarettes Banned From Checked Bags

The U.S. Department of Transportation published a ruling last week that prohibits any battery-powered portable electronic smoking devices from checked baggage. The DOT has also prohibited both passengers and crew from charging their e-cigarettes in the aircraft. A study conducted by the U.S. Fire Administration reported 25 fires or explosions caused by e-cigarettes from 2009 to 2014.

## United Agrees To Tentative Deal With Teamsters

United Airlines agreed to a deal with the Teamsters to put the carrier's 8,600 technicians and related employees under a single contract on October 23. The deal, which still must be ratified by members of the International Brotherhood of Teamsters, is United's first labor deal since CEO Oscar Munoz temporarily left the company on medical leave following a heart attack.

## LSG Sky Chefs Finds New Tampa International Home

LSG Sky Chefs signed a 10-year lease on a 27,000-square-foot building at Tampa International Airport and has retrofitted it with a state-of-the-art commercial kitchen. LSG Sky Chefs had lost its facility to a \$1 billion upgrade project at the airport. Local real estate costs had LSG Sky Chefs planning to move their kitchen to Fort Myers, Fla. and truck meals to Tampa International.

## Ground Handling System Market Projected to Grow to \$526.1 Million By 2022

The global aircraft ground handling system market size is expected to reach \$526.1 million by 2022, according to a new report by Grand View Research, Inc. Increased global air traffic is expected to drive GSE industry growth. The vast increase is likely to require an increase in both GSE and related staffing, both of which bode good signs for the prospects of GSE vendors and suppliers.

## Lower Fuel Prices Are Starting to Push Airfares Down

Airfares are expected to decrease through the end of the year as airlines pass some of the savings from drastically lower fuel prices onto consumers. Average domestic airfares were 18 percent lower in September than during the same period in 2014, and 9 percent lower than they were in August 2015. Fares prices are projected to be 17 percent lower in Q4 2015 than in the same period in 2014. Aviation Fuel prices have dropped 47% since last year.

## Inter airport Europe Closes With 7 Percent Visitor Increase

The 20th anniversary inter airport Europe, International Exhibition for Airport Equipment, Technology, Design & Services, ended with a 7 percent uptick in total visitors over 2013. The bi-annual show housed 12,706 trade visitors from 110 countries at the Munich Trade Fair Centre. In addition to the visitor increase, a total of 676 exhibitors from 44 countries and a net floor space of 29,870-square-meters rounded out inter airport Europe 2015.



## PHOENIX METAL PRODUCTS AND SOUTHWEST AIRLINES CELEBRATE LAV TRUCKS NOS. 1 AND 500

Representatives from Phoenix Metal Products, Southwest Airlines Co. and Isuzu met in Dallas on November 3 to commemorate Phoenix Metal's 500th TL-600 lavatory truck, which was sold to Southwest. The group noting the No. 500 milestone, but had the opportunity to celebrating Phoenix Metal's very first truck.

In 1995, Southwest took a chance on buying a lavatory truck from a brand new GSE company based in Miami, Phoenix Metal Products. Phoenix Metal's first lavatory truck sale kickstarted their business and created a relationship that has lasted for more than 20 years.

"Take it, destroy it, give it back to me in a cardboard box, let somebody use it," Bill Wilcox, co-owner of Phoenix Metal Products, says of how he and his partner built their business through proving their equipment's worth. "We don't care. We just want you to try it."

Southwest is both Phoenix oldest supporter and one of their largest. The Dallas-based airline currently has 98 Phoenix Metal lav trucks in service and more than 250 pieces of Phoenix Metal GSE in their fleet. In all, Southwest has purchased almost one-fifth of all products manufactured by Phoenix Metal Products, more than any other airline.

"People say it's durable," Larry Laney, Director of Ground Support at Southwest Airlines, says. "But we don't believe them as an end-user until we get them out there and prove it."

## Cargo 2000 Members Agree On New Quality Standards for the Air Cargo Industry

The more than 60 technical and operational managers that make up Cargo 2000 (C2K) took part in a meeting to implement new quality standards for the air cargo industry. The group met in Vienna, Austria to finish guidelines for airport-to-airport specs and to begin revising door-to-door processes.

## Philippine Ground Handler Sued For Faking Contracts

Philippine ground support concessionaire Philippine Airport Ground Support Solutions Inc. (PAGSS) is accused of falsifying lease contracts to operate two lounges in terminal one at the Ninoy Aquino International Airport (NAIA). According to Manila International Airport Authority (MIAA) spokesperson David De Castro, PAGSS operates two lounges at NAIA—one contract was since 1993, and another was acquired in 2014. PAGSS' operations on the lounges went on a month-to-month basis at the conclusion of the contracts. In May, the MIAA announced that the lounge spaces operated by PAGSS would be put up for auction, effectively ending PAGSS' month-to-month contract. Cordero and PAGSS are accused of providing a fake contract for operations covering February 2015 to February 2016 for each of the lounges the company operated after the pre-bidding phase. MIAA said the documents were signed by Cordero and dated January 2015, but were noticeably forged and weren't filed with any of the corporate offices of the MIAA.

## Hactl and Haxis Win Again

Hong Kong Air Cargo Terminals Ltd (Hactl) and its logistics subsidiary Haxis both won awards at the Payload Asia Awards. Hactl received this year's award for Ground Handler of the Year (Customer Choice), while Haxis received the award as Regional Logistics Provider of the Year in both Customer Choice and Industry Choice.

## Miami-Dade Mayor Vetoes Luggage-Wrap Rules at MIA

Miami-Dade Mayor Carlos Gimenez on October 14 vetoed a plan to crackdown on

outside luggage wrapping at Miami International Airport. Gimenez said it made no sense for the county to start policing baggage wrap at MIA and warned of travel disruptions if the screening regulations determined which bags were properly encased in plastic and which weren't.

## Baggage Handler Sues Over Alleged Electric Shock at Dublin Airport

A 29-year-old baggage handler is suing for damages following an electric shock incident when he plugged his truck in for charging. According to the Irish Times, Keith Doyle says that "he was stuck to the ground and unable to shout after an electric shock went up his arms." Doyle, who was on a three-month contract, says he initially felt fortunate to not have long-term injuries following the shock, but that he has suffered from panic attacks that have resulted in "intense fear, despair and chest pains" in the ensuing months.

