

ground handling INTERNATIONAL

GROUND HANDLING INTERNATIONAL

DECEMBER 2019



STRAIGHT TALKING

Ramp communications explored

P16 WORLD ANALYSIS
The European theatre

P22 GHI ANNUAL
This year's was in Amsterdam

P34 INTERAIRPORT
What was new in Munich?

P44 PUSHBACKS
GSE for the turnaround process

ISSUE 6 VOLUME 24



Keep ramp operations running smoothly, right out of the gate.

Contact David Clark for rugged, reliable communication solutions to enhance the safety and efficiency of your ground support operations. Because keeping planes in the air, starts with better communication on the ground.

Call **800-298-6235** (508-751-5800 Outside the USA) to schedule a **system demonstration** or visit **www.davidclark.com** for more information.



WWW.DAVIDCLARK.COM



An Employee Owned
American Company

CONTENTS

COVER IMAGE Courtesy of David Clark



51
COVER STORY



16



22



32



34



44

REGULARS

04 Editor's Thoughts

Alwyn Brice dusts off his crystal ball and takes a look to see what 2020 has in store

06 Handling Talk

Frankfurt and Munich embrace VR while Emirates jumps on to a green cycle

09 Cargo Matters

IAG's innovative Hangar 51 scheme attracts the brightest and best within the industry, declares Felicity Stredder

26 Green Scene

Hydrogen is in vogue at Hamburg; solar power developments at Emirates; and Finavia celebrates its carbon free status

41 Conference Community

A post-match report from Amsterdam by Conference Chairman Max Gosney

53 GSE Focus

There is plenty to read about in this issue, including electric progress at Heathrow as well as in Spain

54 Ramp Safety Briefing

More lessons towards a safer ramp

58 Last Call

Why passengers open aircraft doors; and why asking for an upgrade can lead to big trouble

FEATURES

13 GHI African Conference

Nairobi recently played host to this magazine's fifth African conference. Has the African continent made progress? A review of the event, from the Deputy Editor

16 World Analysis

Felicity Stredder turns her attention to Europe in the last analysis of 2019: how have handlers fared over the last 12 months or so?

22 GHI Annual Conference

The twenty-first event welcomed over 800 delegates, and launched a special cargo forum, records Felicity Stredder

30 Site Visit

The Deputy Editor toured Swissport Kenya's facility recently, interviewed Jeroen de Clercq - and found out the secret of the operation's success

32 Battery Advances

As battery power gains adherents on the ramp, so performance monitoring becomes desirable, argues the Editor

34 InterAirport Review

Alwyn Brice was in Munich where he noted a very busy show, revealing plenty of innovation and development in GSE

44 Pushbacks

To close the year, the Editor brings a comprehensive round-up of the heaviest GSE in the business

COVER STORY

51 Ramp Communications

When miscommunication is a cardinal sin, the specialists can help out. The Deputy Editor adjusts her volume control and reports from the ramp

GHI EVENTS

- **2nd GHI Leaders Academy**
Grand Hyatt, Istanbul
5-6 February 2020
- **13th Asian GHI Conference**
Marina Bay Sands, Singapore
17-19 March 2020
- **9th GHI Safety Conference**
Tryp Barcelona Apolo, Barcelona
12-13 May 2020
- **6th Americas GHI Conference**
The Sheraton, Buenos Aires
23-25 June 2020

20/20 VISION

The end of the year is traditionally the time for looking back and taking stock. But January, as any Roman historian knows only too well, owes a debt to Janus, the god who looked in both directions.

So what will the coming year bring to the sector and, more specifically, the ramp?

For starters, I think that we can all look forward to a safer workplace, as the technology currently being adopted by GSE manufacturers strives to reduce that worrying margin for error. Although AI and an automated ramp may be a way off yet, it's certain that more and more trials will be held to substantiate these exciting developments. Another practice that is gaining traction is that of equipment pooling: until recently its ramifications were understood by very few handlers indeed, yet within the space of the last 18 months, more and more GSPs are waking up to its hitherto latent merits.

"I think that we can all look forward to a safer workplace"

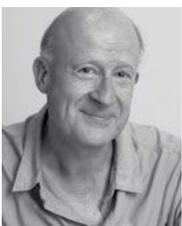
And talk of pooling leads me into another area that appears to be enjoying something of a renaissance: equipment renting. There was a time when no handler saw any tangible benefit in this arrangement, but clearly the corporate penny has now dropped, if the media is anything to go by. For example, just before *GHI* went to press, Los Angeles announced its interest in this area. Coupled with renting and leasing is that time-honoured practice of telematics: it's taken two decades to filter through

but today it has become a desirable asset in the handler's search for the most efficient operation.

I've not mentioned alternative fuels yet, but clearly the writing is on the wall here: electric is king and it's merely a question of when, and not if, we read of the first all-electric handling operation. One or two stations are getting close...

All in all, things are looking good. The cargo side of the equation may be in the doldrums but the passenger element is definitely benefitting from a tailwind as we head into 2020, with all the indications of ever-busier skies ahead.

Which, of course, translates into positive news for our ramp community. ■



Editor Alwyn Brice
alwyn@groundhandling.com

CONTENT DIRECTOR: Max Gosney
tel: +44 1322 221144
e-mail: max@groundhandling.com

MANAGING EDITOR: Alwyn Brice
tel: +44 1322 221144
e-mail: alwyn@groundhandling.com

DEPUTY EDITOR: Felicity Stredder
tel: +44 1322 221144
e-mail: felicity@groundhandling.com

ART DIRECTOR: Andrew Ganassin
tel: +44 1322 221144
e-mail: andrew.ganassin@markallengroup.com

PRODUCTION: Sejal Patel
tel: +44 1322 221144
e-mail: sejal.patel@markallengroup.com

PUBLISHER: Marc Young
tel: +44 1322 221144
e-mail: marc@groundhandling.com

DELEGATE SERVICES DIRECTOR: Alice Williams
tel: +44 1322 626964
e-mail: alice@groundhandling.com

OPERATIONS DIRECTOR: Ceri Sladden
tel: +44 1322 626966
e-mail: ceri@groundhandling.com

SENIOR OPERATIONS MANAGER: Libby Swayland
tel: +44 1322 626973
e-mail: libby@groundhandling.com

CONFERENCE MANAGER: Sian Tickner
tel: +44 1322 626975
e-mail: sian@groundhandling.com

CONFERENCE EXECUTIVE: Sophie Skinner-Jones
tel: +44 1322 221144
e-mail: sophie@groundhandling.com

CONTRIBUTORS
Tom Dombroski

Ground Handling International is published in February, April, June, August, October & December. Subscription rate per year applies to UK and overseas: **Qualifying subscription: £99 or €140 or US\$150** **Non-industry subscription: £250 or €360 or US\$380**



A MARK ALLEN GROUP COMPANY
www.markallengroup.com

Published by MA Business
a Mark Allen Group Company
Hawley Mill, Hawley Road,
Dartford, Kent DA2 7TJ. Tel: 01322 221144

CHIEF OPERATING OFFICER MARK ALLEN GROUP
Jon Benson
tel: +44 1322 221144
e-mail: jon.benson@markallengroup.com



©2019. All rights reserved. No part of the *Ground Handling International* may be reproduced or transmitted in any form, by any means, electronic or mechanical, including photocopying, recording or any information storage or retrieval system, without permission in writing from the Publisher.

The views expressed do not necessarily represent those of the editor or the *Ground Handling International*. Advertisements in the journal do not imply endorsement of the products or services advertised.

Front cover courtesy of **David Clark**

ISSN Number: 1364 – 8330 PRINT

Origination CC Media Group,
Printed by Pensord Press Ltd,
NP122YA



TEXTRON **GSE**

GROUND SUPPORT EQUIPMENT

Pushing Forward



FIRST OF ITS KIND

SAFETY PRODUCTIVITY DESIGN

TUG > ALPHA 1
COMING 2020

We've set out to build a new single-aisle pushback with one thing in mind—a safer operator experience. It was designed from the ground up to offer best-in-class space and ergonomics—plus unmatched ease of maintenance. There's only one, and it's coming in 2020.

Be the first to see all the features that put this new pushback on top at TugAlpha1.com

©2019 Textron Ground Support Equipment Inc. All Rights Reserved.

VR rolled out at Frankfurt



Fraport and AeroGround Flughafen München have developed a joint virtual reality training tool for ground handling operations.

New digital training content has also been created for the VR tool. One training module, for example, is aimed at practising the ground handling processes required right after an aircraft has assumed its parking position on stand. Other planned modules include apron safety training and a dedicated training course for baggage sorting. The training modules, which are available in German and English, can be used by both new staff and employees who have already received training. The objective is one of allowing ground handling staff to practise the processes in a safe space before performing them in a real operational environment.

The training content can be shared and

used via an online platform, the Innoactive Hub, which has been developed by Munich-based start-up company Innoactive. The software required by the platform was developed by 3D visualisation provider ThreeDee while the project was supported by the Innovation Management team at Flughafen München.

Christian Stoschek, Managing Director of AeroGround, commented on the initiative.

“We firmly believe that VR has strong transformative potential and is going to change the way

in which our employees prepare themselves for the challenges that await out on the apron. Innoactive’s platform also enables us to switch virtual training content easily between various locations. This helps us to implement common quality standards across all locations in a faster and more efficient way.”

Dennis Stein, VP Logistics and Information Management at Fraport’s Ground Services unit, underlined the benefits.

“The VR applications are not a replacement for live training but are designed to provide extra support to trainers. The practical exercises are always available at your fingertips and can be completed whatever time of day, and regardless of the weather and traffic conditions. Moreover, VR training reduces the time that you would normally require to wait for an aircraft to arrive or drive to a handling position.”

Change of tack

Following on from the October feature on ground handling in India, that country’s government has since seen fit to alter a clause within the regulations relating to the sale of AIATSL.

Potential bidders for the entity had expressed concern over the term of assured business that would accompany any deal. The ongoing guarantee of grandfather rights at 76 Indian airports was queried, along with severance package details. Specifically, the 2018 regulation had detailed an assured tenure for a period of three years but such has been the opposition to this timeframe that the total has now been increased to 84 months.

Perhaps even more significant has been the revised rubric on what constitutes a ground handling provider: by using the phrase “with distinct and independent existence at the airport”, the government is looking to head off any opportunistic third party agencies from getting involved on the ramp, something that has dogged the sector for many years.

Recycling packaging at 35,000 feet

Emirates’ flight catering offshoot (the EKFC) has replaced cardboard packaging with reusable crates to store and transport an average of 100,000 inflight meals daily. As a result of its newest environmental initiative, the carrier is looking to save 750 tonnes of cardboard waste, the equivalent of 260,000 square metres of mature woodland, annually.

Saeed Mohammed, Chief Executive Office of Emirates Flight Catering, said: “We are committed to operating with a mindset of efficiency and environmental sustainability. In addition to our vertical farming and solar power projects, our new packaging solution is already the third key initiative we have launched in a year to reduce our environmental footprint and deliver more value for our stakeholders. We continue to challenge our processes and work practices to ensure the highest possible level of environmental efficiency across our operations.”

EKFC recognises that responsible environmental practices are core to its long-term success and it is committed to using resources in a sustainable manner, thereby minimising the environmental impact of its operations across all activities.



CONTRACTS

■ **AAT** has been appointed by Royal Air Philippines as its cargo terminal operator in Hong Kong. Passenger charter services have been operating twice a week from September 30, using A319 aircraft.

■ In late September, **Swissport International** announced the launch of a new operation at Naha Airport, Okinawa, further cementing the company's growth in Japan and the Asia Pacific region.

The Swissport Okinawa team is supporting the start-up of Hong Kong Express' new daily Airbus 321 Hong Kong/Okinawa/Hong Kong service. Naha airport becomes the fifth Swissport station in Japan to support Hong Kong Express, following Nagoya, Narita, Haneda and Fukuoka.

■ **Menzies Aviation** has signed a contract renewal with Lufthansa Group, which will see Menzies delivering a full suite of ground handling services to five airlines at London's Heathrow airport. The contract dates from November 1. The renewal includes the delivery of passenger and ramp services for Austrian Airlines, Lufthansa, SWISS, Brussels Airlines and Eurowings. Menzies will also provide airside trucking services for a selection of those airlines, including Austrian Airlines, Lufthansa, and Brussels Airlines. In total, the contract will see Menzies servicing 48 flights per day for the group.

