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WORLDWIDE

SETTING GLOBAL RAMP SAFETY STANDARDS

IATA's ground safety programs may be the best-known, but here is what three other organizations are doing.

INTERNATIONAL

Seletar Airport Sets Standards For Ground Handling

Changi Airport Group prepares to make XSP Singapore's top business and general aviation airport and prunes the number of licensed ground handlers who make the grade. Page 16

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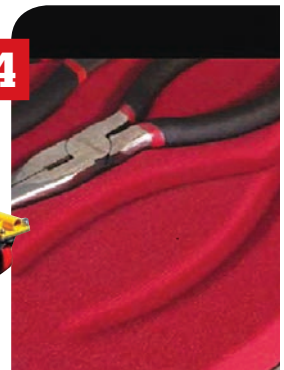
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Brett Ryden

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Leaders Lead ...

By Brett Ryden

Seriously, aviation!

I have had an opportunity to work in some pretty cool industries over the span of a 25-year magazine/media career. I rode the rails in the railroad/intermodal industry, then hit the water while working on boating magazines in the 1980s and 1990s. In the 1990s, I launched my own publishing business in Southern California before moving to the coatings industry. I was then approached by an association to build a new magazine, and in this role I created and ran a magazine, handled trade show sales and operated a live summit event. After this incredible ride, I now get to take to the skies and lead the Aviation Group at Cygnus Business Media.

Leadership is the one commonality I've found within all the industries I have been a part of. At the core of every successful organization - be it a publishing company, a railroad, a boating manufacturer or a ground service provider - is strong leadership that propels the operation toward a common goal.

The phrase "leaders lead" knows no boundaries. But while it's true that good leaders step up and take charge, great leaders look closely at their teams and rely on each and every member for their organizations' success.

Over my career, I have learned that the most successful leaders in any industry typically have a strong support structure in place and use every member of their teams to their fullest potential. How do you do this?

- **Serve as an inspiration.** Paint a vision for the future that others want to be a part of.
- **Support your team.** Promote a safe environment for them to speak up, take risks and make decisions.
- **Engage team members in all that you do.** Offer challenges and seek out their ideas and contributions.
- **Recognize team members for a job well done.** Don't keep the accolades to yourself. Praise your team and give them recognition for the work that they do.

The Cygnus Aviation Group has at its core an incredible team; a team ready to help you lead your own teams to an incredible future. Our aviation magazines, which include *Ground Support Worldwide*, *Aircraft Maintenance Technology* and *Airport Business*, offer in-depth insight into the aviation market while our website, www.AviationPros.com, is accessed by more than 200,000 visitors a month!

Let's work together to drive innovation and success in a cooperative environment.


Brett Ryden Brett@AviationPros.com
Publisher, AviationPros Group

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IATA Ground Handling Conference
Kuala Lumpur, Malaysia



GSE Buyers & Ramp-Ops Conference
Dublin, Ireland



86th Annual AAAE Annual Conference & Exposition
San Antonio, TX

winners across a variety of industry sector categories were voted for in a poll of the 42,000 readers of *STAT Times*.

New contractors to hire Delta workers:

Delta Air Lines says no workers will lose jobs in April when it switches contractors for regional jet cabin cleaning and ground handling work at Detroit Metro Airport. The airline has commitments from its new contractors, Menzies Aviation and Prospect Airport Services, to rehire 741 workers after DAL Global Services, a Delta subsidiary, lost the contract.

Airlines attempt year's first fare hikes:

Delta Air Lines initiated the industry's first hike in mid-February by raising domestic tickets \$10 per round-trip flight, but only for high-priced tickets booked at the last minute. United Airlines, Southwest Airlines and AirTran

Airways matched the Delta hike the following day, according to the fare-tracking site Farecompare. Meanwhile, American Airlines and US Airways launched a \$22 fare hike for round-trip flights between the U.S. and Canada. United and Air Canada matched the hike, but Delta refused to raise its fares for flights across the border. Farecompare reported that United and Air Canada are rolling back the hike.

Frontier adds two Cleveland routes after United de-hub:

Frontier Airlines has become the first carrier to announce new service to Cleveland Hopkins International Airport since United Airlines announced its decision to withdraw its hub earlier this month. The carrier will add year-round, nonstop service to Orlando and seasonal nonstop service to Seattle starting in June.

Airline consumer complaints down:

Complaints against airlines filed with the U.S. Department of Transportation's during 2013 were down 14.1 percent from 2012. The department received 13,168 complaints last year.

MEM makes plans after de-hub:

Memphis International Airport presented plans to spend \$3 million tearing down a fourth of its gates and \$111 million upgrading much of what remains, following news that Delta Air Lines would end hub operations. The project is expected to begin later this year and wrap up in 2020 or 2021.

Southwest logs worst on-time performance:

A little more than half of Southwest Airlines' flights arrived on time in December as bad weather and operational problems in Chicago hurt the airline's flight schedule, making it the worst on-time performer

Business

WFS wins international cargo handler award:

Worldwide Flight Services has been voted "International Cargo Ground Handler of the Year" in the International Awards for Excellence presented at the Air Cargo India conference and exhibition. Award



More than four years after John Bruce, 64, took a fatal fall at a military base in Kuwait, a jury awarded the family of the Arlington Heights, IL, man \$6.65 million in a wrongful death lawsuit.

Jurors in the civil case reached their decision against government contractor CAV International Inc. on Feb. 14 after a 10-day trial.

In October 2009, Bruce was working as a ramp serviceman for United Airlines at Al-Mubarak Air Base in Kuwait. He was on a raised belt loader handling cargo from a 747 when a CAV employee moved it, causing Bruce to fall about 12 feet.

The impact caused significant brain injury. After surgery, doctors overseas declared Bruce brain-dead. He was flown home and taken off life support six days later at a hospital.