## ► PEOPLE

### Southwest Airlines Adds Tom Nealon as EVP Strategy & Innovation

Southwest Airlines has announced that Tom Nealon will join Southwest Airlines in January 2016 as Executive Vice President Strategy & Innovation. Nealon has served as a member of Southwest's board of directors since 2010 and has participated on the Audit, Nominating and Corporate Governance, and Safety and Compliance Oversight committees.



### Priority Freight Names Stuart Stobie Group Sales and Marketing Director

Priority Freight has appointed Stuart Stobie as Group Sales and Marketing

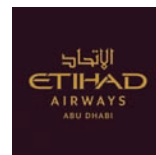


Director. Stobie will be responsible for developing and implementing the company's global growth strategy, as well raising awareness of Priority Freight's service offerings in global automotive, aerospace and pharmaceutical industries. Stobie joins Priority Freight from TNT, where he worked for 28 years in a variety of roles including senior management and at boardroom level.

## ► NEW DEALS

### Etihad Signs \$700 Million IT Deal With IBM

Etihad Airways signed a 10-year, \$700 million agreement with IBM for a range of IT services and infrastructure. The deal, which was signed last month, will provide access to the latest cloud-based technologies and services for the airline, its group companies and equity partners. The agreement includes a plan for a cloud data center in Abu Dhabi. The center, to be developed and operated by IBM.



### Vestergaard chosen by Menzies Aviation for new operation in Copenhagen and expansion in Stockholm

Vestergaard's Elephant® Beta de-icers have been chosen by Menzies Aviation for their new operation in Copenhagen Airport, where Menzies will be the airport's third deicing provider. Menzies will operate on one of the remote platforms in Copenhagen and their main customer is the second-largest airline in Copenhagen, Norwegian.



### Carolina GSE Confirms Tronair Distribution Agreement

Tronair has entered an agreement with Carolina GSE, Inc as a global distributor for their GSE and JetPorter towbarless electric aircraft tugs. Carolina GSE will market and support Tronair's complete line of products which include ground power units, hydraulic power units, jacks, stands, towbars, heads



and servicing equipment. This agreement is an addition to the existing JetPorter electric tug distributorship.

### AMSS and JBT Join For Global Marketing Agreement

AMSS and JBT signed a global, joint marketing and co-manufacturing agreement for military aircraft ground support activities. The multi-year deal will provide military customers access to a broad range of ground support equipment capable of supplying the conditioned air, high pressure air, and electrical power needs of virtually all U.S. and NATO fighter, trainer, cargo, naval, and specialty military aircraft. Certain key products will be regionally manufactured and their designs enhanced to meet local requirements and support needs.

### Crisplant Awarded Contract for Second Baggage System at Calgary Airport Authority

Crisplant – part of the BEUMER Group – has been awarded a contract by The Calgary Airport Authority, operator of Calgary International Airport (YYC), to install a second CrisBag®

tote-based baggage sorting system with integrated Standard 3 screening, replacing the existing conveyor-based baggage handling system. The contract also includes an extension to the existing system which will allow the CrisBag systems in the existing terminal and the airport's new International Terminal to be linked, extending the 100 percent system-wide tracing for each item of baggage to both systems.

### Gama Aviation announces a new contract with Avinode

Gama Aviation Plc, the global aviation services company, has today announced a new contract with Avinode, the world's leading tool for buying and selling air charter. As part of the new agreement, Avinode has developed a mobile app for Gama Aviation, and one for its website, providing easier access to live data on its fleet of charter aircraft for brokers and clients.

### Mack Brooks Exhibitions renews GATE agreement for inter airport shows

Mack Brooks Exhibitions has renewed the partnership agreement with GATE, German

Airport Technology and Equipment (GATE). The official signing of the agreement took place on the opening day of inter airport Europe 2015.



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# FUEL P FORTU



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Three of the Big Four airlines posted record third-quarter profits in 2015, and so did a lengthy list of regional and international carriers. Yet, amidst the sea of green, airlines are insisting that their financials are unsustainable due to the volatility of fuel costs - an insistence that would drive down future profit projections. As leading indicators for the health of aviation, what's going on with airline profits and exactly how bright is the future of the aviation industry?

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# PRICE LINES

## Q3 PROFITS

The United States' Big Four airlines all increased profits in Q3 2015.

Three of the four set new profit records.

American  
Airlines  
**\$1.9**  
billion

United  
Airlines  
**\$1.7**  
billion

Delta Air Lines  
**\$1.3**  
billion

Southwest  
Airlines  
**\$584**  
million

By Alex Wendland

On October 14 of this year, Delta Air Lines reported a third-quarter profit of \$1.3 billion. The record breaking milestone was reported in the Atlanta-Journal Constitution by Russell Grantham.

Grantham reported in the very same article that Delta would cut an undisclosed number of jobs from the company's "management and salaried" workforce over the next few months to "boost productivity."

In the same week as Delta's announcement, American Airlines, Southwest Airlines and Alaska Air Group all reported record quarterly profits. Even with considerable C-suite management turmoil, both United and Air India reported profit increases and a return to profit, respectively. And that was just in one week. Airline profits, as key indicators for industry-wide growth, are booming.

Why then, are airlines hedging their future projections?

Fuel prices.

"With volatile fuel prices and revenues under pressure," Paul Jacobson, Delta's chief financial officer, said in an October statement. "We are using the current environment to evaluate and prune costs across all parts of the business, including our overhead functions, making sure we're investing in the right parts of the airline and at levels we can sustain over time."

Fair enough. Delta's third-quarter revenue was, in fact, down one percent compared to 2014 and, according to Jacobson, the company's fuel price fortune "will drive a \$750 million benefit in the December quarter."

To a tee, airlines across the country are warning that profit levels of this nature are currently unsustainable due to fuel price volatility, but Airlines for America (A4A), a lobbying group for the airline industry, issued a similar statement last year as well.

"Declining fuel prices are good news for everyone as they lower personal costs and enable industries such as airlines that rely heavily on fuel to reinvest in their business and their customers," the release, dated December 14, 2014, said.

And, in fact, A4A estimated in 2014 that airlines were reinvesting \$1 billion per month back into operations – including GSE and other equipment purchases. That number has only grown with a year of profitability, according to A4A.