APPOINTMENTS

■ **Worldwide Flight Services** has strengthened its regional management team in the EMEA. Michel Fiorani joins WFS as General Manager Belgium, and will be based in Brussels. He has over 19 years' experience in the air cargo industry, having previously held senior management positions at Swissport, Emirates and Cargolux. In addition, WFS has also recruited Jack Brandstrup as General Manager Scandinavia, with responsibility for WFS' cargo operations in both Sweden and Denmark.

■ To further strengthen the EMEA organisation and to better meet customer expectations specific to air cargo handling and airport ground services, **Swissport** has appointed Rudolf Steiner as Senior Vice President Cargo Europe, Middle

East & Africa and Mark Skinner as Senior Vice President Business Development & Sales Europe, Middle East & Africa.

■ **John Menzies** has announced the appointment of a new Chief Financial Officer and the creation of an Executive Management Board. Alvaro Gomez-Reino becomes the new CFO, bringing with him significant financial experience gained through a career that has to date involved senior financial positions with Amey, Ferrovial and Swissport.

■ In October, **AeroGround Munich's** Siegfried Pasler stepped down from the post of Managing Director. Christian Stoschek has taken over the responsibility for AeroGround Munich and the AeroGround Group in the interim period.



www.tld-group.com



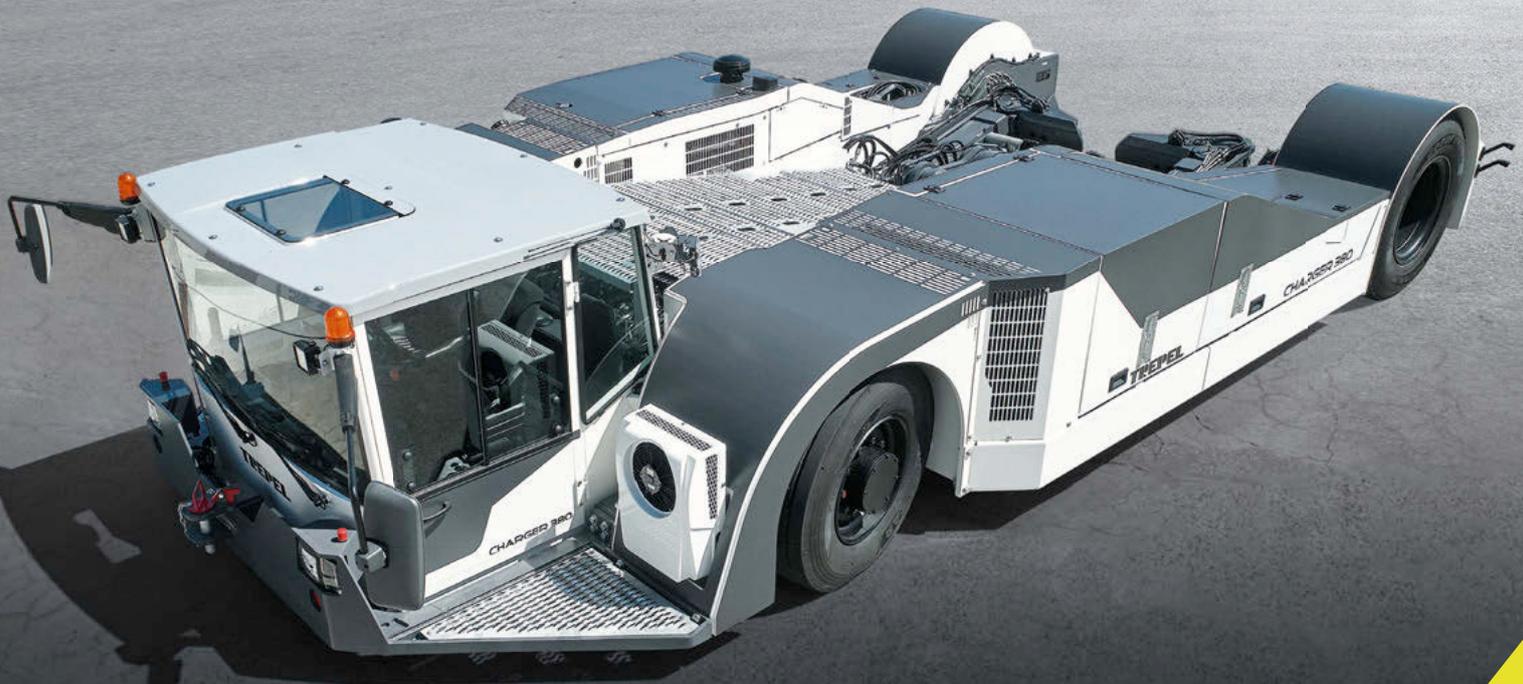
9 factories and 45 sales & service offices
worldwide to provide you superior GSE and support

TLD

THE NEW

TLTV CHARGER 380

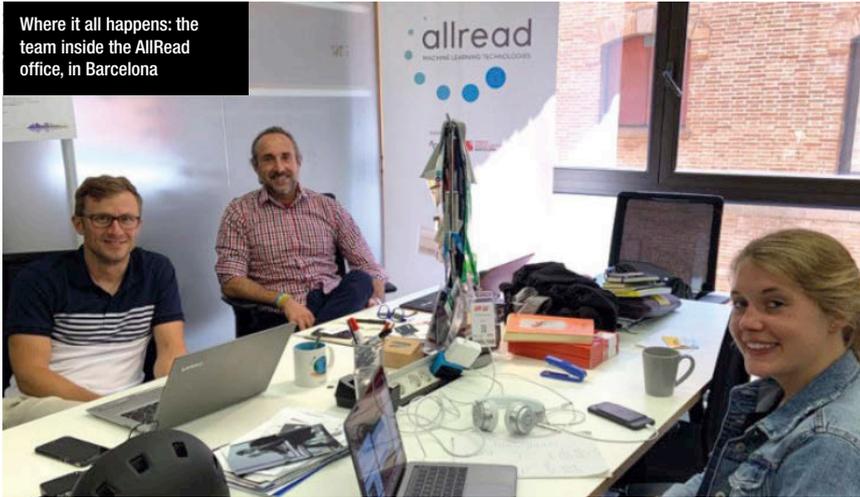
TREPEL
AIRPORT EQUIPMENT



***fast . strong .
comfortable .***

CHARGER 380 - the latest innovation in towbarless aircraft tractor technology. This aircraft tractor is ideally suited for pushbacks, intergate towing and high-speed maintenance tows.





Where it all happens: the team inside the AllRead office, in Barcelona



(L to r) Adriaan Landman, Pedro Paulo Rossi (IAG Cargo), Miguel Silva-Constenla, Nischa Basson (IAG) and Carly Morris (IAG Cargo)

READ ALL ABOUT IT

Felicity Stredder spoke to AllRead Machine Learning Technologies, one of 13 winners in the first stage of IAG’s Hangar 51 global innovation programme.

This this year, IAG is running the fourth edition of its Hangar 51 global innovation programme, which offers a selection of disruptive companies ten weeks of personalised mentoring, the opportunity to pilot their innovative technologies on a large scale and the chance to receive investment from the IAG venture fund, as well as fast-tracked commercial opportunities within the group.

The project is growing in popularity with each year, says IAG’s Head of Global Innovation, Dupsy Abiola, adding: “It’s harder to get into Hangar 51 than into Harvard.”

More than 450 applications were received from more than 50 countries this year, which was whittled down to just 36 applicants across seven categories for the initial pitch day, held in Madrid this September. From here, a total of 13 entrants were put through to the accelerator programme, which began on September 30 and will end on December 6, 2019.

The cargo category

Winning in the Future Cargo Logistics category was AllRead Machine Learning

technologies, which was paired with IAG Cargo as its mentor for the accelerator programme. COO Adriaan Landman and CEO Miguel Silva-Constenla presented the company’s concept at the pitch day: computer vision software that identifies and reads text or symbols found in industrial contexts, be these serial numbers, barcodes or expiry dates, and converts this into big data. Says Silva-Constenla: “Data is the new oil. We want to give access in a frictionless way to the valuable data appearing as text in the supply chains of our clients, transforming the raw data into crystal clear data.”

The technology was championed as a way to reduce monotonous tasks, saving time and money in labour, while also enhancing accuracy, even

in challenging operational environments, such as when target text is moving or obscured.

The team at AllRead is a combination of two experienced entrepreneurs with international track records in start-ups and corporate companies, Landman and Silva-Constenla, and three PhD-qualified senior computer vision and machine learning engineers. With one Greek, a Dutchman and three Spaniards, the team is certainly international, speaking ten languages between them.

Landman explains how the company was founded. “The team had been working together within the venture builder “The Collider” – a technology transfer-focused programme by Mobile World Capital, for six months, leading to the founding

of AllRead MLT in March this year. The three engineers are the inventors of the technology, which is the result of five years of investigation inside the Computer Vision Center of Catalonia. The technology and its patent have been transferred with exclusive rights to AllRead MLT.”

Developing the product

Landman relates how the computer vision software came to be developed. “The inventors of the technology are scientific investigators. They worked in a group that specialised in ‘robust reading’, which refers to the research area dealing with the interpretation of written communication in unconstrained settings, and they had been mandated by a Spanish gas company to help them develop a solution to ‘read’ analogue gas meters. Once they reached 98% reading accuracy, the team worked to apply the technology in new contexts,” he asserts.

“Logistics is significantly affected by the costs of tracking and digitising ‘text’ on products, vehicles or load devices, and AllRead MLT saw a potential application for their computer vision software technology.”

Since then, the product has



(L to r) Marcal Rossinyol, Miguel Silva-Constenla, Luis Gomez and Dimosthenis Karatzas, together with Adriaan Landman

gone from potential to reality. “Today, AllRead MLT offers an (online to offline) machine learning based software to process images (photos and videos) taken by mobile or fixed cameras, and spot and digitise any type of alphanumeric text in operational environments,” Landman explains. “Through its agile and easy implementation, it streamlines and simplifies data extraction processes, reducing repetitive manual tasks and allowing immediate processing of the information. AllRead MLT is a cost-effective solution, adapting to the existing processes and needing no specific hardware,” he enthuses.

AllRead’s technology already has some early customers, notes Landman. “We have ongoing pilot projects with companies like Suez, the port of Barcelona and Comsa, in Spain.”

Benefits to air cargo

AllRead’s submission was originally entered under the Airport Operations and Logistics category of the competition – but it was put through to the next stage in a different category. “IAG Cargo spotted great potential in our computer vision software technology for application in the cargo logistics industry,” says Landman.

“With AllRead, we want to disrupt the traditional OCR (optical character recognition) and barcode technologies.” He explains more specifically how the technology stands to benefit the sector. “By providing a solution to capture, read and accurately digitise the codes on unit load devices, both containers and aircraft pallets, to be automatically integrated with the existing ULD management systems, AllRead MLT wants to help the air cargo industry to streamline all their ULD related processes,” he begins. “These processes include tracking ‘ins’ and ‘outs’ of warehouses,



Mobile phone cameras can be used to capture the alphanumeric data

managing ULD stocks and managing inventories. The technology helps to reduce inefficient and error-prone manual processes and accelerate data management. Knowing in real time where a container is, when it entered the warehouse, or how many containers are currently available, is highly valuable,” he asserts. “This ensures that all containers are managed efficiently.”

Accelerator objectives

With the ten-week pilot already underway, Landman explains what they aim to achieve during this time. “We are developing a unique reading software for air cargo containers and ultimately for all kinds of ULDs, based on the requirements of IAG Cargo. The software will be tested in mobile devices used during the daily inventory process and evaluated on its impact on inventory and data integration time in the ULD management software,” he relates.

They also hope to use this time to address any current limitations of the solution. Landman provides one such example: “Despite the established nomenclature of ULD codes, some can be very damaged, which makes the recognition more challenging. The way to address this is to train our model with more real



data and artificially augmented data, to be able to read ULD codes despite damage.”

The mentor

Carly Morris, Head of Innovation at IAG Cargo, explains why AllRead was chosen for the accelerator programme. “AllRead’s presentation highlighted how they can use machine learning to take data and turn it into actionable insights. IAG Cargo are committed to continually investing in innovation to improve how we deliver for our customers.”