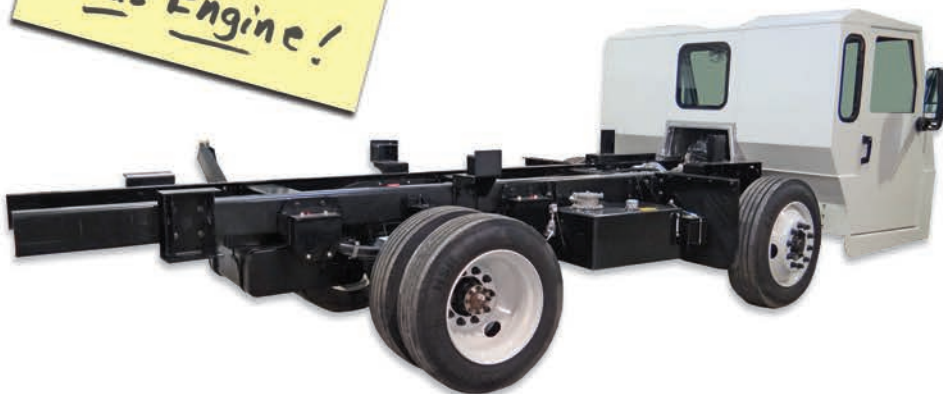
The lawsuit claimed the CAV employee was talking with others and distracted when he moved the loader while Bruce was still on it, and that the company was negligent because it failed to properly train or supervise that employee.

Bruce had worked for years as a liaison for United on charter flights for the military as well as for several Chicago sports teams.

\$6.65 Million Awarded Over Ramp Worker's Death

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among U.S. carriers. But all U.S. airlines had trouble with tardiness last month as they reported an on-time arrival rate of 68.9 percent, down from 76.6 percent in December 2012.

Pilots often head to wrong airports:

An AP analysis found that pilots on at least 150 U.S. commercial flights since the 1990s have either landed at the wrong airport or started to land and realized their mistake in time. Many such incidents occur at night, with pilots reporting they were attracted by the runway lights of the first airport they saw during descent. Some pilots said they disregarded navigation equipment that showed their planes slightly off course because the information didn't match what they were seeing out their windows — a runway straight ahead.

United marks a first:

United Airlines became the first carrier to operate a commercial flight using an aircraft equipped with new fuel-saving Split Scimitar Winglets made by a Boeing subsidiary. The new winglets, which add a wing-tip piece curving downward as well as upward, received approval earlier this month by the FAA.

New Deals

Menzies Aviation started cargo warehouse handling in January for Etihad Cargo at Amsterdam Schiphol Airport. The carrier expects to bring in around 45,000 tonnes of cargo per year and is currently flying into Amsterdam five times per week. In addition, Menzies will perform the cargo handling for the carrier's daily passenger flight.

JBT AeroTech has been awarded a contract valued in excess of \$5 million for the supply of gate equipment to O.R. Tambo International Airport.

ASIG has acquired Skytanking USA, Inc. The aviation fuel services business employs more than 350 employees and owns more than 800 pieces of refueling-related assets. The company, which is headquartered in South Florida, has operations at 14 U.S. airports, six of which represent new markets for ASIG.

Signature Flight Support

has agreed to buy Metro Flight Services at Detroit Metropolitan Wayne County Airport. Metro Flight Services provides fueling, ground handling and FBO services to commercial airlines and business and general aviation operators. Signature will provide

all FBO services while sister company ASIG will continue to provide commercial fueling and ground handling services.

Southwest Airlines has contracted for the surface management module of Passur's Integrated Traffic Management at 35 US airports across its network to streamline turn times, reduce fuel burn and enhance on time performance.

SATS Ltd. received the first-ever IATA certification for its SATS Coolport at Changi Airport. Last year, the facility handled more than 15,200 tonnes of pharmaceuticals. The IATA certification will give pharmaceutical companies the guarantee of excellence in service and ease in conducting audits on SATS Coolport; and in turn, the airport will become an even more attractive pharmaceutical air freight hub.

FBO PrivatPort, affiliated with Swissport Executive Aviation, received the license to deliver a full range of services at Zurich International Airport. The new FBO license completes the network in Switzerland and includes all three of the country's main Swiss airports, including Geneva and Basel.

People



Henry Balensifer III joined LEKTRO as its new government

relations and communications manager. Balensifer will lead the company's public relations and marketing projects from LEKTRO's corporate headquarters in Warrenton, OR.

Continental Tire the Americas, LLC has appointed new management to its Commercial



Vehicle Tire group. **Federico Jiménez** will be responsible for man-

aging sales and marketing for the commercial specialty tire business in the Americas. Previous to this role, Jiménez managed key accounts for ports for commercial specialty tires on a



global scale. **Marco Rabe** has been named director of truck tire

technologies for the Americas. Rabe joins the commercial vehicle tire unit from Continental's North American passenger and light truck quality unit.



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Ground Support Systems

SETTING GLOBAL RAMP SAFETY STANDARDS

IATA's ground safety programs may be the best-known, but here is what three other organizations are doing.

By Mario Pierbon

Since it is very little regulated by government authorities, the ground support industry is characterized by a tradition of self-regulation. While the International Air Transport Association's ground safety programs, in particular the Safety Audit for Ground Operations (ISAGO), may be the most followed and structured industry initiatives for safety performance improvements on the ramp, other initiatives have also taken shape in the industry to provide airside safety managers with operational and safety standards.



The initiatives of the UK CAA, FSF and AAGSC have the common focus of stressing that the airport apron can be a very hazardous environment. Their main purposes are to reduce losses associated with aircraft and equipment damage, and injury to personnel.

CAP 642

The United Kingdom Civil Aviation Authority (UK CAA) has been at the forefront in terms of standard making in ramp operations. The Civil Aviation Publication (CAP) 642 "Airside Safety Management" was first issued in 1995. The document provides guidance on matters affecting the health and safety of individuals and the safety of aircraft to aerodrome operators, airlines and other organizations that undertake activities in airside areas of aerodromes.

CAP 642 incorporates a brief overview of the legislative and regulatory arrangements and obligations that apply in airside areas and offers several model

procedures demonstrating best industry practices upon which aerodrome operators and other involved organizations may base their specific procedures. The publication illustrates how risks might be identified and provides advice on how airside safety can be placed within the context of a Safety Management System (SMS). Coverage is provided to those operational situations which contain elements of risk and which might be considered commonplace. The document is structured in five chapters covering respectively general principles for health and safety management airside, risk management, airside development and management of airside works, airside vehicle operation and driving, safety performance management and measurement.

CAP 642 is not the only effort made by the UK CAA with regard to airside safety. The Ground Handling Operations Safety Team (GHOST) has been set up to analyze the root causes of incidents that occur on the apron, recommend actions aimed at reducing the risk to aircraft and their occupants and formulate an action plan to address each issue. GHOST members are drawn from the CAA, airport operators, airlines and ground handling companies.