"Finally, U.S. airlines are growing once again," Melanie Hinton, managing director for airline industry public relations and communications at A4A, says. "This has



The per gallon cost of fuel has **dropped 37.1 percent** compared to prices in Q3 2014.

allowed airlines to reinvest in operations and equipment and on average \$1.3 billion per month into the passenger experience offering enhanced inflight entertainment options on aircraft; adding bigger, newer planes to their fleets."

What then, if profits are driving growth throughout the aviation industry and airlines insist that lower fuel prices are the key driver for their increased profits but those prices can't be relied upon to continue the trend, is the industry supposed to do?

## Don't Be Crude

Fuel prices are normally the largest expense for airlines, and often in all of aviation. According to A4A, after combining SEC

filings for 10 of the United States' busiest airlines, that wages and benefits (29 percent) have replaced fuel costs (24 percent) as the largest operating expenses for the airline industry.

The per gallon cost of fuel has dropped 37.1 percent compared to prices in Q3 2014. Even with relatively flat revenues, that creates a massive amount of room to breathe for airlines. But that's all fairly common knowledge. What happens next?

"The consensus amongst major oil industry associations—including the Organization of Petroleum Exporting Countries (OPEC) and the International Energy Agency (IEA)—is that crude oil will remain relatively low, below \$80 per barrel, heading toward 2020 due to plentiful supply and falling demand across developing countries," CR Sincok, managing director of business development at Avfuel, says.

"But also a weakening supply growth outside of OPEC resulting in a gradual rise in price. This is consistent with the U.S. Energy Information Administration's projections that West Texas Intermediate crude



A4A estimated in 2014 that airlines were **reinvesting \$1 billion per month** back into operations – including GSE and other equipment purchases. **That number has only grown** with a year of profitability.



oil prices for 2016 will slightly rise from this year's \$49.88 a barrel to \$51.31. We would have to agree with the projection of these associations."

So the oil industry is expecting per-barrel prices to rise, which is expected about as much as airlines trying to push profit projections down, except that rise is 2.9 percent in 2016. And that rate is projected through 2020.

Obviously the percentages mentioned in this section aren't apples-to-apples. A4A is citing per-gallon prices for finished fuel whereas Avfuel's numbers are per-barrel projections for crude oil. The comparison, however, reveals that fuel prices will not be jumping 37 percent anytime soon the way they have plummeted in the past year.

"Barring unforeseen events – such as hurricanes, earthquakes, floods and other natural disasters, as well as political climates – we think it's very reasonable to say that while steadily increasing, overall, crude-oil prices will remain low, which customers should see reflected in the end price of jet fuel products," Sincok says.

## The Air Necessities

Maybe we've read too much into the pessimism of the airlines' earnings reports. Perhaps they're just looking to push down expectations on Wall Street so they can wow the analysts again in the fourth quarter. After all, this is still an industry in recovery.

"While the price of fuel has fallen year over year, fuel remains one of the airlines

biggest and volatile expense," Hinton says.

"This year is the first year since the Great Recession that U.S. airlines' profitability has fallen in line with the average U.S. company," Hinton says. "This return to profitability has benefitted customers as airlines are strong, able to compete and reinvest in their business with new planes, products and destinations, including expanded service to small communities and internationally, which in turn creates jobs."

Airlines for America says that, finally, airlines are coming back into line with other business sectors around the country and fuel prices are a big part of that. Surely that's the case. But given the rate at which airlines are reinvesting in their operations, including GSE, it doesn't appear that the airlines' fuel-

Delta's third-quarter revenue was, in fact, **down one percent** compared to 2014 and, according to Jacobson, the company's fuel price fortune "will drive a **\$750 million benefit** in the December quarter."

Airlines across the country are **warning that profit levels** of this nature are currently **unsustainable** due to fuel price **volatility**.

based profit projections are hindering them as a key indicator in aviation.

If there's really anything to worry about for airline financials, it's that revenue remains pretty flat with an increase in the number of passengers carried. The fact remains, however, that expenses have fallen so far for airlines that they're able to provide fare decreases for customers and reinvest in employees and equipment.

"While lower crude prices do translate to lower fuel costs, it stems from flat demand and increased supply, which tends to be an indicator of an economy that's slow to grow," Sincok says.

The best conclusion to be drawn from what we know is that profits are going to remain high with oil prices rising just below 3 percent per year. Based on the rate that airlines have been putting that money back into operations and GSE purchasing, that's good news for the entire industry. **GSW**



Elliott Aviation

# The 5 Biggest Business Headaches for Aviation Fuel Suppliers and Resellers

*By Lucy Temple*

A global software development company, specializing in aviation fuel management solutions, has recently conducted research with aviation fuel suppliers and resellers to understand what their biggest day-to-day challenges are in relation to data and administration. The results paint a picture of a sector that is still reliant on time-consuming manual processes, and where there are numerous opportunities for improving business efficiency.



The company behind the research, the FuelPlus Group, held discussions with fuel suppliers and resellers during 2014 and 2015, to help shape its new product aimed at this market: supplier.ONE. This web-based application is designed for suppliers and resellers who service both airlines and general aviation customers, and aims to save them time and money by streamlining fuel desk activities.

FuelPlus uncovered some recurring themes during their research:

#### HEADACHE 1:

##### **Maintaining a single up-to-date list of jet fuel prices**

First, being able to maintain a single, up-to-date list of fuel prices was by far the main issue for the aviation fuel resellers and suppliers they spoke to, as FuelPlus' Product Manager for supplier.ONE, Tiberiu Jecza, explains:

"The complexity around how fuel prices are determined, the number of different components that make up the price, and the volatility of the energy market, make this a real administrative pain for most companies," Jecza says. "Our experience is that organizations are either trying to manage and manually update multiple Excel spreadsheets, or trying to use a generic ERP system (Enterprise Resource Planning). Neither solution works very well."

David Dykes, Supply, Logistics and Commercial Aviation Manager for the fuel supplier Gulf Aviation, agrees and outlines the real problems with this approach:

"For activities related to pricing, tendering, credit control, stock management and sales and invoicing, we currently use a combination of our ERP system and Excel spreadsheets. This is a fragmented way

of working and is very time and resource consuming because a number of tasks are duplicated. It also increases the chance of human errors occurring."

Tiberiu also reports, in his experience,

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Being able to maintain a **single, up-to-date list of fuel prices** was, by far, the **main issue** for aviation fuel resellers and suppliers they spoke to.

other problems with this approach.