Morris elaborates on the objectives of the mentorship period. “The aim of the ten week programme is to run a joint proof of concept

“Data is the new oil. We want to give access in a frictionless way to the valuable data appearing as text in the supply chains of our clients”

Miguel Silva-Constenla, CEO, AllRead

which is showcased to senior management in IAG Cargo. AllRead will have access to real world operational environments, work with experts across the industry and receive tailored mentorship and support from a senior sponsor. If the ten week programme goes well, our ambition is to utilise AllRead’s innovative technology to digitalise our ULD management processes, thereby strengthening our operations,” she explains.

“We are now halfway through the programme and excellent progress has been made in exploring how AllRead’s technology will be applied within IAG Cargo and how it can make our business run more efficiently. We will be starting testing in the next few weeks and we are excited to see the results come together for the Hangar 51 Demo Day in January.

“As with all start-ups that are selected for the ten week accelerator programme, AllRead has the opportunity to follow in the footsteps of Emu Analytics – a winner of the 2018 Hangar 51 programme. Emu Analytics’ success on the programme has led to IAG Cargo’s use of its real-time vehicle telematics analysis and visualisation solution platform, Flo.w, created to improve the efficiency of our high-volume cargo handling operation at Heathrow,” Morris relates.

The accelerator programme will come to a head in January 2020, when all 13 of the finalists will present the results of their pilots at the Demo Day, for a chance to receive funding towards the further development and commercialisation of their concepts. “To receive funding, start-ups on the programme must demonstrate the use of their technology in putting customers first while improving IAG Cargo’s services,” Morris concludes. **ghi**



Early bird rate
\$1900
Expires 10 April 2020

GHI is delighted to announce the beautiful Latin American city of **Buenos Aires will host our 6th Americas Conference...**

Join us at the 6th Americas GHI Conference, Buenos Aires and connect with an expected 350 aviation stakeholders looking to discover new business opportunities across the Americas region. From airlines and airport operators, equipment manufacturers and ground service providers – the conference is a one-stop shop for aviation operators across the Americas region to connect and discover operational best practice. Register now and benefit from:



PREMIER NETWORKING

- 83% of 2019 attendees discovered a new business lead
- Enjoy a personalised One-to-One Meetings service, fully managed by GHI's team
- 95% approval rating for our One-to-One Meetings Planner



MEET WITH THE MAJOR PLAYERS

- 30+ airlines targeting new routes in North and Latam markets
- 350 senior aviation directors and managers under one roof: 2019 attendees estimated an average travel saving of \$8,973 by meeting peers at the Americas Conference
- Attendees from 30+ countries including Dominican Republic; Mexico; Colombia; USA; Brazil, Argentina; Chile



BEST PRACTICE-LED CONFERENCE SEMINARS

- Expert advice on combatting staff attrition
- Developing a ground handling strategy fit for the Americas market
- 76% of 2019 attendees discovered a solution to a business challenge at our conference seminars

SAVE THE DATE

23-25 JUNE 2020

SHERATON BUENOS AIRES HOTEL & CONVENTION CENTER

REGISTER NOW: americas.groundhandling.com

innovation for aviation
Ground Support Equipment

Mallaghan®



PASSENGER STAIRS
MEDICAL & PRM VEHICLES
AIRPORT PASSENGER BUS
DE-ICERS / AIRCRAFT WASHERS
TOILET & WATER SERVICE UNITS
EXTENDABLE BAGGAGE CONVEYOR
CATERING & CABIN CLEANING TRUCKS

T: +44 (0) 28 8772 3444
E: sales@mallaghanGSE.com

www.mallaghanGSE.com   

BLISS-FOX
PANUS GSE

F1-280E
MADE TO TOW



WORLD FIRST
— ★ —
WIDE BODY
TRACTOR

www.bliss-fox.com

Contact:
bliss-fox@panus.co.th | +66 38 462100-2



African activity

Delegates gathered in Nairobi for the fifth edition of this magazine's African event, writes the Deputy Editor.

September saw the African *GHI* Stakeholders Conference return, with over 150 delegates gathering at the Safari Park Hotel in Nairobi to discuss the growth opportunities of the market, set to be one of the fastest growing in the next 20 years.

Liberalising markets

At an estimated 5% per annum, regional growth should be considerably higher, it was asserted. "We need to set ourselves a target of two digit growth," said Gaoussou Konate, of the African Airlines Association (AFRAA), noting that the Free Trade Agreement will boost growth by 52% by 2022.

To enable growth, protectionism must stop, said Gordon Anyimu, Head of Ground Services, Kenya Airways, lamenting the visa restrictions and documentation encountered when travelling between states. These are inhibiting the most direct routes, stifling intra-African connectivity and encouraging flyers to take alternative routes, declared Konate. How to liberalise visa requirements was queried, with the room concurring that the government must take action.

"Currently there is a perception that African carriers aren't reliable and we need to dispel this myth," said Anyimu, adding

that national airlines need to put away their egos and align towards the common goal of a liberalised Africa. However, there is currently more incentive for regional airlines to co-operate with international carriers than with domestic – and this must be addressed.

Free trade is vital in facilitating growth of the regional industry, asserted Konate. "Air traffic always follows trade. This is why we have to lobby for trade growth." However, some concern was expressed for the future of the Single Air Transport Market Agreement (SAATM) in the current global climate of protectionism, amidst Brexit and the US-China trade war.

Christophe de Figueiredo, CEO Morocco, Swissport Maroc, suggested the re-entry of certain legacy airlines offers hope, including BA opening routes from North Africa to the US and Europe, and Ryanair operating into Nigeria. Local airlines would do well to take note of this activity, however – while they fight each other, large international airlines are becoming better connected in Africa and usurping opportunities for local airlines.

Infrastructure limitations

Unanimous was the assertion that lacking or dated infrastructure is a major limitation

in the progress of African aviation. Short-sightedness by each government that comes to power means that funds are not invested in airports; meanwhile, airlines are investing in smaller aircraft because the infrastructure is geared towards this, when there is a need to invest in bigger aircraft that can carry both passengers and cargo.

Charges to use said infrastructure are too high, Konate bemoaned, while under-development in some stations is encouraging people to take routes that bypass African airports, related Anyimu. "Perception is key because people believe in liabilities and that it's safer to transit in Istanbul than a country in Africa." Leadership will be crucial in strategising on how to take back market share, while an overall need for greater trust between countries is required. It was also suggested that airports reinvest some of their revenue in infrastructure development.

Policy and financial concerns

Elisha Omuya of ICAO commented on the uptake of ICAO standards at airports in Africa, noting an average of 52% implementation across the states. He advised a target of over 60% implementation by 2020, adding that all international gateways in Africa should be compliant by 2022.

A financial update followed, addressing SAATM. A single, liberalised African sky is good on paper but flawed in practice and gradual implementation is needed, explained James Mwendia from Deloitte East Africa. ▶

Growth markets he flagged up included Uganda, following the relaunch of Uganda Airlines, Zambia, where tourism led by South African Airways drives growth, and Rwanda, which is benefitting from the dynamic growth of Rwandair. All are expected to grow 7% each year for the next 20 years, doubling in size each decade, he said.

Opportunities in cargo

Another Big Debate brought the regional cargo market under the spotlight. High demand for African exports, from coffee beans grown in Kenya to cocoa from Ghana, has seen the African airfreight industry register 5% growth in FTKs year-to-date – but there is potential for much greater growth, highlighted Cisse Abdoulaye, Group COO – Ground Handling & Cargo Management at NAS, with Africa only commanding only 2% of the world's trade at present. Plentiful arable land is one of Africa's strengths, he continued; however, the main export, perishables, is vulnerable to price volatility. Meshack Kipturgo of Siginon Aviation emphasised the potential of this sector, with two thirds of arable land uncultivated. "We could feed the world," he stressed, suggesting that Africa be considered as a single trade block with duty-free regimes to enable economies of scale.

Lacking infrastructure at airports presents limitations to capacity growth, however, and service charges and high taxation between countries hinder intra-African trade. The SAATM naturally represents an opportunity in this area, by opening borders, and the consensus from the panel was that Customs standardisation is required and government needs to actively address barriers to trade.

Kipturgo asserted that if free movement of people between states was allowed without business visas, companies in Africa would invest more in the country; while Abdoulaye highlighted the regional prevalence of corruption, citing the mandatory payment to a customs agent to bring goods in, "but you never get a receipt..." he remarked.

What do airlines want?

On Day Two, some of Africa's biggest carriers took to the stage to relay the needs of the sector from their perspective. Alongside high fees and visa restrictions, current infrastructure is preventing airlines from operating the wide-body aircraft they need to, to better serve the sector, explained Tom Ogendo of Kenya Airways; while high ticket prices, resulting from excessive



taxes, is leading to a low uptake of air travel within Africa. Konate stated that AFRAA is ready to collaborate on any initiative that will drive growth, emphasising the need to work together to bring charges down. Stakeholder collaboration was given as the key to encouraging new carrier entrants, with Konate highlighting that "low cost carriers are the future of Africa". Currently, LCCs only command 12% of traffic in the country. Also on the wishlist was a more comprehensive service portfolio from ground handlers, to bring end-to-end continuity, along with the usual request for investment in technology, training and safety. Examples of work being done to address these requests came from Swissport Maroc and NAS in their presentations on how to incentivise and retain staff, while Dawit Lemma, CEO, Krimson Aviation, explained how to implement a mature safety culture.

The handler, meanwhile, was seeking more collaborative, less punitive SLAs and a review of the 'termination for convenience' clause,

ISAGO IN AFRICA

The relevance of IATA's Safety Audit for Ground Operations (ISAGO) in Africa was debated, with many deeming it not worth the US\$50,000 price tag as airlines still insist on their own audits. "ISAGO won't happen in Africa," said one delegate, to which Maurizio Anachini, BFS, recounted the old adage "cheap is expensive", emphasising the value of standards and certification. Another delegate mooted the idea of 'ISAGO light': auditing for localised standards at a lower price.

asserted ASA Director General Fabio Gamba, with the merits of GSE pooling also mentioned, and the need for airports to regulate contract prices to stop handling companies "cannibalising each other".

African airports and GSE

Outgoing CEO of the Kenya Airports Authority Jonny Andersen reported huge growth in the domestic travel market and aircraft movements, with Jomo Kenyatta alone poised to hit 9m passengers this year, up from 7m two years ago. The airport is also one of the fastest growing cargo airports, seeing 25% growth in throughput from 2017 to 2018.

All airports in Africa need to become ISAGO certified, he stated, or "our very existence is at stake," as well as to invest in zero emission equipment, noting Jomo's goal to become the greenest airport in Africa by 2022. Infrastructure updates are planned, such as to cargo facilities, he explained, adding that he foresees fewer ground handling companies in the future – and that recommended changes to the KAA Act 1996 will address these areas.

The room was full for the last session of the day, which evaluated the ground support equipment market in Africa, where a unit of GSE costs 25% more than the industry average. Delegates bemoaned the excessive delivery time for GSE orders to Africa and the perception that GSE is made to a lower specification for this market. David Bunting of JBT Aerotech dispelled this misconception, while Bob Gurr, VP Swissport South Africa, highlighted unmaintained equipment as a common factor here, asserting, "you ignore routine maintenance at your peril."

Electric GSE received due mention, with Gurr noting that Swissport's fleet will be 40% electric by 2023; however, uptake is severely hindered in Africa owing to the cost and a lack of charging infrastructure.

Call to action

With representation from airlines doubling to 20 carriers this year and over 500 One-to-One Meetings taking place, networking was productive at the event, as was crucial conversation in the conference room.

Discussion concluded that collaboration is needed to lower taxes, remove barriers to travel and trade, bring profitable routes into Africa, and ultimately to create an environment that will foster rather than stifle industry growth in this promising region.

Join us in Cape Town from September 22-23, 2020 when the event returns, to evaluate the progress of the coming year. **ghi**

Damarel



Improve performance and increase revenue with FiNDnet

FiNDnet Suite

The complete turn management and billing solution for Ground Handlers

Coordinate, monitor and improve all aspects of your Ground Handling & Ground Operations with help from FiNDnet.

over **150** airport operations around the world and **millions** of flights every year rely on FiNDnet



Demand Planning



Revenue Forecasting



Turnaround Management



Staff / GSE Allocations



Mobile Workforce



Service / Revenue Capture



Airline Billing



Business Intelligence

Contact us today on **+44 (0)1252 783 787** or email info@damarel.com

www.damarel.com/ground-handling



EUROPES AND DOWNS

Europe's ground handling market receives scrutiny this issue, where the climate has been somewhat volatile. Felicity Stredder brings a report.