GHOST also has two subgroups:

- One addressing loading errors (Aircraft Loading Subgroup-ALS).

Civil Aviation
Authority

Ground Accident Prevention Cost Model

Enter Your Information

Total Flights

0

Fleet Mix

Narrow-Body

%

Wide-Body

NaN

%

Incident Rate

per 1,000 flights

Personal Injury Rate

per 1,000 flights

Calculate

Cost (U.S. Dollars)

Cost — Ground Incident

Cost — Personal Injury

Total Cost

Among the e-tools developed by the FSF's GAP program features a "Ground Accident Prevention Cost Model." This tool was developed after a pioneering data collection effort.

- One overseeing "capability issues" and human performance (Human Factors Subgroup-HFS).

The ALS' activities have included the production of two educational DVDs. "Safety in the Balance" was released in 2011 to reiterate to all those involved with aircraft loading the importance of correct mass and balance calculations and the

securing of loads. In 2012 "One Team One Goal" was released to provide specific guidance to the carriage of persons of reduced mobility and their mobility aids by air.

The HFS was developed to investigate and address human factors in ground handling, including ensuring that there is an open reporting culture across the

ground handling discipline with a view to increase reporting, since, as GHOST reports, "it is possible that only 50 percent of UK ground handling related errors are currently reported to the CAA through their Mandatory Occurrence Reporting (MOR) scheme".

GHOST members have signed up to working towards achieving a just culture and GHOST has produced various guidance materials to assist ground handling providers to implement a "Just Culture." The supplement to CAP 382 "Guide to Ground Safety Reporting," in particular, is a booklet developed by the CAA and GHOST aimed at front line supervisors and highlights what types of incidents, accidents and near misses are reportable under the MOR Scheme by law. This guide can be used as an opportunity to reiterate the importance of reporting to internal systems as well as to the MOR scheme.

Norman Hogwood, who recently retired from a long career in aviation ground safety and most notably helped start the Australasian Aviation Ground Safety Council, is of the opinion that human factors awareness is particularly needed in the ground handling business: "Human factors play such a significant part in most apron incidents that it is extremely important to carefully examine each one in order to fully identify cause and remedy. Invariably, the major cause is associated with procedures and the failings of people to either follow them, or adequately prepare them. Unfortunately, a surprisingly large number of companies practice the dreadful policy of dismissing an employee without taking the necessary action to fully investigate the incident. Certainly up until 2012 this practice was still quite widespread, especially in the United States."

FLIGHT SAFETY FOUNDATION

Some 10 years ago the Flight Safety Foundation (FSF) launched the Ground Accident Prevention (GAP) program. The exclusive aim of the FSF GAP program was to reduce aircraft damage costs. At the opening GAP meeting the joint chairmen, Bob Vandel and Earl Weener, commented that airlines seemed to work under the impression that damage to aircraft was simply a cost of doing business.



The FSF's GAP program developed information and products in the form of "e-tools" designed to eliminate accidents and incidents on airport ramps and adjacent taxiways, and during the movement of aircraft into and out of hangars.

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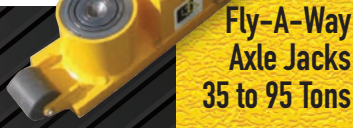
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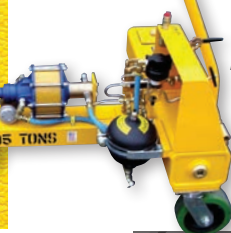
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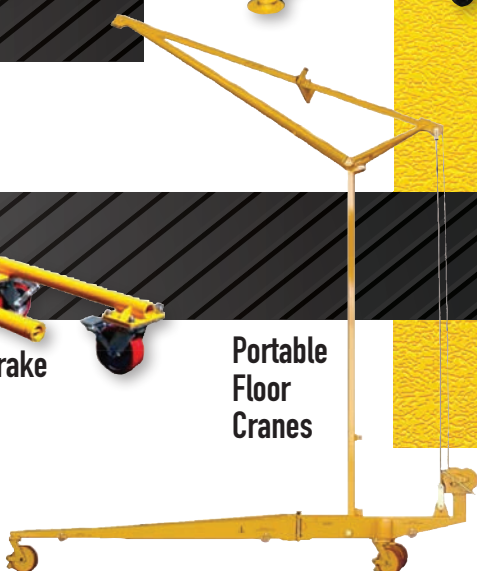
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The GAP program developed information and products in the form of "e-tools" designed to eliminate accidents and incidents on airport ramps and adjacent taxiways, and during the movement of aircraft into and out of hangars.

Among the e-tools developed by the GAP program features a "Ground Accident Prevention Cost Model." This tool was developed after a pioneering data collection effort. The cost model requires users to enter the number of flights handled in one year, the percentage of narrow-body (single-aisle) and wide-body (twin-aisle) aircraft. In the model the incident rate and the personal injury rate are entered by default as the industry averages per 1,000 flights calculated at the time of program development. If a given operator is experiencing different rates, these can be entered instead of using industry averages, in particular in view of the fact that rates might have changed as compared to when GAP programs data were collected.

FLIGHT SAFETY 
FOUNDATION

Once data are input and the calculation button is pressed, the model displays the overall costs in U.S. dollars (direct plus indirect). It should be borne in mind that the output figures are only valid so long as industry averages apply, while after 10 years from the launch of the GAP program safety performance on the ramp (and thus industry averages) might have improved and consequently cost figures may result higher than they actually are, it is also true that because of inflation incident and personal injury costs are higher today than they were 10 ago, thus making the output figures quite possibly enough representative of actual ground accident costs incurred.

Another e-tool developed by the GAP program is a set of three videos on towing corporate/business aircraft. Each of the videos has a duration of approximately 12 minutes:

- The first video provides best practices for the safe use of aircraft-tow vehicles.
- The second provides best practices for safely towing aircraft.

- The third video provides best practices for general ramp safety.

An additional resource available from the Flight Safety Foundations is a set of five ground safety leadership tip sheets designed to be presented to senior managers to heighten their awareness of ramp safety problem and its effect on the organization's operations and economic performance. The leadership tip sheets are one-page briefings which stimulate reflections on what senior managers should ask their staff about what is being done to prevent ramp accidents, the development of a company safety policy, the inclusion of ramp operations in the company's safety management system (SMS), roles and responsibilities in a SMS; and the development and use of ramp safety performance metrics.