“Your ability to interrogate, analyze and effectively use the data is also very limited because it’s in different places,” he says. “Plus, generic ERP systems weren’t designed with the aviation fuel supply market in mind and suppliers often tell us that as a result, these systems aren’t a good fit with business processes.”

These revelations are worrying for the industry, because clearly, being able to maintain a single up-to-date list of fuel prices is absolutely crucial to the fuel supply business.

## **HEADACHE 2:**

### **Creating a transparent pricing policy**

Another closely linked challenge is apparently that many of the aviation fuel suppliers and resellers FuelPlus talked to are struggling to create a pricing policy that can be understood and applied by different members of staff. Due to the complexity of pricing, which could include different mark-ups based on location or fuel volume, as well as the frequency with which price components change, pricing decisions are mainly being taken by the fuel desk manager. This can slow down the process of quoting and responding to fuel requests and, arguably, isn’t the best use of resources.

## **HEADACHE 3:**

### **Monitoring the credit limits of airlines**

Another key issue, according to FuelPlus, is that suppliers and resellers need the ability to accurately monitor the credit limits of their airline customers. The main headache here is about keeping credit limits sufficiently up-to-date, bearing in mind the number of refuelling events that could be taking place each day, and the number of fuel tickets this would generate.

Again, the norm seems to be that fuel suppliers and resellers manually maintain this information in Excel files, so the risk of human error and out-of-date information is high, says FuelPlus representatives. This could potentially leave fuel suppliers and resellers financially vulnerable.

“Flightworx Fuel works closely with Flightworx Accounts to monitor credit limits and ensure that there is constant communication with our clients in order to keep things

moving,” James Kossick, Fuel Manager for the fuel reseller Flightworx Aviation, says of his company’s process. Kossick admits that this is “largely a human task which is performed on a daily basis, and we rely on the suppliers invoices to be correct.”

The reseller’s dependency on information from fuel suppliers is explained further in headache 5.

## **HEADACHE 4:**

### **Operating a slick and efficient fuel request process**

In order to supply fuel to a customer at an airport, numerous steps must be taken, appropriate checks made and data from various sources needs to be tied together. For example, when a fuel supplier or reseller receives a fuel request from a customer, they need to check credit, send out authorization to the airport, issue fuel codes, a corresponding fuel order, and so on. As Flightworx Aviation’s James Kossick summarises: “There is a large amount of human influence on any fuel release.”

For most of the fuel suppliers and resellers that FuelPlus talked to, this means manually checking several spreadsheets and copying and pasting information between documents. FuelPlus see this as another waste of skilled resources and one that leaves suppliers at risk of human error.

## **HEADACHE 5:**

### **Capturing fuel ticket information quickly**

During their research, FuelPlus also discovered that for aviation fuel resellers in particular, confirmation of the actual amount of fuel uplifted at each fuelling takes a long time to come through.

Tiberiu elaborates: “While fuel tickets are issued to the pilot, airline and fuel supplier, they aren’t given to the resellers. This means that fuel resellers usually have to wait for the suppliers to send an invoice before they know the actual volume sold, and this can create cashflow problems.” He added: “This also means that fuel resellers have to trust fuel suppliers to invoice for the correct amount.”

Fuel suppliers are clearly at an advantage here, but even for them, say FuelPlus, there are inefficiencies. They are faced with the

laborious and slow process of gathering and checking hundreds of (often) paper-based fuel tickets and then raising invoices for these.

## **The drive for automation**

It’s perhaps surprising to many, that in the 21<sup>st</sup> Century, much of the work of fuel suppliers and resellers is still manual and resource-intensive. But this is a familiar story for FuelPlus as their CEO, Klaus-Peter Warnke explains: “About 5–10 years ago we saw the same reliance on paper-based, manual processes for invoicing within the industry. It created a lot of inefficiency and as a result, IATA started the initiative to create a standardized electronic (XML) fuel invoice for all parties to use. FuelPlus was part of the taskforce for this initiative and within 5 years, we’ve seen the sector switch from a very manual approach to invoicing to a very automated approach.”

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It’s perhaps surprising to many that, in the 21st Century, **much of the work** of fuel suppliers and resellers **is still manual and resource-intensive.**

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Klaus-Peter is confident that the same transformation can take place within the fuel supply industry for other accounting and procurement activities, so that the difficulties experienced by suppliers and resellers today, will become a thing of the past. In fact, automating the industry is his central mission: “I believe that ultimate business efficiency can only be achieved through the automation of processes,” he explains. “So the FuelPlus vision is to come up with tools that can free fuel professionals of their boring routine activities, so they have more time to spend on areas where they can really add value, such as talking



to suppliers, analyzing and interpreting figures, and coming up with new ideas. I compare it to the new self-driving cars that are being developed. We want to create the first completely self-driving aviation fuel management system."

Their new software for fuel suppliers and resellers, supplier.ONE, which was launched in June, is not quite that yet, says Klaus-Peter, but he certainly believes it's moving the industry forward and removing many of the common issues highlighted by their research. "There were no products on the market that had been specifically designed for the supply side, only large standardized ERP systems or tools designed for other industries, such as road transport. None of these quite met the needs of the aviation fuel supply industry, so we decided to create our own tool." He continues: "Thanks

to the effort we've put into researching this segment of the fuel market, we're confident supplier.ONE will bring many benefits to fuel suppliers and resellers. For example, users will be able to easily create and maintain a single pricing database for quotes and contracts, which is automatically updated with the latest energy prices and exchange rates. That removes some of their biggest headaches straight away."

David Dykes from Gulf Aviation is equally hopeful: "Before now, there wasn't a

user-friendly and tailor-made system which could provide a database covering all the key requirements for a supplier: pricing, tendering, credit control, stock management and sales and invoicing. FuelPlus' new supplier.ONE product looks as if it could be the answer to these problems. We're very interested in finding out more about it."

Are you a fuel supplier or reseller? Do these issues sound familiar to you? Let us know on Twitter @GroundSupportWW using #fuelsupplierpain. **GSW**



#### ▶ ABOUT THE AUTHOR:

**Lucy Temple** is a UK-based freelance copywriter and content creator who regularly writes for FuelPlus. She has over 14 years of experience in the field as well as a professional marketing qualification. In addition to writing for the aviation industry, Lucy also has experience in a range of other sectors, including software, education and training, travel and leisure. She's on Twitter – @lucytemple – or at [www.lucytemple.co.uk](http://www.lucytemple.co.uk).