It's been a challenging year for the European aviation sector – and the handlers haven't been totally safe from the impact.

A mixed bag

Havas' Deputy General Manager/Sales and Marketing, Mete Erna, casts a positive light over the handling market in Europe overall. "In all our European operations we observe double digit growth percentages in international traffic figures. Growth was strong particularly in the leisure traffic in the southern part of Turkey, which has been recovering since the decline in 2016. This growth helped us to offset the decline in domestic traffic caused by various factors, including the economic crisis that emerged in Turkey in 2018 and the grounding of the B737 Max."

Ross Marino, Regional CEO, Europe, for dnata, conveys a similarly mixed bag. "So far this year, our ground handling business has remained stable, although we are seeing tactical flight cancellations by a number of our airline customers in certain markets. Cargo volumes are down globally, and

Europe has not been immune to this trend, with some markets hit worse than others," he relates. "The mood is most definitely cautious and we expect trading conditions to become even more challenging before we see an upswing in business."

The tough global economic cycle of the present has had widespread impact, reiterates Giles Wilson, CEO Menzies Aviation. "Very sadly, a few airlines have recently gone under, Thomas Cook obviously being the big headline one. Also, schedule changes, the 737 Max issues, which I think has affected a number of our customers, and on top of that we've had quite a challenging summer with weather and Air Traffic Control," he continues. Overall, he still sees Europe as a generally growing market, however.

Axel Feil, Vice President Sales, Marketing & Business Development at AeroGround Flughafen München, also emphasises the ATC challenges handling companies have faced. "Among other things, with the instability of air traffic due to infrastructure restrictions, slot and air

traffic problems and strikes, and a high rate of unpunctuality, the scheduling of resource allocation became more difficult." He also flags up several insolvencies within AeroGround's customer portfolio, namely Germania, Adria Airways, Condor, Thomas Cook and bmi regional. "Although other airlines are jumping in to get the slots, most of the insolvencies lead to a loss if services are not prepaid or covered by a bank deposit," he explains. "Unfortunately, we expect that this is not the end. We believe that consolidation, especially within Europe, will continue in the coming years."

Groupe Europe Handling operates in Paris, London, Nice, Dublin, Shannon and Belgrade. Says Commercial Director Hugo Ehrhard, "The general tendency in terms of traffic growth has been positive in 2019, but the end of the year is quite chaotic, with two French carriers, Aigle Azur and XL Airways France, collapsing and Thomas Cook, or Adria Airways, bankrupting as well. One of our ground handling competitors is probably going to shut down its operations in Paris Orly, too. We hope

that this very negative trend is going to stop,” he reports.

Cargo concerns

Luzius Wirth, EVP Europe, Middle East, Africa for Swissport, observes a more stable business on the ground handling side than in cargo, however. “On the passenger side, we don’t see much of the pressure on the airline being passed on to our side; that’s mainly because the contractual side of our business is by aircraft type and not necessarily by seat load. Unfortunately, that doesn’t hold true for the cargo side, where we have seen continuous weakening of the market since the beginning of the year.” He explains that costs, such as labour, can be managed to compensate to a certain extent, “but we are now at the level where you cannot cut further. Considering the economic challenges and trade differences between the US and China, it is also the expectation that this is going to continue to be quite weak.” He doesn’t believe the situation will worsen, however. “At the end of the year, 90 plus percent of the trade flows between the US and China will be tariffed. So, I think we have reached pretty much a maximum stage. And hopefully everyone will see that this will have countereffects to the global economy and it’s not the right way to go.”

Barry Nassberg, Group Commercial Officer of Worldwide Flight Services, also flags up the difficulties in cargo. “The time it is taking to resolve the US-China trade dispute as well as other market realities have contributed to the slowing of trade,” he notes; however, he flags up the resilience of the pharma market as a positive for the handler.

Neither Wirth nor Nassberg are concerned by the possibility of a longer term struggle with volumes. “We’ve been in this business over 45 years and been through plenty of peaks and troughs before,” Nassberg asserts. “No one wants this downturn to continue - and it won’t.” While the decline has been greater and longer than expected, WFS continues to invest in the provision of specialist services in anticipation of market recovery, he adds. “On the cargo side of our business, the biggest frustration is to do with markets we’d like to be in but can’t be because of the lack of available real estate on airports. There remains a serious need for airports to further invest in their cargo businesses by developing land and facilities. We think airports ready to show this commitment will see a good return on their investment.”

Uncertainty surrounding Brexit has impacted cargo, notes Wilson, with short-



term disruption expected at the tunnels and ports; however, cross-border trade issues aren’t expected to have any knock-on effects for the handler. “Today, tomorrow, the next day, the impact it’s having is uncertainty in the market. I think airlines are bidding for lower prices, so that puts pressure on the financials in the industry.” The biggest potential challenge of this, he adds, is the possible impact on the UK labour market.

Staff churn

Staffing is becoming more and more of an issue, Wirth affirms, admitting that employing people to work all hours in all weathers for low pay and high expectations is a tough sell. “This is the reality. What do we do about it? I think that’s the beauty of a global player like ours. We can offer opportunities,” he says. “People can move to different locations, different cultures, depending on what their appetite is. At the same time, we invest in training programmes so people can grow through the ranks. From early on in their career, they will gain experience in leading people, leading larger teams, leading a department, leading a station and then multiple

stations.” Swissport is also introducing more dynamic, mobile forms of communication for employees, including staff forums and online rostering apps at larger stations to enhance the employee experience.

“What keeps me up the most at night is staff turnover,” concurs Wilson. “Because 65 percent plus of my cost base is people and we employ 36,000 around world. The US has very high staff turnover and we’re seeing it quite strongly at the moment in Eastern Europe.” The issue Menzies is addressing is not recruitment but retention, he stresses, emphasising the importance of leading, recognising and communicating with staff, making them feel proud and offering a career path. Menzies is addressing all of this with the launch of a leadership programme at five stations in the US, which will be rolled out worldwide into 2020. “That drive is about training everybody from a ramp lead all the way up to me. If you get the managers right, the leaders right, the team below will stay,” asserts Wilson. The classroom-led training is geared towards understanding the people, “but also really understanding how we can differentiate ourselves as the employer of choice in our



“We are planning to break ground on a new cargo service centre in Frankfurt located close to airside in December”

Luzius Wirth
Swissport



“With low unemployment rates, we need to work smarter to recruit, retain and develop our staff across Europe”

Ross Marino
dnata

sector. Our industry is growing. The pool of people we’re going after isn’t getting any bigger, so we have to drive efficiency. If you can get more better trained people with better systems, better processes and better equipment, you can do more with the same number of people as the industry grows alongside you,” he explains.

Dnata is working on similar initiatives, says Marino. “We are working very hard on initiatives that will make us an employer of choice in each of the markets that we operate. With low unemployment rates we need to work smarter to recruit, retain and develop our staff across Europe. This will be an ongoing challenge for years to come.”

Erna flags up the need to adapt to appeal to the changing motivations of the younger workforce. “The mismatch between the prospects offered by the vacant positions in our industry and the expectations of younger generation seems to continue and we do not expect to have any changes in this area soon. This is one of the main reasons why new technologies, minimising the interference of humans in processes, have become more important,” he asserts.

Ehrhard reports severe staff turnover issues in the UK, while in France the issue is more specifically attrition. “The answer to both problems is the same: keep your people as happy as possible through respect, close management and healthy communication, as in any relationship.”

Challenges besides

Referring back to the aforementioned volatility of the airspace and airline scheduling, Wirth highlights that helping airlines recoup lost time, along with issues with staff numbers and allocation, all drive significant costs into the business. “These can only to a limited extent be passed on to the customer,” he notes.

Meanwhile, Erna observes global growth in the low cost carrier market, particularly in the emerging markets in Europe. “Full-service carrier groups are establishing

their own low cost subsidiaries to compete with these carriers. Hence, the pressure of reducing the expenses steadily increases,” he bemoans. “Another trend we have started to notice is self-handling by airlines. We closely follow the recent developments by Pegasus Airlines in their hub Sabiha Gokcen airport in Turkey, by Ryanair in Spain and by Jet2. We believe ground handlers still have something to learn from the airlines in this respect and we have to be able to satisfy the needs of our customers if we want our industry to thrive.”

In Munich, Feil reports that the expansion of Terminal 1 during ongoing operations is a challenge for ground handlers, creating longer transit and driving times and construction sites to navigate; while in Berlin, the focus on trial operations and the opening of Berlin Brandenburg airport is a challenge. “New processes and procedures must be tested and evaluated; another challenge is the continuing splits, by splitting traffic to Brandenburg and Schönefeld airports,” he explains.

Meanwhile, the proliferation of no-bag fares by airlines, combined with baggage fees, has seen an increase in hand baggage. “Manual handling at the position or at the gate makes the handling process more expensive and leads to delays of the aircraft,” he notes.

Areas of investment

Alongside investment in GSE telematics, management tools for operations planning and staff allocation, and training aids like



VR simulators, the handlers also report plenty of investment in green initiatives. “Choosing green or hybrid options is a prime consideration in all our ground support equipment fleet planning,” asserts Marino. “We are already operating electric GSE at several stations and are also testing new fully electric and hybrid electric vehicles such as tugs and tractors at different stations in the UK and elsewhere. We will continue to invest in our green fleet.”

Groupe Europe is also making good headway towards a greener ramp. “Some 40% of our GSE fleet is electric. We would love to be at 100% but we must wait for airports to provide enough recharging capacities,” explains Ehrhard. At Havas, all GSE within the indoor areas are electric and Erna reports that the handler is in the process of converting outdoor vehicles, too.

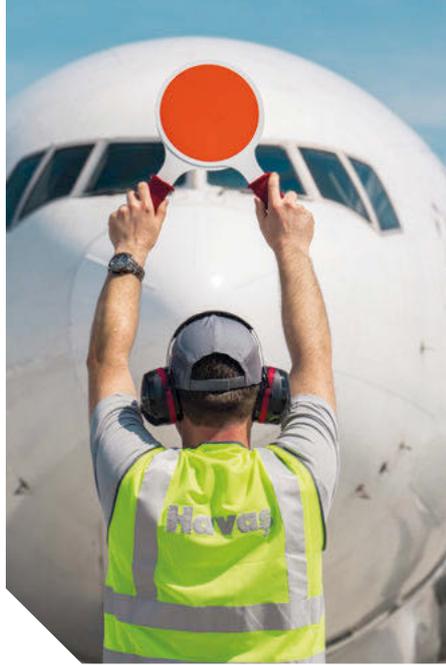
In its 2019 Sustainability Report, Swissport committed to convert 50% of its GSE to electric by 2025. “That’s a massive investment to renew the fleet and make it electric and we’re also looking at autonomous driving; these are the pilots we are doing,” says Wirth. “It needs the airport, it needs the carriers and every party to contribute efforts to push something like that forward.” Further environmental initiatives include the decision to stop using single use plastic straws in all Swissport lounges across its global network. “These are small things we do in sustainability that make quite a sizeable impact with the millions of guests we put through our lounges.”

Menzies, meanwhile, is currently



“We believe that consolidation, especially within Europe, will continue in the coming years”

Axel Feil
AeroGround Flughafen München



Business growth

Marino relates dnata's milestones for the year, including the opening of a 14,000 square metre cargo centre at Brussels airport, capable of processing 80,000 tonnes of cargo annually, and of dnata City East at London Heathrow, encompassing eight facilities. "At Manchester airport, our second biggest operation after Heathrow, we are working on a project to develop the new dnata City North cargo complex. We've also invested in our pharma facilities in the UK and The Netherlands, where we now offer more handling capability than any other company." The handler also renewed its ground and cargo handling licence at Zurich airport through to 2025.

Ehrhard relates GEH's newest customers: "Our most recent new full handling signings are Cathay Pacific in Boston, Norwegian in Orly, Qatar Airways in Charles de Gaulle, Flydubai in Belgrade and La Compagnie in Nice. The biggest trend I have personally noticed is that more and more carriers are turning away from our largest competitors, for what they perceive as a lack of

appointing somebody to oversee the company's sustainable agenda, reports Wilson. "The key obviously is trying to rotate older diesel equipment on the airports and driving more effective, electric equipment because it's cleaner. And that's everything from buses to pushbacks."