The set of e-tools developed as part of the GAP program include a document template named "Ramp Operational Safety Procedures" that includes industry best practices and guidelines for a wide range of ramp procedures. The document is intended to assist ramp supervisors in the development or improvement of their organizations' written standard operating procedures (SOPs). The template is presented in Microsoft Word format to facilitate customization by the user, including revision, deletion and addition of information as necessary to tailor the document to the organization's ramp activities. The template is available with and without illustrations, which complement the procedures developed in the template and refer to aircraft clearance zones and related markings, circles of safety, safety cone placement, standard hand signals and cargo doors.

"The standards that were produced by the FSF under the GAP program are almost totally aimed at aircraft ground damage prevention," says Hogwood, who assisted with the editing process. "The end result of the project was the production of the Ramp Operational Safety Procedures manual"

THE AAGSC

A regional working group has also been active in the development of standards of reference for the ground operations industry. The Australasian Aviation Ground Safety Council (AAGSC) has developed Recommended Industry Practices (RIPs) for the safe operation of airlines, airports and associated facilities. "The RIPs cov-



er a fairly wide range of topics ranging from personal harm prevention through suggestions regarding provision of safety equipment to defenses against adverse weather and the prevention of damage to aircraft. They are freely available at the AAGSC website www.aagsc.org under Resources" says Hogwood, who helped in the establishment of the AAGSC some 32 years ago.

The AAGSC has also released an Interactive Ground Safety toolkit DVD to provide a basic safety information overview for the workforce involved in the supply of services to aircraft and airport facilities. The program has been structured to cover a broad range of operations that make up

the aviation ground support industry. The AAGSC clarifies that national regulations always apply and the purpose of the produced information is to advise and assist rather than to set up rules and regulations. The Ground Safety Toolkit covers topics such as airside driving, aircraft turnaround, refueling operations, manual handling, security, emergency and airport works.

The initiatives of the UK CAA, of the FSF and of the AAGSC have the common focus of stressing that the airport apron can be a very hazardous environment; their main purposes are to reduce losses associated with aircraft and equipment damage, and injury to personnel. Unlike IATA's ISAGO, however, the other ramp safety standards developed by the industry are not designed to reduce the number of audits or eliminate redundant audits from airlines. "I don't see where they could in any way reduce audits. Hopefully, they may provide assistance to auditing personnel by guiding them in their quest for searching out errors and faults" says Hogwood. ✈️

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The review of ground handling services as well as safety practices was part of CAG's long-term strategy to position Seletar Airport into a top business and general aviation airport.

Seletar Airport Sets Standards For Ground Handling

Changi Airport Group prepares to make XSP Singapore's top business and general aviation airport and prunes the number of licensed ground handlers who make the grade.

By Steve Smith

Five ground handling companies will receive licenses next month to officially operate at Seletar Airport for the next two years. The review of ground handling services as well as safety practices was part of CAG's long-term strategy to position Seletar Airport into a top business and general aviation airport.

"Consistent standards are crucial for the airport to become a top airport," says Ivan Tan, spokesman for Changi Airport Group. "This is a proactive step towards ensuring that the airport continues to provide a high level of service to users even as traffic grows."

The five companies remaining are from what were originally seven companies that had been performing ground handling duties at the airport prior to a review of work standards.

Over the past three decades, CAG has successfully established the country's Singapore Changi Airport as one of the world's premiere airports as well as made investments and provide management of commercial airports throughout the world.

LONG HISTORY

CAG has officially managed XSB since 2009, but the airport has a long history. The airfield was built by the British just before the WWII, but was a Royal Air Force station as far back as 1928. It served as the Singapore's first civil airport in the 1930s. The airport's current runway was actually built during the Japanese Occupation of WWII. After the war, Seletar returned to service as an RAF base until 1973. The facility was eventually handed over to Singapore aviation authorities.

In recent years, business aviation in Singapore has increased significantly. Aircraft movements have increased at a compounded annual growth rate of about 21 percent from 2007 to 2011. This re-

flects rising demand for private jet travel in Asia, as well as Singapore's attractiveness as a financial and business hub.

Since 2008, XSB has also been undergoing construction to improve the airport's infrastructure, including an extension of its sole runway and construction of the Seletar Aerospace Park, an industrial park catering to the aviation industry.

When the airport upgrades are com-



pleted in 2014, users can expect a significant increase in the number of parking stands, additional taxiways, upgraded aircraft parking aprons, as well as an instrument landing system. With the enhanced infrastructure, CAG expects XSB to support the growth of Singapore's aviation industry.

GROUND HANDLING

The scope of ground handling services offered varied across these companies, Tan adds.

"Some of them were equipped with the full suite of capabilities and equipment," Tan explains, "while others outsourced part or most of their service delivery. Over time, this resulted in a disparity in the capabilities of ground handling agents at the airport, making it difficult to apply consistent service and safety level requirements for all players."

The process began in 2013 when CAG held its first consultation with the airport and its customers to review standards and apply an improved framework of operations. Very quickly, two of the ground handling companies fell out of favor with management.

"Our aim is for all ground handlers at the airport to meet a set of minimum operating standards for essential air-side service," Tan says. "This would mean a leveling up of service and safety standards among them, resulting in healthy competition among ground handlers, while motivating each operator to improve its operations and efficiency."

The five ground service providers had been granted temporary permits to op-

erate until the two-year licenses begin in April.

"The existing ground handlers are expected to meet a set of minimum operating standards imposed by CAG for essential air-side services and they will be monitored for their level of service," Tan says. "CAG will continue to monitor their service levels and seek feedback

from users to ensure that their needs are well met by the ground handling agents. They will be notified closer to the renewal date should there be new processes or requirements that they need to fulfill for the next license period." ✈️

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When the airport upgrades are completed in 2014, users can expect a significant increase in the number of parking stands, additional taxiways, upgraded aircraft parking aprons, as well as an instrument landing system. With the enhanced infrastructure, Changi Airport Group expects Seletar Airport to support the growth of Singapore's business and general aviation industry.