# Simple Complexity



# Growing Inside and Out: dnata's Diversifying Culture

The Middle East, especially the Gulf region, is one of the parts of the world where the aviation industry is growing more than anywhere else. How are ground handlers keeping pace with an industry growing more quickly than their workforce?

*By Mario Pierobon*

**T**he geographically strategic location of the Middle East – between the European and the Asian continents – and a supportive aeronautical infrastructure are changing the way many long and medium haul passengers travel. Middle Eastern air carriers are also developing significant networks in Africa with the results that, paradoxically, it becomes more economical, as well as practical due to frequent connections, to fly from Europe to Africa and back with a stopover in a Middle Eastern hub than without a stopover. It's a fact that the booming aviation industry of the Middle East, namely of the Gulf region, cannot develop by relying only on the local workforce of these Middle Eastern economies. Indeed a significant proportion of the workforce comes from overseas to work at the major airports, air

navigation service providers and airlines in the region. This trend holds true also for many other economic sectors.

The aircraft ground handling business is key in supporting the sustainability of the aviation industry in the Middle East and it is significantly affected by the practice of recruiting personnel from overseas.

## Where From?

The ramp workforce is not limited to a certain region but rather employees are recruited from all over the world. In the Gulf countries the ramp workforce's origin varies from Australasia, Philippines, the Indian Subcontinent (India, Pakistan, Sri Lanka, Bangladesh), Africa (South Africa, Kenya), and Europe. The origin is dependent upon the type of job advertised by a ground service provider's recruitment function, i.e. supervision to operators or manual labor.

Jon Conway, a Divisional Senior Vice President at dnata in Dubai, United Arab Emirates (UAE) confirmed the theory that Middle Eastern firms source ramp personnel internationally.

"We source ramp personnel primarily from overseas, although many expatriate colleagues are recruited locally," Conway says. "Our top five nationalities working in airside operations are: Indian, Pakistani, Philippine, Bangladeshi and Sri Lankan. Across our UAE business, we have nearly 100 nationalities. We are, by any definition, a multi-cultural organization and it is one reason it is such a pleasure to work here."

## Why Do Personnel Relocate?

The workforce of a given industrial sector being so heavily populated by foreign residents is a phenomenon due to the possibility of better standards





of living, better working conditions, a human resource management ethics and primarily the non-availability of employment opportunities back in one's home country.

"It is probably important to remember the UAE indigenous population represents roughly 15 percent of the overall UAE population," Conway says. "Of this 15 percent, a large percentage of Emiratis work in the state, as well as the private sector. Combined with the enormous development and growth in Dubai (indeed the UAE) it is a very simple fact that Dubai absolutely needs large numbers of ex-patriate personnel to help operate many businesses and support the infrastructure development we see here. Fortunately, we have no shortage of expatriates seeking employment with us."

## Coping With Seasonality

The practice of recruiting personnel from overseas also provides the advantage to cope with the seasonality that characterizes the airline business.

In the Gulf countries, the expatriate workforce is bound by contracts and limited to single employers only. In addition, moonlighting is not permitted. This allows operators, ground handling firms and airports to cope with seasonality. The issue of coping with seasonality is greater in other regions of the Middle East and North Africa where the workforce is generally local and terms and conditions of contract vary significantly between locals and expatriates.


For Dubai, however, seasonality is simply not an issue.

"With the growth we see, about 80 million passengers forecasted for Dubai International this year, it is generally about more staff – not less," Conway says.

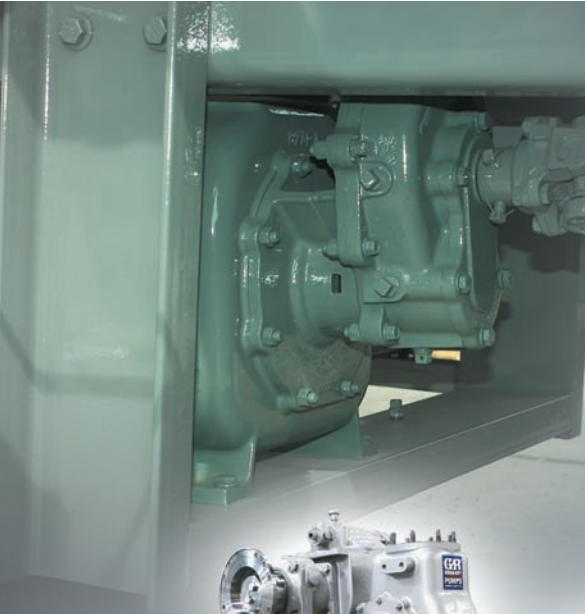

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▲ **Though ramp staffing is often a high-turnover area, Jon Conway, Divisional Senior VP at dnata says it hasn't been an issue for them. "I can assure that their sense of belonging is often humbling," he says. dnata**

## Ramp Safety

Sourcing ramp personnel from overseas is often subject to a cultural prejudice: some believe that ramp operators sourced from foreign countries are more likely to be involved in ramp safety events, because of a possibly limited sense of belonging to the organization and the hosting country.

However, this is not the case. If the ramp workforce is predominantly from overseas, then surely even one event will skew the statistics. Accidents and incidents are not related to one's ethnic background or from which country the ramp workforce comes from, but rather they result from a combination of dysfunctional circumstances and interactions at a moment resulting in an event.

Conway also says that there is absolutely zero evidence of foreign ramp personnel being more often involved in safety events.

"Ramp safety, in fact all workplace safety, is a prime focus and always will be," Conway says.

Conway also refutes the notion of possible issues as a result of foreign employees' sense of belonging to the organisation leading to reckless behavior.

"Again, there is zero evidence of this," Conway says. "One of the most enjoyable parts of my job is, on a monthly basis, to present long service awards to dnata colleagues who have worked 20 years or more

within the organization. I can assure that their sense of belonging is often humbling."

The presence of issues regarding the sense of belonging is dependent on the employee and employer relationships and the terms of the work contracts. The sense of belonging is very personal and can vary from person to person for varied reasons, including the existence of problems that are specific to the individual and the organization simply cannot influence.

## Maximizing Training Effectiveness

Recruiting ramp employees from overseas provides the advantage of matching workforce demand with supply in a flexible way; the challenge remains, however, on how to maximize the effects of training given the notoriously low retention rates of employees in the ramp environment.

dnata's approach is to train all of its staff to the very same exacting standards.