Nassberg is particularly positive about the green dream becoming a reality on the airfield. "In the past there has been a degree of lip service paid to new technology because although everyone wanted it, there

was no way to pay for it. Consequently, for example, a lot of ground equipment hadn't changed for 20-30 years but I would say that's probably no longer the case and we are seeing advancements that support both greater efficiency and sustainability. This includes the transition to electric equipment and automated GSE robotics."

Sustainability is becoming increasingly important to WFS as airlines and airport authorities mandate environmental standards on equipment, he adds.

Hactl is Hong Kong

Scan the QR code to find out why

commercial flexibility,” he notes.

The inauguration of New Istanbul airport in April, with a passenger capacity of 90m, is naturally of import for Havas. “Havas has kicked off its operations successfully, with over a thousand employees simultaneously,” enthuses Erna. “We made multi-million Euro investments in a brand new 10,000 square metre cargo warehouse, ramp buildings, workshops and GSE to meet the increasing demand in the new airport.” He adds that the operation there will achieve a “Green Airport Company” licence by the end of the year.

Swissport recently opened a state-of-the-art pharma handling centre in Brussels, which Wirth believes to be the largest of its kind in Belgium. “We are planning to break ground on a new cargo service centre in Frankfurt located close to airside in December. This this will come online in 2022.” In May, Swissport was assigned handling responsibility with Finnair’s COOL Nordic Cargo Hub at Helsinki airport; and in June it opened its second cargo facility in Vienna, also securing a five-year easyJet contract in Zurich.

Since becoming CEO, Wilson’s focus has been on getting back in front of Menzies’ customers, he relates. “The UK for us has been the market that’s been through quite a lot of change. We’ve obviously recently changed our management team and we feel quite positive going forward.” He adds that one of the biggest achievements for Menzies in the UK was the recent win of a five-year contract with easyJet at Luton.

WFS has also gained ground in Europe this year, opening a new facility in Madrid, Copenhagen and a pharma centre in Paris



“We’re going to be making a lot more investment in both organic and inorganic opportunities”

Barry Nassberg
WFS

CDG. It will soon commence ground handling services for Virgin Connect (formerly Flybe) in Birmingham, a product with an increasing focus on narrow-body, high volume LCCs and the ‘cost-plus’ business model, relates Nassberg. “One of the positive outcomes of the current market conditions is that we expect airlines and airports to be even more open to the types of services and solutions we offer. This might be in the form of multi-station agreements or because of the expertise we bring across the full handling portfolio, alongside our ability to invest.”

WFS has plans to grow its modest presence as a handler in Europe. “We lack sufficient presence in central and eastern Europe, so this will be an area of focus for us in the next couple of years,” adds Nassberg. “We have a lot to do so we’re going to be making a lot more investment in both organic and inorganic opportunities.” To further support this, WFS has given the ground handling side its own dedicated senior management team.

Near term forecast

When asked for near-term expectations of the European handling market, Wirth predicts a flat 2020, with stagnation at the current level on the passenger side and

further decline in cargo volumes. “So for me it’s a pretty soft outlook for Europe,” he says. Marino believes it will continue be a tough operating environment, too, but stresses dnata’s plans to continue investing in its people and technology.

Ehrhard and Feil anticipate further financial struggles. “There will be more airlines collapsing, and more ground handlers suffering from it. I do hope that I’m wrong,” Ehrhard asserts. Feil expects high tariff claims and wage agreements going forward. “This will increase the financial pressure on ground handling with high price sensitivity of the airlines at the same time.”

Erna expects more consolidation via mergers, acquisitions and joint ventures by the major global companies in the mid-term. “We observe a continuous trend of consolidation in the market, which also brings opportunities for acquisitions,” he asserts. “We have noticed that the market is getting more regulated in less developed countries, particularly in Africa, which may result in the emergence of new markets,” he adds. Wilson also expects to see consolidation. “There will be, I believe, bigger and fewer handlers, but it will take time. The top five or six handlers account for about 20% of the market, so there’re still huge opportunities there. The big players will hopefully continue to grow and good, strong competitors is exactly what we need. If I look five years down the line, the market will look more consolidated.”

Nassberg injects further positivity into the forecasts. “On the cargo side, we will see growth geographically, particularly in cargo-focused airports, in order to take the slot pressure off passenger-focused airports. In terms of ground handling, we will see increasing interest by narrow-body carriers in more transparent, customised handling solutions.”

Wilson concludes that the aforementioned challenges don’t necessarily spell bad news. “There will always be challenges in the market. Europe is still a massive market and a really interesting market for us, so we see us growing more and more in Europe. There’s some exciting times in our industry ahead.” **ghi**





Connecting the air cargo community



A validated circulation of 19,400 copies print & digital worldwide

Publication dates: February, April, June, August, October & December 2020

Audience: C-suite management level in airfreight, logistics, airlines, airports, cargo agents, charter brokers, charter airlines, express operators, freight forwarders, shippers, GSSAs & integrators

Coverage of shippers and forwarders

A4 glossy business magazine format

Digital edition and weekly newsletter

Air Logistics International successfully launched in June 2018



www.airlogisticsinternational.com

To discuss opportunities with ALI please contact Anthony Smith
anthony.smith@markallengroup.com
or + 44 (0) 1322 221144



Dutch coverage

This year's event unfolded in Holland, writes Felicity Stredder, and saw a record attendance.

With over 800 delegates, in excess of 60 exhibitors and around 3,500 meetings taking place, the November event was a busy one.

Seeking out synergies

As the first panel of the conference assessed both the passenger and cargo side of operations, Menzies' Executive VP – Cargo, Robert Fordree, declared that the e-AWB was not the future – “it was the future a long time ago.” Steven Polmans, Director Cargo & Logistics for Brussels Airport Company, shared the view that the focus shouldn't be on paper, highlighting that hitting implementation targets without changing any operational processes is not benefitting the industry. “Talking about e-AWB and innovation is ridiculous – it's old solutions for future problems,” he said, stressing that the energy should be put into new solutions.

Benoit Dumont, CEO of Unilode Aviation Solutions, flagged up an absurd reality: “You can track a US\$10 pizza through every step of its journey but you don't know the location of your shipment for four days,” he said. The limitation is not skills or technological capability but mindset, he noted, to which Fordree added that

fresh blood coming into the industry would help to drive change.

When asked what strengths cargo could borrow from the passenger side of the equation, Fordree singled out customer interaction. Tania Boyes, Director of Cargo Operations, Virgin Atlantic Cargo, agreed, noting that the impact of upsetting a cargo customer could be far worse than that of a disgruntled passenger. In an ideal world, she added, the airline would like to be able to contract jointly for passenger and cargo – Fordree concurred, saying that this was where he saw the business going.

Big Debate on price

The results of a *GHI* survey revealed some shocking statistics relating to pricing for the average turnaround and top KPIs in SLA negotiation. Handlers reported an average price per turn of €955, equating to €5.30 per passenger, while airlines reported a higher average cost of €1,047; however, the handlers in the room were unanimous that these estimations were considerably

higher than the reality. Three quarters of respondents reported having to decline a deal because an airline wouldn't meet their minimum per turn fee – and 90% of airlines confirmed that their SLA included a penalty clause. Both handlers and airlines gave safety and OTP as the most important KPIs, followed by passenger satisfaction, leading the room to ask that if they were not all in this business for the passenger, then what were they in the game for?

Moving on to costs, labour is the main driver, at 70% of total outlay, while GSE totalled around 10%, suggested Richard Prince, COO of Aviapartner, noting some parts of Europe were pushing heavily on full time contracts. While demands on standards and timings were no bad thing, the feeling was unanimous that procurement methods of old needed to change and a more value-driven conversation needed to take place, centred around return on investment. Koen Slembrouck from Norwegian stressed that more transparency was required between the airline and the handler, but that they all needed to stick to their promise to communicate after returning home, if any real change was to be made.

Aviation trailblazers

A session devoted to easyJet and DHL's trailblazing a new ground handling model at London's Gatwick airport heard that the partnership has been entirely successful thus far, generating more staff engagement and a step change in productivity.

"We're a new pair of eyes in the industry and have applied some learning from our experience in warehouses," said David Jenkins, Operations Director for DHL Supply Chain. A subsequent presentation demonstrated how Groundforce Portugal had implemented process improvements, by establishing contact with and learning from their other operations in Funchal and Faro, despite the varying scale of operations.

Ross Priday of Baines Simmons reminded delegates of the benefits of a Just Culture in the workplace, from increased reporting to reduced waste, risk and cost. A lack of trust and normalised deviance discourage ▶





employees from reporting, he noted, suggesting the Flowchart Analysis of Investigation Results system as a way to drive a corporate safety culture.

This was dovetailed with a lesson in conversational intelligence from performance coach Desiree Perez, who warned delegates against the five common mistakes that make nine out of ten conversations ineffective. “Everyone’s reality is different, based on biases and expectations,” she explained, “and trust changes the reality.” Transparency, relationship, understanding, shared success and truth telling – these were the ways to achieve a win-win conversation, which is what we should be aiming for, she advised.

Swissport’s Nick Ward, winner of last year’s Rising Star Award, brought the delegation up to speed on the handler’s successful efforts towards increasing staff retention, including a mentorship programme and Talent Development programme, designed in-house in Brisbane. “We’ve already placed over 60% into leadership roles,” Ward enthused, noting a 32% reduction in leavers, with 90% of new hires saying that their expectations were exceeded.

All about perspectives

On Day Two, delegates heard the perspective from the flight deck, as easyJet Captain Douglas Moule and American Airlines Captain Bill Sherrod flagged up communication between the ground and the aircraft as key to success in a quick turn, noting examples where breakdowns in communication had led to delays. Both highlighted the need to improve staff retention, promoting the role of continuous training in achieving this, with safety declared the priority at all times. Moule flagged up leadership as the cornerstone to any safety initiative, while Sherrod asserted the role of standardisation, with both citing plans to invest in real-time communication aids, from iPads and live apps to easyJet’s redeployment of wireless headsets at Gatwick.

When a panel of under 30 year-olds voiced their views on the industry and how to improve it, the need to deploy more technology, like smart watches to provide push notifications on the ramp, was raised again; however, it was agreed that diversity of potential applications was crucial – and tech for tech’s sake ill-advised. Nick Ward emphasised the need for the millennial workforce to feel “part of the tribe”, with failure to deliver on this leading to high attrition, which itself is a precursor to various issues. Consultant Maryam Noorzai called millennials a “hybrid” generation, learning from the passion of their elders, while Ward iterated the need to take this opportunity to evolve the industry, “not cement norms.” Change management will always be difficult, noted Kelly Miller of United Ground Express, while Ward’s lasting advice was never to underestimate the power of a good mentor – a



sentiment to which the whole panel related.

Leadership was the focus of two further sessions on Day Two, as Dr Sarah Flaherty of Lux Consulting ruminated on the concept of excellence. “It is a habit, not an act. Repeated, normalised behaviour,” she asserted. She noted also the formula to create a habit: make it obvious, attractive, easy and satisfying.

From people to promise: a discussion on Latin America revealed that, despite devaluation in all currencies and fluctuating fuel prices, the region is one of great opportunity, seeing above-average passenger growth. “Every airport in the region is saturated,” asserted Gustavo Di Cio, Director, AbiAx Air, adding that exciting times are afoot, with Argentina just recently liberalising to allow non state-owned ground handlers to operate.

Day three

Matt Frankel of DLL promoted the shift from a purchase to a pay-per-use scenario, as ground support equipment took centre stage. “Sharing, subscription, consumption – people are choosing to pay only for what they use rather than for the asset and all the additional costs and liabilities that go with it,” he stated. Not only is it applicable at airports of varying size, he said, but a pay-per-turn model could help when outfitting new stations, as it makes known true costs and affords predictability and flexibility to an operation.

From baggage tractors to baggage itself, there followed a panel on the future of luggage tracking. SITA’s Nick Gates enthused that investment in this

area is paying off, with the number of mishandled bags decreasing while passenger numbers have increased. Since IATA's implementation of Resolution 753, 36% of airlines plan to be more than 50% compliant, he added. The panel was unanimous on the need for 100% visibility, with CAI ZHI's Thomas Waintraub reporting that 56% of passengers want to receive notifications on their bag. The technology has to fit around the behaviour of people, he asserted, flagging up the role of proximity sensors – and while this technology might cost millions overall, the cost per bag is a miniscule 2-3 cents.