CHANGI AIRPORT GROUP





A Brief History Of Line Operations Safety Audits

From a program initially just for the flight deck, LOSA has grown into an operational strategy for real-time data analysis of operations that supports data-driven organizational change.

By Kevin Crowley

Tax season is upon us and for some folks and organizations the word “audit” inherently has a negative connotation attached to it.

In the aviation industry, the term has a better meaning. Line Operations Safety Audits or LOSA is a safety management program that is available to help identify risks within airlines operations. Human Factors is a big part of the LOSA program, specifically, principals for Threat and Error Management or TEM.

Over the last 23 years, LOSA has developed from a program that was initially constructed for analysis of behaviors in the flight deck into an operational strategy for real-time data analysis of normal operations that supports data-driven organizational change based on employee threat and error management at the maintenance and ramp operations level.

LOSA BASICS

LOSA is comprised of several characteristics that include peer-to-peer observations during normal operations by trusted

and trained observers using observation techniques based on TEM.

Joint management/union sponsorship will need to be coordinated to ensure success. The data collection process is non-punitive; observations will be anonymous and confidential with observational data being housed in a secure data collection warehouse.

Once data has been collected, organizations will need to verify the data with the LOSA team and operational leadership which should result in data-derived targets for improvement. Most importantly, feedback from the LOSA observations will need to be communicated back out to the workforce.

The purpose of a Safety Management System is to provide a systematic way to control risk and to provide assurance that those risk controls are effective.

Safety risk management (SRM) re-

quires development of processes and procedures to provide an understanding of the carrier's operational systems to allow operational employees to identify hazards associated with those systems.

Once hazards are identified, other procedures must be developed under SRM to analyze and assess the risk resulting from these hazards, as well as to institute controls to reduce or eliminate the risks from these hazards.

Most safety programs are developed to be used as a response mechanism to events (incidents and accidents) that have already occurred in the operation. LOSA can help actively identify hazards through the analysis of the organizations processes.

One of the main objectives behind line operations safety audits is to identify employee behaviors that lead to effective and ineffective threat and error management. Many “red flags” or “threats” that occur in the operation at any given time most often times do not lead to an accident or incident; LOSA helps organizations understand employee response to

these “red flags” or “threats” that have not led to negative consequences such as aircraft damage or employee injuries.

TEM understands that threats, such as unfavorable weather and errors, such as speeding on the ramp, while driving GSE, and undesired states, such as a late arriving aircraft, are everyday events that employees working in an airport environment must manage to maintain the safety of equipment, other employees and themselves.

RISK FACTORS

If we take a look into risk factors that are present in the everyday airport operating environments, threats are considered normal or abnormal, which could lead employees into situations that can cause them to commit potential errors.

Error management takes actions against those errors that have been committed by identifying them and putting a corrective action plan in place to eliminate them, or containing the errors and reducing the severity of the error outcome. *Error management* is often considered managing the past where *threat management* is considered managing the future.

Errors occur when a mistake has been mismanaged; managing errors requires recognition and correction before these errors have a negative consequence to safety.

Some types of errors are intentional, non-compliance errors, but also procedural errors, and errors that occur during miscommunication. Proficiency errors and operational decision errors can be inconsequential to safety, but can also lead to an undesirable state if it is not addressed correctly or ignored. This may also lead to additional errors and may make situations worse.

LOSA is a tool that can be used in the operation to help identify threats, errors and undesired states and can assist in building strategies and mitigation plans to reduce risks in the airport environment. LOSA helps front line employees become better threat managers by actively identifying threats in the operation and helps build a safety culture by encouraging open and honest communications.

About the author:

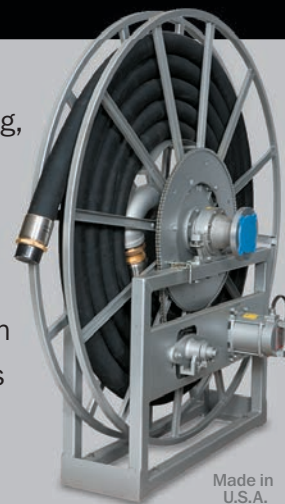


Kevin P. Crowley, an analyst for ground safety programs, JetBlue Airways Corp., started on the ramp in Buffalo, NY, in 1993. He's been with JetBlue for 12 years and began as an instructor at JetBlue University and taught aircraft servicing for the A320 and E190. He has additional experience in HAZMAT and dangerous goods; winter ops and deicing; and is a certified OSHA instructor.

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The ABCs Of LOSA

By Dr. William Johnson

Line Operations Safety Assessments (LOSA) require employee involvement to identify safety threats to areas of ramp operations.

RAMP AUDITS

Ramp LOSA uses structured observa-

tion checklists. The system for ramp comes complete with ready-to-use database and data analysis tools that are kept with the operator. There is no need for outside data storage and analysis. This ensures that company data

are secure and that analysis does not require external consultants.

The accompanying illustration shows the characteristics of the LOSA systems used for ramp environments. As you can see, LOSA is a joint effort by company management and labor to recognize early indications of threats and errors.

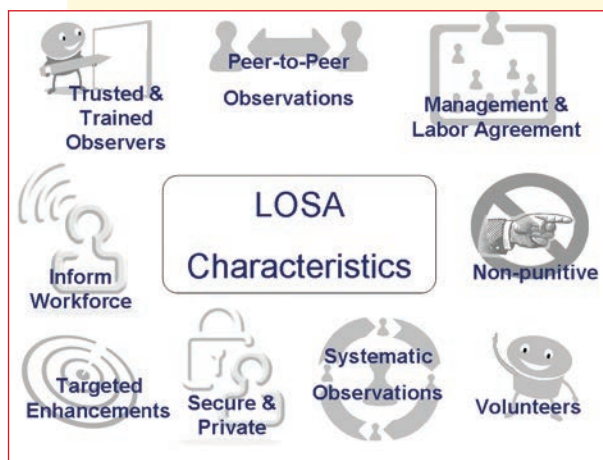
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- Collecting, analyzing, and applying **proactive** data isn't new, only the emphasis on the term is new. Aviation organizations have auditing, quality, and safety departments that apply a multitude of operational measures



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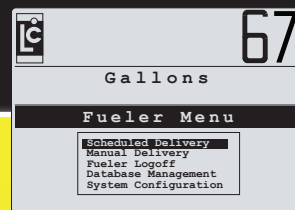
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to assess current performance and safety.