"We are one of the few ground handlers who have taken, as a basis for our training, a Government approved vocational training program," Conway says. "Our attrition levels are lower than one would think and is in single figures."

The challenge on how to maximize the effects of training can also be met by means of constant reminders and by investing on

## IMPROVING PERFORMANCE ON THE RAMP

Despite the best efforts by proactive ground handling service providers, working on the ramp remains a rather alienating job, often performed in extreme environments and under constant pressure. What else can be done to improve the sense of belonging and thus the awareness and performance in the work environment of ramp personnel?

Like any other workforce, the fact that ramp personnel has the sense of security and the belief that their efforts and contributions are recognized and appreciated by the company has a great influence on how an individual develops a sense of belonging.

Although monetary reward has a great influence on the sense of belonging, it can be rather short lived. Ground handling companies should look at making small incremental changes – which are significant in the long term – with regard to improving the working conditions, including: enhancing the social welfare standards of employees; recognizing employees; rewarding them for the contributions and sacrifices they make; having them involved; and letting them know that their contribution is valued in the development of training programs, operational processes and procedures.

"We do not differentiate between overseas or locally recruited staff," Jon Conway, a Divisional Senior Vice President at dnata, says. "They are all part of the dnata family regardless of origin, background or experience. We recruit, train and offer career opportunities to everyone that joins. Some will stay for decades, others may return home after a few years."





▲ **"Insourcing" ramp staff can make maintaining training standards a challenge. dnata**

awareness and mindfulness in the workplace. Where possible, if there is a high enough number of employees, training by their own peers and in their native language should be delivered to ramp personnel.

### Feeling at Home

Middle Eastern carriers are leading a revolution in the long-haul domain of the airline business by means of high standards of service and a wide array of connections. The aircraft ground handling sector is of key importance in the Middle East's aero-

nautical infrastructure that is supporting this revolution.

Large communities of expatriates have been and are moving into the Gulf region to work on the ramp. They move in search of a better standard of living and improved working conditions. These operators contribute significantly to the resilience of aircraft ground handling and it is important that organisations recognise and continue to recognise their contribution. **GSW**



#### ► 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 air-side safety.



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# One Fuel Fits All: Avgas vs. Jet Fuel Through the Years

In the beginning, airplanes used piston engines and aviation gasoline – or avgas – and life was simple. Ground support folks just had to know what octane avgas to put in each particular airplane, and even then they were aided by the dyes used to identify different octane levels.

*By Ralph Hood*

**T**hen along came the first jets, and, lo, there was jet fuel, which was much like kerosene and would not run in piston engines. Thus began the problems and all hell broke loose.

None of this mattered much at first, sure. Jet engines were mostly used by the airlines and the military. Besides, if the airplane had propellers that was a pretty good indication that it had a piston engine and used avgas.

Next came the Beech King Air and other turbo-prop aircraft, called propjets by marketers. They had props, but used turbine engines that burned

jet fuel. Uh-oh! How could anyone tell which prop planes took avgas and which took jet fuel? I mean, you know, they had props, didn't they?

Then, in the 1960s, came the Learjets and other business jets. They were smaller than airliners, but had no props, so they took jet fuel. That was easy.

Each of these steps created problems for support personnel. First, they had to learn that turbine engines did not like avgas and vice versa. That sounds simple, but there were always little surprises. Older airliners – the DC-3s, 4s, 6s, 7s, Martins, Convairs and others – were around long after the

jets arrived and, indeed, some are still around today. These old planes were big and important looking, but they did have props, so that helped.

During and after the Korean War came the helicopters. At first there were the Whirly Birds, the Bell-47s, they were piston powered and most everybody knew that. In fact, many just figured that all helicopters were piston powered. Around the same time came turbine-engined helicopters which, as ground-service providers had to learn, required jet fuel.

## Changing Times

I was in the aviation insurance business during many of these changes and saw the results. One truly fine FBO put a load of jet fuel into one of the old round-engine airliners. The lineperson just never had seen such a big airplane with piston engines, I reckon, and the result was disastrous.

At the FBO for which I worked,



▲ *The R-44 is piston powered. The R-66 is turbine powered. But you wouldn't know that just by looking at them - that knowledge requires experience and training.*

*Robinson and Bell*



This move to **“one fuel fits all”** might help ground support in their eternal **quest for safety** and simplicity. But watch out, folks. As I write this, the **Solar Impulse II** is trying an around-the-world flight in a **sun-powered aircraft**.

we came full-circle. Our line staff was well-trained, but the younger folks had never seen a piston-powered helicopter. Sure, enough, an old Bell-47 flew in and it was filled with jet fuel. We lucked out on that one. The pilot had been around a long time and he noticed an engine instrument indication shortly after takeoff that screamed “jet fuel, jet fuel!” He immediately put it on the ground – and I do mean immediately.

I dare say a less experienced pilot would never have noticed the flicker of that gauge. Not only that, but the pilot knew exactly how to get the engine cleaned out, our shop did the work and he flew away.

We were also worried that the farmer on whose crop the helicopter had set down might sue us. As it turned out he was one of our customers and he let us off light.

These problems were once rampant throughout aviation. To make matters worse, Piper, Beech, Cessna and others started putting out aircraft with turbo-charged piston engines. The powers-that-be asked manufacturers not to put the words “turbo charged” on the outside of the airplane, lest ground support personnel misunderstand and put jet fuel in the tanks.

Also, the military purposefully planned a switch to all turbine aircraft. They performed better and having a full fleet of them meant the military had to buy, store, handle and use only one type of fuel.

At the same time, in some places—Bermuda comes to mind—avgas wasn’t available at all,

and you’d best not arrive there in a piston-powered airplane. Getting back to the mainland could be both very expensive and time consuming.

No doubt the move to jet fuel will continue. Avgas is already becoming more difficult to get in many parts of the world. One response has been to move towards small aviation

diesel engines that will burn either jet fuel or diesel.

This move to “one fuel fits all” might help ground support in their eternal quest for safety and simplicity. But watch out, folks. As I write this, the Solar Impulse II is trying an around-the-world flight in a sun-powered aircraft. **GSW**



#### ▶ ABOUT THE AUTHOR:

**Ralph Hood** is a Certified Speaking Professional who has addressed aviation groups throughout North America. A pilot since 1969, he’s insured and sold airplanes at retail and distributor levels and taught aviation management for Southern Illinois University. Ralph Hood is also an award-winning columnist (he writes for several publications), a salesman and sales manager (he sold airplanes, for crying out loud!), a teacher (he taught college-level aviation management) and a professional public speaker who has entertained and enlightened audiences from Hawaii to Spain, and from Fairbanks to Puerto Rico.