Beyond basic tracking, new revenue opportunities for ground handlers include door-to-door services and self-connect (in use at London's Gatwick), while Gates suggested that the industry ought to be using predictive analytics to pre-empt when cabin bag capacity would be reached to eliminate last minute loading. Better tracking would also help to address passengers' reluctance to have their cabin bag checked, it was added.

Cargo corner

The GHI event, whilst focused on ground handling issues, this year played host to a new concept: a mini

conference that attracted a useful number of cargo-focused delegates and a spectrum of speakers. The entire gamut of cargo activity was discussed during the sessions, with everything from electronic air waybills and pharma considerations through new airport development to optimising the logistics operation and ULD progress. Response was positive, inclining the organisers towards expanding this feature for 2020. If your remit is cargo, then watch this space.

Next year's annual event will fall over November 30 – December 3, and take place in Copenhagen, at the Bella Center. **ghi**



ULTIMATE ONE

SINGLE ENGINE DEICER

Class Control Panel, One Button Start, Self-Diagnostics, Telemetry Ready.

Reduced Time and labor for Preventative Maintenance. All Filters in one location. All electrical boxes in one location. All accessible from ground level.

Hydro-Static Deicing Drive
Low engine RPM

Introducing the Ultimate One Changed From The Inside Out

One Engine, Reduced Fuel Usage, Lower Maintenance Costs, Higher Reliability

While the Ultimate One looks exactly like the Deicers produced by Global for the last 30 years, the internal design and components are completely new. We've integrated new products and technologies to eliminate the need for an auxiliary engine. This design reduces fuel consumption and reduces annual maintenance while increasing reliability. The Ultimate One deicer is available with all options and configurations; AirPlus, Premium Blend, Midas, Single Operator and XR Extra Reach.

+1.913.780.0300
540 E 56 Highway - Olathe, KS 66061
www.globalgroundsupport.com

HYDROGEN AT HAMBURG

The Hamburg Senate, North German Chambers of Commerce and Hamburg airport all want to promote green hydrogen technology. It is believed that the fuel (obtained from wind power) should strengthen the north compared to the south of Germany.

The 12 northern German Chambers of Commerce and Industry have set out in a position paper that they have a great need to emulate the technological advantage of the south. “The wind power comes from the north,” explained the IHK Chairman North, Friederike Kühn, at Hamburg airport. “But we do not have lines to the south.

Let’s just say that we have to make something out of it in the north and keep the clean energy with us – if the south does not want it – in the form of hydrogen.”

Hamburg’s Hydrogen Society has been campaigning for clean fuel for some 30 odd years. Its Chairman, Michael Eggenschwiler, is also the Head of Hamburg airport. “We want to convert all conventional vehicles at the airport to alternative drive systems by 2020 and are already there with 70%,” he said recently. “We use synthetic diesel and we have electric vehicles, and I drive with hydrogen myself.”

In late September the airport



put into service the first aircraft tractor to be refuelled with hydrogen. This represented a venture between Mulag and Plug Power. Unlike electric vehicles, the tractor has a long range. It is also worth noting that hydrogen, strictly

speaking, is not an energy source such as oil, wind or solar energy, but is rather an energy storage. By its nature, hydrogen only occurs in a bound form, such as in water or natural gas.

Today, a large part of the hydrogen produced in

Individual. Reliable. Innovative.

We take care. You take off.



Professional Ground Handling made by Fraport.

www.fraport-groundservices.com

CATERING TO THE ENVIRONMENT

Emirates Flight Catering (EKFC) has successfully commissioned a state-of-the-art solar power system across its premises, which is expected to deliver an annual reduction of 3m kilogrammes of greenhouse gas emissions. This is part of EKFC's continued investment in infrastructure to improve resource efficiency.

EKFC's latest initiative supports the Dubai Clean Energy Strategy 2050, which was launched by His Highness Sheikh Mohammed bin Rashid Al Maktoum in 2015. Under the strategy, the Emirate aims to produce 75% of its energy requirements from clean sources by 2050.

EKFC's solar rooftop power plant comprises 8,112 individual solar panels. It is expected to generate 4,195 megawatt-hours of electricity annually, allowing the company to reduce traditional energy consumption by 15% across its laundry, food manufacturing and staff accommodation facilities. Consequently, EKFC's carbon dioxide emissions will decrease accordingly, which is put at the equivalent of the annual electricity usage of 518 homes.

EKFC recognises that environmental responsibility is core to its long term success and is committed to using resources in a sustainable manner and minimising the environmental impact of its operations across all activities.

The offshoot will shortly start on the construction of one of the world's largest vertical farming facilities in a joint venture with US-based Crop One. The 130,000 square foot controlled environment facility will produce 2,700 kilogrammes of high quality, herbicide- and pesticide-free leafy greens daily, using 99% less water than outdoor fields.

Finally, its location will enable a quick delivery of fresh products within hours of harvest, maintaining the food's nutritional value and reducing carbon emissions associated with transportation.



Germany is so-called "grey hydrogen": it is produced as a by-product in the chemical industry or generated from fossil fuels. In the process, the carbon dioxide is expelled.

This first step at Hamburg is highly significant and it will be interesting to see what develops from here; although hydrogen has some devotees in the US, within Europe it is uncommon as a means of propulsion on the ramp. At InterAirport in October Mulag had a hydrogen-powered tractor on its stand, potentially an indication of what might lie ahead.



BYD for the future

A new, 12 metre “bus of the future” was recently unveiled by BYD at Busworld Europe 2019.

With significant fleet deliveries continuing in 2019 and a rapidly filling order book into 2020, BYD Europe has been consolidating its position this year as the market leading eBus manufacturer in Europe.

Heading up the BYD stand was the company’s latest upgraded electric model, which features a range of enhancements to benefit operators and passengers, including a new appearance, a more comfortable passenger experience, a new air conditioning system, a “six in one” integrated controller and a range of safety options.



SAN DIEGO GOES CARBON NEUTRAL

California’s San Diego International airport has become the second American station to go carbon neutral; in so doing, it joins Dallas Fort Worth International. San Diego has been certified at Level 3+, the highest level of certification in Airports Council International’s Airport Carbon Accreditation programme, the framework that helps airports in the scheme identify, manage and

reduce their carbon emissions.

Having reached the Level 3 ACA programme in 2018, the Airport Authority has since worked closely with its carbon offset programme, “The Good Traveller”, to offset any remaining direct carbon emissions. By doing so, the airport met the final criteria required to reach Level 3+ Carbon Neutrality.

Finally – carbon free

Finnish airport company Finavia has achieved the goal of carbon neutrality at all its airports this year, having worked towards this end for an extended period. The next target on the horizon is that of zero emissions.

“We have worked hard to cut emissions resulting from our own operations and do our part in reducing emissions from air traffic. All our 21 airports have achieved carbon neutrality this year. The reduction of the carbon footprint of our Lapland airports has now also been recognised with an international ACA (Airport

Carbon Accreditation) certification. Helsinki airport was already certified in 2017,” explains Henri Hansson, Finavia’s SVP and Technical Director, who is responsible for company sustainability.

According to Hansson, CO₂ emissions per passenger at the airports have fallen by 68% over the past ten years. Between 2007 and 2018, CO₂ emissions per passenger fell from 2.2 kilogrammes to 0.7 kilogrammes.

At regional airports, Finavia uses renewable sources of energy, such as pellets, for heating, wherever possible.

YOUR SUPPLIER FOR USED REFURBISHED GSE AND RENTAL SOLUTIONS

We offer a wide range of new, used and refurbished ground support equipment (GSE) for the aviation sector

www.aviaco-gse.com
info@aviaco-gse.com

Danny Vranckx
CEO
Tel. +32 471 942 780
danny.vranckx@aviaco-gse.com

Bart Kroonenberg
COO
Tel. +31 653 765 332
bart.kroonenberg@aviaco-gse.com



Are you wasting your station's biggest asset?

Book Now
€899

early bird rate
must end 20 Dec

Discover leadership skills to achieve employee engagement and kickstart your station's KPIs at GHI's 2nd Leaders Academy, 5-6 February 2020, Istanbul

Enjoy a series of 'how-to' presentations and case studies from aviation business leaders on topics including:

- **Human Factors:** fostering high performance teams and a Just Culture
- **Planning and scheduling** to manage people and GSE during peaks and troughs
- **Employee engagement** and the link with OTP, innovation and safety
- **Digital enablers and new tech:** examining the opportunities for ground handling
- **Strategies for more effective recruitment** and retaining your best people
- **Steps to the enlightened SLA:** moving to a more collaborative partnership with airlines



Take an exclusive tour of Celebi's station at the brand new Istanbul Airport on Day Two of the conference.

The tour includes a visit to the apron and see how Celebi combines people, processes and technology to deliver optimum turnarounds. Plus, see inside Celebi's brand new cargo warehouse facility.

This conference is relevant to anyone working in a leadership role within aviation. Specifically targeted at Ground Operations Directors/Managers; Ground Handling Managers; MDs, COOs; Ramp Managers; Station Managers; Terminal Business Managers; Airline Ground Operations managers; Safety Managers; Team Leaders.

Hurry, spaces are limited so book now to secure your place!

ground
handling
INTERNATIONAL
LEADERS ACADEMY

REGISTER NOW AT
leaders.groundhandling.com
or email conferences@groundhandling.com for full details

*We look forward
to welcoming
you to Istanbul*



BIG GAME

Felicity Stredder was recently in Nairobi, visiting Swissport Kenya's cargo handling operation.

Swissport began providing passenger and cargo services at Jomo Kenyatta International airport in 1997, purchasing Cargo Service Centre in 2002 and rebranding as Swissport Cargo Services in 2003. In 2010, it relocated its cargo operations to a 10,400 square metre airside facility, roughly doubling its annual 36,000 tonne cargo throughput and tripling capacity, at the same time launching freighter ramp handling.

In 2018, from a total 426,700 tonnes of cargo handled by Swissport in the EMEA region, over 63,000 tonnes were handled at the Nairobi facilities, with 18% of its aircraft turnarounds comprising freighters.

Swissport Kenya was finalising a few changes at the management level in the EMEA region in September when GHI paid a visit, which will see COO Racheal Ndegwa enter the role of Chief Executive Officer at the end of the year, when outgoing CEO Jeroen de Clercq becomes VP Sub-Saharan Africa and Israel.

Capabilities in Kenya

The facilities at the cargo complex at Jomo Kenyatta are comprehensive, including

a strong room for valuable shipments, secured with biometric technology, cold storage rooms supporting three temperature ranges and sophisticated technology, including a customer portal displaying real-time imports data and loggers monitoring temperature in all cold rooms – technology which is only a year old. Head of Cargo Services for Swissport Kenya Peterson Kimeu relates that plans are already afoot to upgrade the temperature monitoring system, X sense,

to include mobile and e-mail alerts for open doors and temperature excursions. Upgrades to double the capacity of the 10-15°C storage area are also due for completion by year-end.

New to the operation since last August is a BUP fast track, which accommodates quick transfers from landside to airside, which Kimeu says can achieve a five to ten-minute clearance time versus the standard 15 minutes. In September, the operation in Nairobi was audited and approved for IATA's CEIV Pharma certification, but the operation has further intentions to pursue the CEIV Fresh accreditation in the future. "Around 85% of export cargo comprises perishables. Upgrades to the 2010 facilities are geared towards the needs in this market," explains de Clercq.

From 2020, Swissport Kenya also plans to begin offering road feeder services to its airline customers, partnering with a local logistics provider, he adds. "No-one else does this in Kenya."

Regional specifics

Cargo handled at the Nairobi facility is heavily weighted towards exports, which comprise 80% of the total throughput. Three dual-view X-ray scanners fulfil 100% screening of exports (a mandatory requirement), and routine monitoring has picked up ivory and knives concealed in flower boxes in the past, Kimeu explains, as well as the African plant Khat – a stimulant when chewed and a controlled substance outside the EMEA region.

Africa is also subject to a huge spectrum of technological development, according to de Clercq. "In some ways it's very advanced because it's been allowed to

HUMBLE BEGINNINGS

Jeroen de Clercq began his working life in the family business of farming, before trading in the rural life for a shot at fame and fortune as a musician. After some success playing music for adverts and movies in the 1980s, he found steady work as a wheelchair agent at the airport.

After progressing to a check-in agent, de Clercq was poached by El Al, later joining KLM as a load controller before rising to the position of Station Manager. This took him all over Germany, Israel and to Kenya, where he also became Station Manager.