- **Predictive** data systems are a means to use daily/normal operations to help identify a company's strengths and weaknesses.

Sometimes there is confusion between the terms used in "system safety" versus the language used in "threat and error management."

Using the language of system safety, predictive data helps identify the small hazards in advance of assigning a risk level. Using the language of threat and error management, predictive data helps identify the threats so that they can be managed before they become errors. In any language, however, it is a matter of identifying and addressing challenges as early as possible.

How can you establish systems to gather and apply predictive data? Most likely, front-line employees see the hazards before management does. Predictive data, therefore, must be worker-centered. Companies must make it easy for employees to speak up. Voluntary reporting systems are likely the best means to achieve this goal.

FAA cooperates with the industry through programs such as the Aviation Safety Action Program (ASAP). It protects workers from FAA action when they report mistakes early. Progressive companies use ASAP as a means to report not only events but also to report the conditions (threats) that may lead to events.

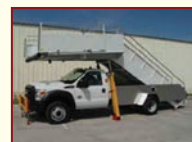
EDITOR'S NOTE: This is an edited version of an article, *SMS Jargon And Collecting Predictive Data*, that originally was published in the February/March 2012 issue of *Airport Business*.

About the author:

Dr. William Johnson is the FAA Chief Scientific and Technical Advisor for Human Factors in Aircraft Maintenance Systems. Johnson is a member of the Human Factors Advisory Group to the European Aviation Safety Agency (EASA).

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Specialty Training For GSE Maintenance Professionals

The best part is many of these courses are low-cost or free-of-charge at the manufacturers' offices. Here are just some of the companies offering courses to further your 'A' game.

By Kenneth DeVolpi and Jason Chapman, Matheson Flight Extenders

GSE techs are a rare breed. They are, at times, difficult to find, and when you do find good ones, you most certainly want to keep them.

Here is a way to help them become even better – specialized GSE product training. If you want your GSE professionals to take their skills to a whole other level, advanced specific manufacturer training is a must. The best part is, many of these courses are low-cost or free-of-charge at the manufacturers' offices.

Here are some we've used. This isn't meant to be a comprehensive list, but just the ones we know first-hand that offer courses to further your GSE tech's "A" game.

HOBART: Offers in-factory training seminars for maintenance personnel as well as comprehensive on-location training.

TLD: Offers training courses for all of your TLD equipment maintenance needs. Give service manager Mike Rawls a call. He will be happy to assist you.

JBT AEROTECH: Conducts factory training at JBT sites around the world. Orlando, FL and Madrid, Spain are primary sites, but classes are also held at the London and Singapore offices. Customized

training is also held at customer sites. JBT can create a customized course to meet specific customer needs. Also, online training content has been developed and is being launched this year. Customers will then have access to product information and education 24/7.

Josh Parkin, global after-market manager of ground support equipment for JBT told us: "We strive to empower our customers with several training options. Properly trained employees significantly improve operational and equipment uptime and reduce cost, incidents and accidents."

We couldn't agree with you more, Mr. Parkin.

CHARLATTE: A manufacturer of battery-powered electric airport ramp equipment that can be seen in use at airports throughout Europe and the United States. They have factory operations in Briennon, France; Bluefield, VA; and Crawley, West Sussex, UK. Classroom training is provided at all Charlotte facilities or at the customer's locations as required.

GLOBAL GROUND SUPPORT: Manufactures many models of deicing units, as well as catering and cabin service vehicles, glycol recovery vehicles, ambulatory passenger vehicles, Cargomax tow tractors, and ground power units. They offer deicer training at the Global factory in Olathe, KS. These two-day classes cover maintenance and troubleshooting of various company products. Also, Global offers a new interactive training CD. It covers all aspects of the Global Ultimate deicer. You are now able to take the entire training course without the costs associated with taking the actual training course in person. It comes with a complete set of electrical schematics and is a great tool for use as a troubleshooting or refresh-



If you want your GSE professionals to take their skills to a whole other level, advanced specific manufacturer training is a must.

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er aide. For your Global deicer training needs, give Charles Preston a call.

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- Electric SCR theory and troubleshooting.
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- Motor, battery and charger maintenance.
- Mechanical, hydraulic and brake system maintenance.

When you see companies offering in-depth maintenance training courses for their products, it is a very good sign. It shows that they care about their customers and stand behind what they sell. They realize that even though a piece of ground support equipment can be built with the highest quality components, smartest engineering, and newest technology it is still a machine. And machines require maintenance and will eventually have a mechanical failure.

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Getting ahead of the problem by offering top-notch parts and technical support, dedicated maintenance assistance and technical training ensures that a manufacturer's logo is seen rolling down the flight line of the world's airports for years to come.

Elite Line Services



About the authors:

Kenneth DeVolpi, manager of GSE and operations, has worked for Matheson for more than four years and has been in the aviation industry for more than 25 years, including 15 years with Northwest Airlines. Jason Chapman works in the company's GSE maintenance department and gained GSE mechanical experience with the U.S. Air Force and has worked in the commercial GSE industry for 12 years.

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Tool Organizer Makes An 'Impression'

New liner system makes storing tools easier than tracing and cutting.

By Steve Smith

A corporate refugee from the aerospace and automotive industry who also happens to hold a black belt in Six Sigma has created a novel way to store most any tool inside the drawers of most any tool cabinet.

Melinda Young is the creator of ToolLodge™, a custom drawer organizing/liner system that can hold tools without resorting to the tedious process of tracing around individual tools and cutting out foam core. The difference in Young's idea comes from a special plastic foam that's similar to what she found used in the florist industry.

Young sells the foam liner, wrapped in a felt-type material and backed with a tough vinyl bottom, that's cut to measure per any size drawer. With it, mechanics can simply lay out their tools

in any desired configuration and then press each tool into the foam.

What's left behind is a permanent mold of each tool. A special tool comes with the organizing system to tap in handy spaces next to the tools to make each easier to take out and put back.

According to instructions found on the company's website, www.ToolLodge.com, Young recommends the following procedures:

- **FIT CHECK:** Install the ToolLodge organizer in an empty tool drawer to check the fit. ToolLodge should fit loosely.

Place the liner on a sturdy, smooth work surface. Gently lay out tools on



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the liner the way you want them in the drawer, leaving a 1-inch margin around the edge.