- Certified Speaking Professional (CSP), National Speakers Association
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# BETA Fueling Systems Program Attempts to Drive Innovation Through Build-Off

Hundreds, millions, even billions of dollars are spent by companies across the world on new product development. All to find and develop the next big idea to bring to the marketplace. The best solution is often the simplest or the answer is in your backyard, although cliché, are options to consider when researching and developing new products.

**B**ETA Fueling Systems hosts an annual one-day Build-Off competition for its employees' across the company. The goal of the contest is to unearth the ideas they may have for new products and give them a chance to develop. Ultimately, this is a team-building event to foster cooperation and teamwork throughout the company, but other companies may be surprised at the viable product ideas that come from this event.

The setup for the Build-Off is simple:

- Group employees into teams. Ensure a wide array of skill sets and company-wide departments are represented on each team. Think accountants learning from welders with sales lending a hand to ensure marketability.
- Provide all participants with one short strategy session to hit certain milestones and the rules for the competition. Ask participants to consider the following:
  - » The type of product they'll want to make
  - » How they'll use their day of development and design
  - » What their product needs to prove viability
  - » What roles each team member can fill to check the boxes for viability criteria
- Give everyone the day to create, mock-up and design the product the team has decided on.
- At the end of the day, each team presents their product idea to a panel of judges who determine a winner.
- Boom! Your next profitable product has been discovered. R&D in one day.

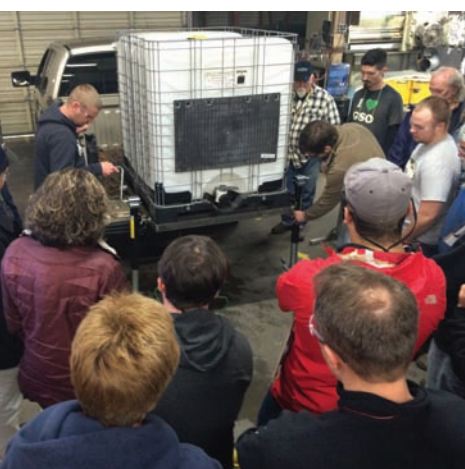
BETA advises that organizers create hub spaces for every team that allow for easy collaboration on the day of the competition. The hubs have the added effect of creating a bartering system for skill sets and making everyone, yes everyone, participate. Every single employee has a skill set that they

can offer their team. Ending the day-long competition with an awards ceremony ties the whole event together nicely. Also, there is something about a trophy and bragging rights that goes a long way for company morale and comradery.

The event is always fun, collaborative and gives every employee the opportunity to work with people they may not interact with on a day-to-day basis.

Ultimately, this is a **team-building event** to foster cooperation and teamwork **throughout the company**, but other companies may be surprised at the **viable product ideas** that come from this event.

Obliterate silos, both communication silos and thought silos, by using the untapped resources in your current pool of employees. All employees can offer first-hand expertise to product designs that would enhance their importance and your bottom line. Enhancement leads to productivity which then turns to profit. If your company is able to manufacture it, then they win two-fold. This annual competition for BETA Fueling Systems has provided the company with ideas and inspiration that have been incorporated into the products they currently offer and new products soon to come on the market. **GSW**







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### Hydraulics International Inc.

Hydraulics International, Inc. (HII) portable Electric Driven Gas booster is rated to 10,000-psi for Breathing air/N2 and 4500-psi for Oxygen service. Ideal for filling or topping off cylinders, Tires, Accumulators, Struts, and Life Rafts. Its two-stage and double acting design uses no belts or pulleys, making it the quietest electrically operated booster in its class, only 60 decibels. Complete with safety controls, filters, gauges and valves.

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## HYDRANT DISPENSER CARTS

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## FUELING MATS

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## HOBART 2400 POWER COIL

### ITW GSE Hobart

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## LOW PROFILE HYDRANT DISPENSER

### ProFlo Industries LLC

ProFlo Industries manufactures a low-profile hydrant dispenser designed to fit under the wing of a Boeing 737 and Airbus A320. Our MicroDispenser is built in accordance with JIG, NFPA and ATA 103 with flow rates ranging from 450 GPM up to 800 GPM (1700 LPM – 3000 LPM). A modular concept is utilized to allow installation on a customer preferred chassis as well as easy re-chassis in the future. The unit is constructed from all aluminum and stainless steel for longevity and reduced maintenance requirements.

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## 800 GPM HYDRANT DISPENSER

### BETA Fueling Systems

BETA Fueling Systems is a global leader in the design and manufacture of aviation hydrant dispensing equipment. With hundreds of units currently in service at major airports around the globe delivering fuel at 800 GPM to 1000 GPM flow rates, BETA dispensers perform reliably for the most demanding oil companies, airlines and aviation fueling companies.

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## LOW PROFILE LOW FUEL RATE MINI HYDRANT DISPENSER

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The GECKO – Refuel International's Low Profile Low Fuel Rate Mini Hydrant Dispenser is designed for efficient and safe refuelling of 'narrow body' aircraft of varying wing heights, such as the Airbus A320, Boeing 737-300, and 737-800 aircraft from the airport underground hydrant system.

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## WORLD FUEL SERVICES

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World Fuel Services Corporation is a global leader in fuel logistics, specializing in the marketing, sale and distribution of aviation, marine, and land fuel products and related services. Fueling Relationships Around the World™ at more than 6,000 locations in 200 countries and territories, our customers value single supplier convenience, competitive pricing, trade credit, price risk management, logistical support, fuel quality control and fuel procurement outsourcing – all provided by our global team of local professionals.

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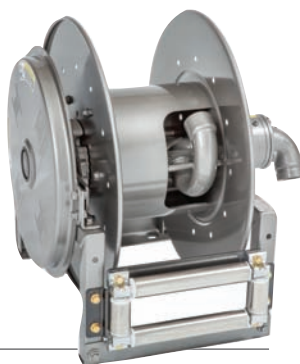
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## ► SPRING REWIND REELS

### Hannay Reels Inc.

Hannay Reels 900 Series features a roll-formed channel frame construction. The 900 Series spring rewind reels are ideal for bulk transfer, fuel dispensing, suction or discharge operations. A declutching arbor prevents damage during reverse winding. Temperatures from -60 F to +175 F (-51 C to +79 C) can be accommodated.