After gaining a degree in Business Administration in Holland, he went into the commercial side of aviation, and was headhunted to be General Manager for Swissport in Kenya in 2004. A brief stint in South Africa followed, from 2005 to 2007, before he moved back to Kenya to become CEO. In his newest role of VP Sub-Saharan Africa and Israel, his area of responsibility now encompasses five countries, seven companies and 13 airports.



develop without too much regulation,” he says, citing the M-Pesa mobile phone-based money transfer system, launched in Kenya in 2007, which threatened to disrupt the banking industry. “Then things that are regulated, like Customs, are old fashioned and burdened by manual processes. There’s a big push on the government to move to electronic data entry but it’s slow. It’s the government that needs to facilitate the private sector and trade because things need to comply with regulations.”

While Swissport’s operation has grown in the region, de Clercq believes the ongoing issue of corruption has stood in the way of its full growth potential. “We have standards at Swissport that we won’t deviate from, so this has stood in the way of certain business opportunities and in some cases benefitted competitors. It’s not a level playing field,” he explains. “We don’t know how big we could have been – but I sleep very well at night.”

Such hurdles have meant that the countries under de Clercq’s care are not living up to their full economic potential, he suggests, but nonetheless he reports Swissport’s plans to grow into Tunis airport in 2020, while one or two other airports within the region are also under consideration.

Positives about

It is not the challenges but the people that make the region stand out, however, says de Clercq.

“In my opinion Kenyans are well-educated, ambitious, hard-working and honest. I find it easier to find talented people here than in other countries – we have made Kenyan people almost an export product within Swissport. We have Kenyans in senior positions in other countries. The CFO in Ghana is Kenyan, the COO in Saudi Arabia is Kenyan, two senior managers in Oman are Kenyan and we have a very capable team here in Kenya as well. It’s one of the reasons I’ve been able to combine my position as CEO for Kenya with the regional position.”

He also adds a comment on the handover of the role of CEO Kenya to Racheal Ndegwa: “Racheal is one of the best people I’ve worked with anywhere. That largely boils down to her being a Kenyan.”



Operations are slick inside Swissport Kenya’s 10,400 square metre airside facility



FROM FINANCE TO FREIGHT

Racheal Ndegwa joined the cargo world in a finance position in 2005, as a Revenue Controller. She rose quickly through the ranks to become Chief Financial Officer in 2009, a position she held until 2017, before taking the leap into operations, when the company created the COO Kenya role for her. This year, she becomes CEO.

Ndegwa feels lucky for the learning experience she’s had. “I knew nothing about ground handling when I started out. I came in from a local manufacturing company, and grew into the role step by step,” she relates. Being female in the industry has never stood in her way, she continues. “I used it to push forward, as a platform to push beyond gender. Nobody treated me any differently. I ensured no-one did.”

Her advice to other women considering ground handling as a career is to go for it. “The barriers you feel are imaginary,” she says. “Swissport has a number of women in senior positions – almost 50:50. The CEO has been quite deliberate about it.”

Land of opportunity

When asked what one small change he would like to see to the benefit of the African handling sector, de Clercq suggests the opening of smaller, closed markets.

“There’s quite a number of smaller countries or airports that we would be interested to go into, to either partner with an existing ground handler or bring in our quality and expertise. But what we see generally there is something of a

protectionist, monopolistic approach.”

Smaller companies have a monopoly at these locations and are often granted unfair privileges based on connections in high places, rather than on quality of service, he bemoans. “I would like to see established ground handlers – not just Swissport – embraced and allowed to partner with the smaller players. That would bring the ground handling landscape in Africa to a higher level.” **ghi**

BRIGHT SPARKS

With battery power becoming the handler's choice, status monitoring is highly desirable



If your operation uses battery power, then remote battery monitoring offers the next logical step, writes Alwyn Brice.

One of the biggest questions in the market for industrial machines and electric vehicles is understanding what is happening in the machine – and gathering as much information as possible to quickly correct any malfunction, declares Marco Righi, CEO of Kaitek Flash Battery.

To give an example: one day, a user of a piece of industrial machinery has the impression that the battery is discharging more rapidly. Thus, the search begins. Why did it happen? Who should be called? There are many possible reasons for this, including simply that the battery is subject to greater usage. A common situation is the one in which the word passes around from one factory foreman to another, only to reach the Service Manager with a slip that reads “battery not working”.

It is virtually impossible to challenge a faulty assumption like this with traditional batteries. Take lead-acid batteries, for example. This would call for a visit to the customer's premises to perform (with the proper equipment) discharging and charging tests to prove that everything was operating correctly. Moreover, the maintenance cost related to these operations is high and can hardly be billed to the final customer.

A solution

To answer this type of need, Flash Battery brought two major innovations. The first is the so-called Flash Data Center, which is effectively a portal that was created to archive data on battery use. The data it stores can

be accessed over the Web by the customer's technical assistance department and by the producer of the machine itself.

Second, the Automatic Alert System is a system that automatically reports possible malfunctions, which enables timely intervention to deal with critical situations before they occur.

The Flash Data Center was designed to first monitor, on a daily basis, the exact usage of each single lithium battery installed in every industrial machine or electric vehicle. Major progress in this area was made within the space of two years: the R&D of the Italian company fine tuned a Web portal that provides full data on the operation of each Flash Battery, including charge status, Ah delivered, cycle duration and the temperatures attained. Automatic data monitoring is thus one fundamental feature of the Flash Data Center.

A software, fully developed by Kaitek Flash Battery, monitors and analyses the battery operation data received daily and notifies the Flash Battery Service Department of any warnings, faults or user abuse.

This means that faults are prevented as soon as the software detects misleading reports or operation anomalies, which includes even those hidden to the user. In this way Flash Battery runs a constant preventative action, avoiding malfunctioning or vehicle stops, even before the customer becomes aware of the situation.

Moreover, manufacturers working with Flash Battery batteries can experience an additional competitive edge: day and night, Flash Data Center monitors the machine's usage data.

This enables OEMs to know and analyse how the industrial machines and electric vehicles equipped with Flash Battery lithium batteries are being used, their actual discharge times, charge times, days of use, their average consumption and temperatures reached.

Technology users

Many manufacturers of industrial and electric machines have realised how important this information is and use the data from Flash Data Center to significantly improve machine performance.

ATA, an Italian manufacturer of tow tractors for airport and industrial applications, baggage tractors and equipment



Marco Righi
CEO, Kaitek Flash Battery

for ports and airports, recently performed tests on its new Zac100E pushback vehicle equipped with 80 V 400 Ah Flash Battery solutions at Venice airport, in Italy. The vehicle is used for moving aircraft through the parking area and it represented the first vehicle of this type to be powered by a lithium battery.

Last October two tests were performed: the Zac100E pushed a 75 tonne, fully loaded Air Portugal aircraft and a 65 tonne loaded Aeroflot aircraft over 200 metres in the aircraft parking area to the taxi-way, where the aircraft is able to operate autonomously. A vehicle with no load also covered a

distance of two kilometres to reach the charging station.

Flash Battery engineers were remotely connected through the 3G router installed on the battery. The remote control was used to monitor the battery in real time as well as to import data for the optimisation of the serial production of the application. ATA has been able to receive data automatically and daily through the Flash Battery portal during every charging and discharging cycle, thus avoiding transfer costs and on-site maintenance. Furthermore, Flash Battery technicians provided real-time assistance, being able to monitor the battery remotely.

Remote control assisted ATA during the field test. "By monitoring the behaviour of the battery in real time, Flash Battery technicians were able to check the real parameters and optimise the choice of the most suitable components for our application," explained Francesco Bergamini, ATA's Managing Director. "This allows us to fine tune the customisation of the battery on the specific application, reducing lead time. It was a great satisfaction to see on the field that our new Zac100E vehicle, as the first lithium-powered machine, respected the parameters that we had defined upstream in the design phase," he concluded. **ghi**

A REVOLUTION IN THE MAKING

"The introduction of lithium batteries has completely revolutionised the world of battery-related services. We have gone from reactive services, with the previous battery technology, to proactive services. The technology developed by our partner Flash Battery doesn't just allow us to remotely monitor the health status of lithium batteries, it also provides a series of preventative alerts on future situations. This results in our work being always one step ahead of any unexpected situation that could potentially occur.

"For end users, this technology customised by Flash Battery provides a sense of complete control over the machinery installed at their facility, even if they should find themselves thousands of kilometres and several time zones away. The choice to embrace Flash Battery lithium batteries allowed us to reduce downtimes to a minimum, to carry out targeted maintenance thanks to the remote troubleshooting capability, and to plan support operations well in advance. All this has lowered service costs to the point of being almost non-existent."

These are comments from Matteo Raccanelli, Customer Service Director of Elettric 80, a recognised force in automated logistics, to which Flash Battery supplies lithium battery power for its Laser Guided Vehicles.



Experts in Ground Handling

AeroGround provides flexible solutions by offering the full range of premium ground handling services at Munich, Berlin-Schönefeld and Berlin-Tegel airports. www.aeroground.de



Ramp & Baggage



Passenger & Operations



Transport



Cargo & Special Cargo



General Aviation



Infrastructure



The Hydro Systems display could hardly be missed: the next step for the pushback?

NEW TO YOU?

In case you didn't attend, the Editor brings an update from the world's biggest GSE exhibition.

Whilst InterAirport is not solely focused on the ramp and things pertaining thereto, it is, nonetheless, still the principal showcase for all equipment of interest to the ground handler. The opportunity to see and touch so much GSE under one metaphorical roof remains a strong attraction for purchasers and fleet managers alike. It's also something of a dais for showcasing any new products – and this year was no exception.

The twenty-second edition ended with record statistics: during the four exhibition days, a grand total of 14,962 trade visitors from 108 countries visited the Munich Trade Fair Centre.

A greener landscape

Green continued to be the overwhelming colour when it came to GSE and allied equipment. Battery power, once in the shadows, is now mainstream and most

exhibitors had examples of technology utilising this emissions-free solution. Transtec, for example, which has a 100,000 square foot manufacturing plant in Gujarat, was showing its lithium-powered beltloader; it had also brought along a lightweight composite baggage trolley, yet another example of less doing more.

Vestergaard Company shares that ambition of providing cleaner and greener service – in this case, de-icing. Its Elephant BETA de-icer has been around since the early 1980s and continues to be a workhorse in major airports across the globe. The manufacturer has now introduced a plug-in hybrid version of this GSE. With a fully charged battery, the new hybrid equipment is able to de-ice 15 to 20 aircraft without running the truck's chassis engine, since all functions are electric. An operator can thus drive to gate areas using the truck's diesel engine, turn off the engine and perform the de-icing

task in a green manner. Without the diesel engine, small particle pollution is all but eliminated from gate areas and noise levels are commensurately reduced. Further, the operator can drive short distances between gates using the electric motor.

At the event, Vestergaard also launched a fully electric 12 tonne chassis that is able to support a number of GSE applications, such as water and lavatory service equipment. The first version is equipped with a 40 kWh lithium-ion battery with enough capacity to drive up to 50 kilometres and operate for approximately 12 hours. With this electric chassis, an operator can now use equipment in closed gate areas.

Catering to new heights

Electric has finally caught up with the catering truck, too.

The E-Catering Wiesel (from KAMAG) relies on a 156 kW electric motor that

FACE OF THE FUTURE?

Electric pushback tractors are no longer out of the ordinary – but that on the Hydro Systems stand certainly begged a second glance. Sleek and purposeful, the design of the Hydro mover suddenly makes many a contemporary product appear dated. Hydro Systems is definitely looking to the next generation of GSE with this vehicle – but will it become the industry benchmark? Its innovative claw that selects the appropriate towbar to attach to the aircraft makes it truly futuristic, just as were the initial towbarless applications as described in the October issue of *Ground Handling International*. This has to be a model to watch...

directly drives the rear axle of the vehicle, doing away with a gearbox or converter fitted in between. The hydraulics of the vehicle are in turn driven by a separate electric motor. KAMAG's new model has sufficient battery capacity for a full shift, claim its manufacturers, the pair of battery

packs providing a total output of 80 kWh.

Batteries can subsequently be recharged using charging stations, although the vehicle has an on-board charger with a capacity of 22 kW, which allows charging to take place by means of conventional power sockets. The electric motor also acts as a generator during braking operations and feeds the energy that would otherwise be lost as waste heat from the brakes back into the battery.

Other manufacturers, notably Mallaghan, also have an electric caterer in the wings.