- **LODGE** Press each tool individually into its place by applying firm pressure. This will make a permanent indentation for storing your tool.

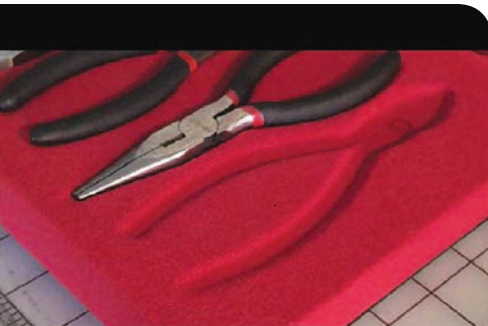
For larger hand tools, it may be easier to press one end of the tool at a time, slowly rocking it. Make an indentation deep enough to hold the tool. Once the impression of the tool has been started, if it's a very sturdy tool like a metal wrench, you can tap the tool further with a small non-marking hammer.

- **GRIP TOOL** Use the grip tool to create thumb-sized indentations for easier access to the lodged tools.

ToolLodge™ is made to fit drawers ranging from 8 inches to 32 7/8 inches wide and from 8 inches to 22 7/8 inches deep. For drawers wider than 33 inches, two units can be used side-by-side to cover the complete drawer.

Each liner has an overall height of about 1 1/8 inches and works best in drawers with clearance heights of about 2 inches to 4 inches, and comes in black, red and blue. Color samples are available by request.

Young says the ToolLodge™ works best with sturdy hand tools or objects



such as sockets, drivers, screwdrivers and wrenches. She does not recommend pressing or tapping plastic tools, tools with large surface areas or tools with fragile mechanisms, such as tape measures, large pipe wrenches, torque wrenches and calipers. She also adds that the system is not recommended for on-board tool storage. 🚫

Product Benefits

- Gain efficiency by keeping tools visible and accessible inside a tool cabinet. Eliminates the wasted time spent searching for tools or snapping tools out of traditional organizers.
- Reduce tool loss by identifying missing tools with just a glance.
- Look sharp. Considering the investment made in tools and pride most techs take in using them, the ToolLodge is not just functional.

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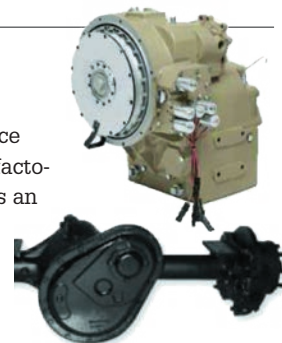
Gas booster charging systems for charging or topping up gas pressures ensure that optimum use is made of commercially bottled gases down to as low as 150 psi supplies while producing pressures as high as 39,000 psi. Gas carts are used for transfer, charging, testing, calibration or tool operation.

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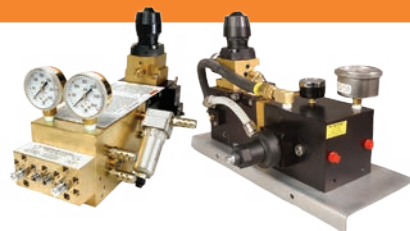


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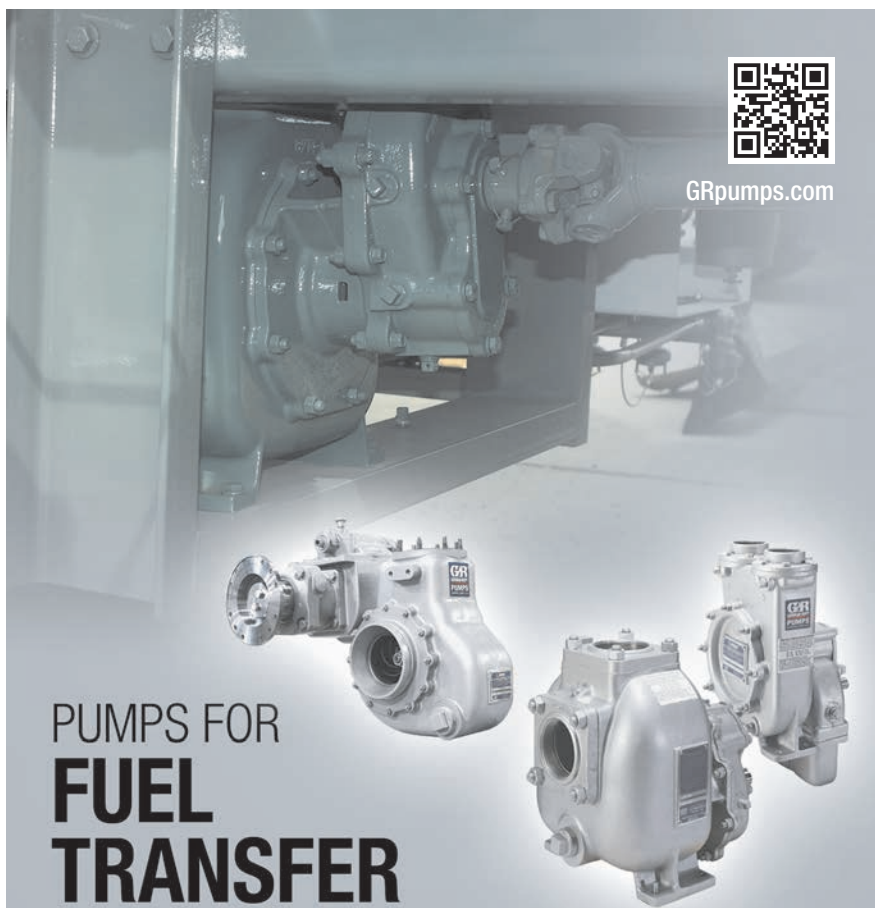


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Tiltable Carts **Tronair Inc.**

Tronair's new four-cylinder tiltable carts meet OSHA/EU-OSHA safety requirements for one-person cylinder lifting. The carts feature an "operator assistance system" that eases the movement of cylinders from vertical to horizontal.