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## ► ENGINE MANAGEMENT SYSTEM

### Rampmaster

Rampmaster, the premier manufacturer of aircraft refuelers for the worldwide aviation market, has received the final testing report from West Virginia University's Center for Alternative Fuels, Engines and Emissions (CAFEE) confirming that an aircraft refueling vehicle outfitted with the company's patented Engine Management System (EMS) consumes up to 78 percent less diesel fuel while pumping its jet fuel, a worldwide first in diesel fuel savings and greenhouse gas emissions.

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Scissor Decks are spring assisted manual lift platforms which set up or fold down in seconds. Scissor Decks may be joined together in line or on 90 degree angles for wrap around applications. Product features include: multi height adjustability, deck side or end mounted extension ladder, non-slip deck surface, locking wheels or stand version. Scissor Decks have handrail options to suit every application. Deployable option with removable lower legs to fit tight cargo spaces. Available in 4 models with max deck height up to 6' 10" and deck width to 40".

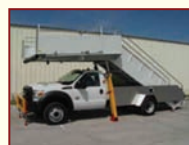
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## ► PILOT/ACTUATOR ASSEMBLY

### Eaton Aerospace Group

Eaton's new Carter product 47900 pilot/actuator assembly will eliminate fuel moving into hydrant servicer air systems and reduce piston seal damage due to debris entering through the pilot vent. Easily installed on all existing 60554 and 61654 hydrant valves, it will soon be offered as Option "V" on new valves.



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**Tronair Inc.**

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## LED DISPLAY

### Tekinno Corporation Inc.

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## GARSITE SERVICE DEPARTMENT

### Garsite

Garsite has now expanded into a fully-staffed service department including regional technicians. With the creation of the parts/service department, Garsite has become the largest aviation fueling equipment service provider in the country. The company offers fleet management and equipment maintenance programs, as well as compliance inspections (ATA 103, NFPA, etc.), equipment repairs and modifications for all makes and models.

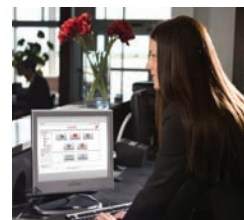


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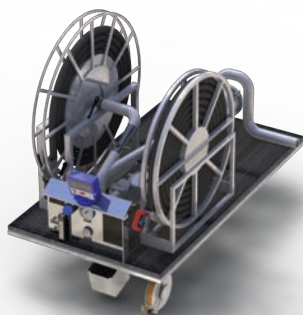
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## AVIATION FUELING MODULES

### ProFlo Industries LLC

ProFlo Industries manufactures Jet refueler, Avgas refueler and hydrant dispenser modules at our factory in Alvada, OH and then coordinates final assembly with global partners in the end user's country to provide the highest quality and most reliable equipment with best in class after sales support. Modules are built in accordance with international standards and designed to meet our customer's requirements. All modules are fully assembled and tested before being shipped to our assembly partner. Final assembly is accomplished using local labor, locally sourced chassis or prime mover and local tank if desired. ProFlo Industries supervises the process to ensure seamless integration. Commissioning and training is then provided in the customer's preferred language.

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## LANDING GEAR ACCESS STAND

### Liftsafe Fall Protection Inc.

The Liftsafe DF071592-03 Landing Gear Access Stand is being fit tested with a large 747 operator. The stand is engineered to integrate within the main and nose wheel wells with or without the wheel assemblies installed. The stand is adjustable laterally on bearing rails for access within the configuration of the gear in the down-and-locked position. The aluminum construction and ability to do a quick height adjustment makes this stand easily used by one aircraft technician. The ATACS bumper pads as well as the Rubber D bumper pads ensure the aircraft, landing gear and door and associated wheel well is protected during use and placement. The Landing Gear Access Stand contains anti-fatigue and anti-slip ladder rungs as well as secondary locks for height and lateral positioning. Additionally, the stand contains fall restraint anchorage on the upper ladder.



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## TRANSFUELER T-SERIES

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# My First Show

NBAA 2015 was my first formal foray in our industry; the whole week was engaging, exciting and was an exhibition for an industry with its eye towards the future.

Undeniably, the highlight of NBAA for the AviationPros group was our involvement in the NBAA Young Professionals events - affectionately referred to as #YoPros because, you know, young people.

For those unfamiliar, NBAA's Young Professionals in Business Aviation program is a group "dedicated to building relationships between emerging leaders across the industry." Through various events, it allows students and recent graduates to rub elbows with industry leaders and insiders at major events. Events like NBAA's Business Aviation Convention and Exhibition. The exposure allows aviation's future leaders to hobnob and network with the current crop of industry leadership.

The YoPro events kicked off on Tuesday evening with a networking reception that was not only well-attended by YoPros themselves, but NBAA did a great job making sure there were experienced professionals there to network and get everyone comfortable. The takeaway from Tuesday night's festivities was the amount of diversity set to enter the industry - I met dozens of people from around the world with all different backgrounds and experiences that will only help broaden the horizons of the future of aviation.

Wednesday morning, however, was the YoPro highlight. Dozens of people, YoPro and not-so-YoPro piled into the Innovation Zone at 9 AM for "Elevate to New Heights: Young Professionals and the Future of Business Aviation," a panel discussion moderated by NBAA writer Lowen

Baumgarten and opened with a speech by Ronnie Garrett, editor of our sister magazine *Airport Business*. The panel, Jo Damato from NBAA, Sarah Barnes from Paragon Aviation, Brad Thress from Textron Aviation and our newly-very-own/JetWhine.com's Rob Mark, spent about a half-hour discussing issues among themselves on stage before venturing into the crowd. After a moment of hesitation, the questions started coming in. We probably could've stayed there all day if we had the time.

Questions ranging from hiring international talent to how to interact with executives kept the panel occupied for another hour, 30 minutes over the scheduled end time.

The NBAA crew, especially NBAA's Manager of Registration Sierra Grimes (a YoPro herself) deserve commendation for pulling off the pair of events as deftly as they did.

The topic I was hoping to hear more about, however, was the inevitable clash between generations with different motivations and ways of working - how can we best cohabitate, collaborate and innovate without dismissing each other as "entitled" or "stuck in the past"?

Perhaps that's another editor's note for another time.

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