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PRODUCT HANGAR



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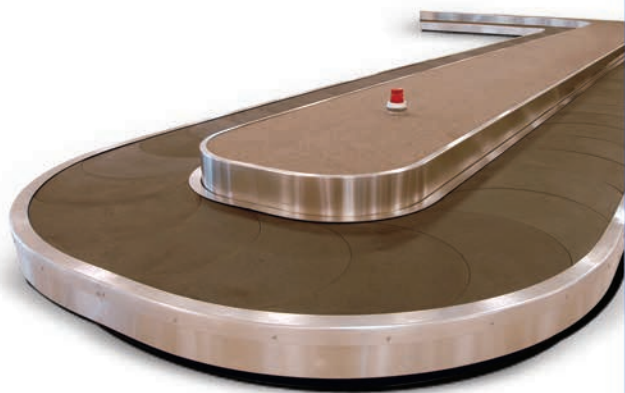
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PRODUCT HANGAR

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Jenny Products, Inc. offers a line of electric single-stage, horizontal-tank stationary air compressors. Built in the United States with quality and safety in mind, the 16 single-stage belt-driven models feature cast-iron compressor pumps and powder-coated, ASME certified tanks.

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Scissor Deck Maintenance Stands Easy Access Industrial Design Inc.

Scissor Decks are spring-assisted manual lift platforms that set up or fold down in seconds. Scissor Decks may be joined together in line or on 90-degree angles for wrap around maintenance applications. They are now available in narrow frame design stands for applications where wheels are not required. The engineered single aluminum 2x3 tube frame reduces weight and cost. Angled heavy wall 2x2 legs allow for positioning on most any surface. Like wheeled units, the stands are available in four models with max deck height up to 6 feet 9 inches.

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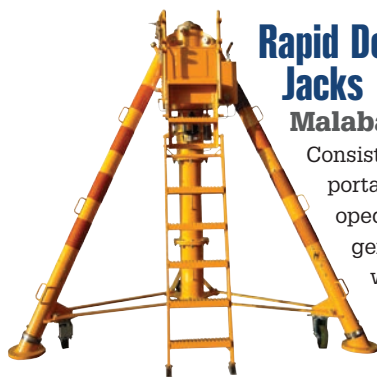


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PRODUCT HANGAR



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Steve Smith

Mum's The Word?

An open impartial and confidential reporting process is essential if any safety program is to be successful.

By Steve Smith

This issue's cover story mentions a safety organization in the United Kingdom known by a rather supernatural acronym, GHOST.

Not that there's anything too mysterious with the stated objective of the Ground Handling Operations Safety Team. A voluntary partnership, originally established by the Civil Aviation Authority, the team of 50 members hopes to identify and reduce the risks associated with ground handling operations.

But GHOST did uncover what surely strikes terror in our hearts: We don't like to admit mistakes, ours or yours.

LOW INCIDENT REPORTING

Annie Gilbert from the CAA wrote last October in *Airport Focus*, about the low incident reporting rates by air-side workers.

"GHOST highlighted a culture amongst ground handling that tended to apportion blame and discouraged open reporting of incidents," Gilbert wrote. "This was an issue that was well known and well documented within safety investigations, and appeared to be accepted practice, not just in the UK but worldwide."

The CAA has tracked accidents/incidents for more than 30 years and contains details of hundreds of thousands of incidents, from minor technical and mechanical failures to fatal accidents.

"The information that can be extracted from the database proves invaluable in plotting risks and trends, allowing operators to take action before a serious incident occurs,"

she wrote. "It is vital that ground handling crews ... understand that the sole objective of the reporting of safety events is to prevent further accidents and incidents through the improved collection and sharing of safety information. It is not to attribute blame or liability."

To encourage ground service providers to report such data, GHOST has developed a "Just Culture" program to promote an open exchange of reporting. In addition, GHOST signed up with Air Safety Central, a web-based safety culture tool that allows members to post, review and discuss safety-related data. GHOST plans to publish other safety guidelines to assist ground service providers to implement a Just Culture.

And if you are attending this year's IGHC, one key seminar will discuss "Just Culture – From Concept To Reality," featuring Andy Fletcher, ground safety manager for Flybe, and current chairman of GHOST.

"Risks can only be identified and managed if knowledge is shared," Gilbert wrote. "This sharing and reporting culture must pervade an organization. Open reporting, ultimately, helps all parties involved in the aircraft turn-around process appreciate and understand where the risks are within the air-side environment."

A handwritten signature in black ink, appearing to read 'Steve Smith'.

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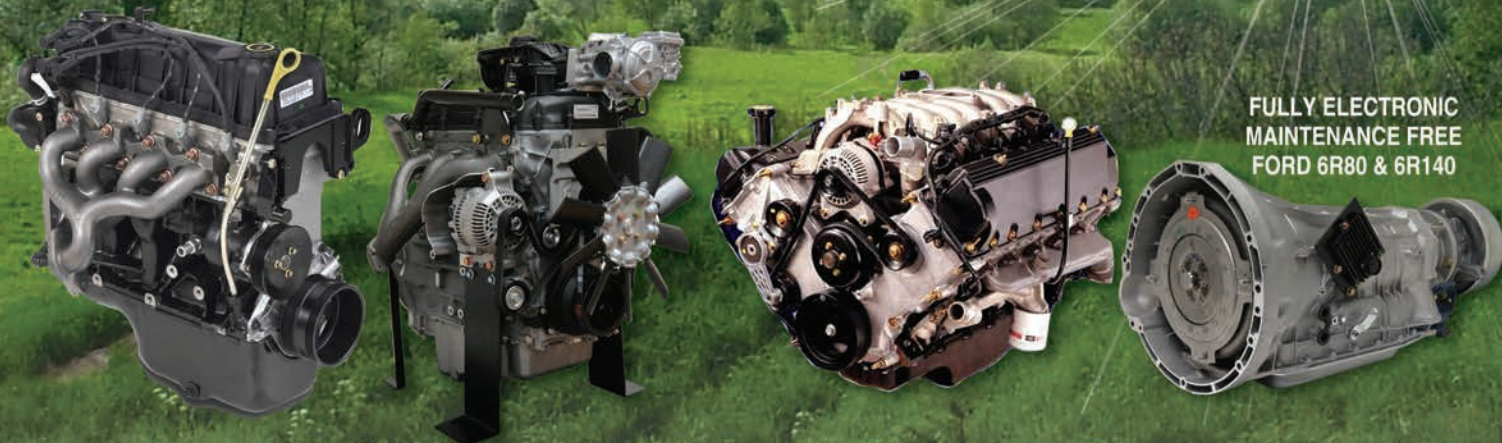
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