Bussing operations

This latter company's big news was that of its bus: unveiled at InterAirport, it must have surprised many who have not traditionally associated the UK company with this type of product. It has been two years in the making and was hard to overlook. In fact, apron bus manufacturers are relatively few and far between – which is arguably why Mallaghan decided to enter this specialist sector.

Its Airport Bus (no prosaic name is evident yet, apparently) can be supplied with either Euro 5 or Euro 6 specification diesel engines and is capable of transporting up to 118 passengers, which the company claims is unsurpassed in the sector. Its “kneeling” function extends to both sides and it comes with a list of options that include air curtains on the double doors, an additional wheelchair ramp and air conditioning within the driver's cab. Upwards of 60 jobs have been created at the company's headquarters to accommodate the initial order of 32 buses from Ryanair.

Plugs, cables and connections

For LPA Connections, the recent past has been all about crocodiles and smart plugs. Anyone who read the factory visit in the last issue will know that the company has been busy enhancing its crocodile cable carrier in time for the Munich event. This indeed made its debut at the show. Outwardly, perhaps not noticeably different, this redesigned



Versatile cargo transporter in an eye-catching hue from French company Goussaint



Cable crocodile from LPA Connections has benefited from some re-engineering



Amongst the passenger transport seen at InterAirport was this newcomer

PART OF THE



GSE CURRENTLY IN STOCK FOR
IMMEDIATE DELIVERY TO SITE

Bespoke STR packages
packages available at competitive rates.

Current Stock Available:

- Electric Baggage Tractors
- Pushback Tugs to Suit All Aircraft Types
- Air-Conditioning for All Aircraft Types
- Airstart Units
- Electric Conveyors
- Step Units
- Towbars

Contact us for more information



0208 564 49 49

RUSHLIFTGSE.CO.UK

**ground
handling**
INTERNATIONAL

6TH AFRICAN
GHI Stakeholders' Conference



SAVE THE DATE

22-23 September 2020

Century City Conference Centre
CAPE TOWN, SOUTH AFRICA

to find out more visit: **african.groundhandling.com**



DEALS DONE

Aside from the window shoppers, during the week there was some actual business transacted. Avigei revealed that it had signed contracts for the supply of six of its electric PRM lifts, the 6000 Thunderlift example. Five of these units are destined for use with Fraport, with the other going to Stuttgart airport. Delivery is expected to occur next February.

Aside from that, in the wake of trials with the Mototok pushback device, Iberia's Angel Marcos took advantage of the exhibition to place an order for 30 units of this particular GSE. Reports from Barcelona and Madrid airports have been positive and Marcos stated that his decision was based on a forward thinking strategy at Iberia. Whilst the infrastructure at the time of writing is not quite ready, nonetheless this is expected to be in place by late 2019/early 2020. Part of Iberia's transformation process, the Mototoks should all be running by mid-2020.

crocodile is actually lighter and comes with an in-harness release system that permits a quick change of harnesses when required. Equally, the basket is simple to replace and its upgraded design permits better operation on uneven ramp surfaces. As before, the crocodile endears itself to today's cluttered ramp by folding into a very compact space. Finally, in terms of deployment, it can be configured for cabling lengths ranging from six metres to 30 metres.

The newest addition to the Elaflex portfolio, also unveiled at the show, was the fully customisable hose wheel for aircraft refuelling, which hit the commercial market just a couple of months ago. The hose wheel is already proving very popular with customers, according to Elaflex's Susanne Thielsch. In July, the company also launched a green refuelling nozzle for unleaded fuel, in time for the debut of unleaded in aviation applications. Currently it is only used by the Swedish military but Elaflex foresees it becoming more widely deployed. A new nozzle holder was also on display, to be fitted on the refuelling truck, developed at the request of customers; other news involved the recent partnership with Aljac that was also being promoted.

The staff-free sector?

Autonomous vehicles, which caused something of a stir at the 2017 InterAirport event, were again at the forefront this year.

TLD's separate stand featured a baggage tug and laden trailer circulating endlessly every day without any human intervention at all – and without any accident, either.

Elsewhere, it was Charlatte that was carrying the autonomous torch: its Autonom Tract AT135 looked remarkably unprepossessing yet here was an intelligent tractor that is based on the company's standard T135 series.

In conjunction with Navya (a company that has put well over 100 autonomous vehicles into operation already), Charlatte has produced a tractor that is equipped with multiple sensors so that it can operate safely within a given environment. Still boasting a cab, the tractor can be switched over to manual operation if desired.

A choice of battery power is available (lead-acid or li-ion), and it can operate at



Electric power very much in evidence at Vestergaard; and Avigei busy with sales (left)

speeds up to 25 kilometres/hour.

Technology, though, comes in all shapes and sizes. Some readers of this magazine will know of the Israeli Xsight Systems company that manufactures FOD sensors: these are to be found at many airports around the world. At the show the enterprise was displaying SnowWize, a real-time remote runway surface condition assessment tool. Aimed at the times of the year when inclement weather is a very real factor affecting ramp safety, this device is able to report on the state of tarmac and alert staff about any problems that may be about to arise. Clearly a boon for the sector if not primarily the ground handler, this application is sure to find favour, given the unpredictable weather conditions that are par for the course at today's airports.

Outside, Lektro (now part of the JBT empire) was displaying its 250 model, the latest in its growing range. Of interest here was the failsafe system that was demonstrated by Henry Balensifer: should the tractor's hydraulic system fail for whatever reason, a speedy manual operation allows the user to bypass the problem and disconnect the pushback to avoid any delay on the ramp.

German ingenuity

It was a busy time for German manufacturers, without a doubt. The future may not all be electric, either: Mulag, in association with Plug Power, was showing ▶

its latest innovation, that of a hydrogen-powered bag tractor. Plug Power's zero emission ProGen hydrogen engine provides the impetus and the first unit has already undergone successful trials at Hamburg airport. Such a development goes to show that the jury is still out on alternative forms of propulsion. Whilst hydrogen power is not commonly encountered at European airports, nevertheless there are those who feel that electric merely displaces the pollution problem. Hydrogen neatly gets around all that.

At Trepel, simulation and training were the big news items. The GSE manufacturer has brought out its Chariot simulator, which is aimed at aircraft tractor and other ground vehicle familiarisation. Three levels of sophistication are offered, the most realistic being that of a set-up that replicates the actual Trepel driver station. It's all there, including pedals, gearshift and side mirrors, culminating in an effective aid for those about to go out on the ramp.

Goldhofer's press conference centred on the company's philosophy going forward, namely that of providing not just a product but also pre and post-sales

advice and care. A consultancy service is a part of all this, showing that the GSE industry (for some, at any rate) is moving forward, and is no longer content with merely building and selling equipment. A tailored (remote) maintenance service is also now available. Interesting, too, was the little sticker placed near the engine bay on one tractor: scanning this and then going to an app allows the user to obtain an augmented reality image of the engine bay, which is useful where someone requires a part and is perhaps unsure of the technical term. Great store is set by the modular build of Trepel's GSE (for example, the cabin unit is shared) and on view at the event was the company's Bison E620, making its first appearance. This model, together with the Phoenix and Sherpa, all share the so-called IonMaster technology.

Finally, it wasn't all about GSE at the event. Although there were relatively few IT companies exhibiting, one that had some interesting news was that of Undagrid. The company's Garcia Sanz revealed that Schiphol airport is soon to benefit from an enhanced PRM solution, one that is based on the company's sensor technology. This should be ready by the end of the year, so look out for a report

on the application at Schiphol airport.

From INFORM, there was the release of the GroundStar RealTime myStaff application (myStaff app). Working with its airline clients, INFORM has developed an app designed to enhance operational flow by empowering frontline managers with real-time staff dispatch data based on GroundStar RealTime. This allows them to better oversee operations and manage operational workflows, whilst away from the desk or in the field. The app connects seamlessly with INFORM's resource management solution, GroundStar RealTime Staff & Equipment, enabling the real-time monitoring of workflows, staff levels and communications with both dispatchers and agents.

In conclusion, it was a busy week, as is ever the case at this particular exhibition. The GSE sector is certainly on a roll. **ghi**



Mototok's Thilo Wiers-Keiser (left) and Iberia's Angel Marcos conclude their GSE deal



There was plenty of interest in autonomous GSE at the Munich show...



... and TLD had a tractor and trailer circulating daily near its stand during the event

Professional electric GSE

MULAG

Made in Germany



High-quality electric ground support for baggage, cargo and push-back applications.



MULAG Fahrzeugwerk
Heinz Wössner GmbH u. Co. KG

77728 Oppenau
Germany

Phone +49 78 04 913-0
Fax +49 78 04 913-163

E-mail info@mulag.com
Web www.mulag.com



More Information

LET'S GO GREEN!



WGJB90PTC
AIRCRAFT SOLID STATE CONVERTER (RECHARGEABLE)
Our new star product during *inter airport Europe 2019*



G-POWER

Lithium Battery
Rated Output Power of 90kVA

Artistic Industrial Design
Reliable Battery System
Proven Converting Technology
Zero emission, No noise
Less maintenance
Lower running costs



GUANGTAI 广泰



+86-0631-3953327



www.guangtai.com.cn



overseas-sales@guangtai.com.cn

17-19 MARCH 2020 AT MARINA BAY SANDS, SINGAPORE

BOOK NOW!
\$2430
USD



Join us at the premier ground handling industry networking event for aviation stakeholders looking to do business in the Asia region.

Attend this year's conference from 17-19 March 2020 at Marina Bay Sands, Singapore and benefit from:

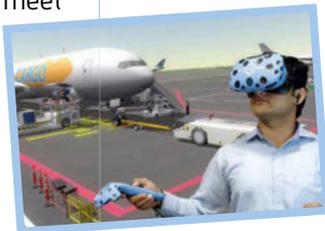
Premium networking:

Take advantage of GHI's One-to-One Meetings Service, which allows you to send targeted meeting requests to the delegates you most want to meet with. The GHI team will help send meeting chasers on your behalf and build a personalised schedule that best matches your requirements. Meetings take place in discreet, purpose-built meeting rooms with an emphasis on providing you a high quality, hassle-free way to do business.

Help shape a blueprint for Asian aviation growth:

Join us in the conference room for our opening GHI Big Debate, where leading ground handlers, airlines and airport operators in the region will detail how stakeholder collaboration

could be vital in overcoming regional challenges around congestion, strained infrastructure and a shortage of skilled staff.



Automation and AI on the Asian apron:

GHI investigates how advances in robotics and autonomous

GSE could transform the operational capabilities of Asian stations

Extra meeting opportunities with key airlines and GSPs:

Enjoy GHI's Meet the Airline and Meet the Handler Speed Networking Forum. Both provide you with the



Find GSE and IT solutions:

take a tour of our exhibition area and meet with 40+ industry suppliers who offer a range of potential business solutions.

Did you know?

\$6,349 was the average amount attendees said they had saved in travel expenses by meeting attending companies at last year's Conference instead

70% said attending this Conference helped them discover a new approach to solving a key business challenge

63% said attending conference sessions gave them a chance for continuing professional development

79% said they met a new business lead as a result of attending the Conference

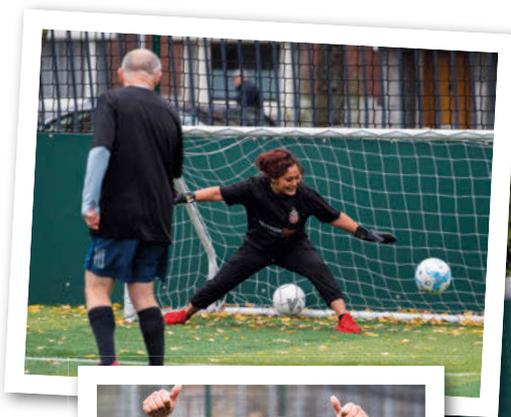
chance to secure quickfire, 5 minute introductions with key carriers or GSPs.

Don't miss out: book with the GHI team now at...
conferences@groundhandling.com or

Visit: asia.groundhandling.com

THE GHI CONFERENCE COMMUNITY

This issue, Max Gosney examines typical turnaround prices for narrow-body aircraft – and files a pitchside report from GHI’s delegate football tournament in Amsterdam.



Real NAS reign supreme at GHI’s Delegate Football Tournament

The Netherlands has seen its fair share of fantasy football teams from the Ajax sides of Johan Cruyff and Frank Rijkaard to Ronaldo’s PSV. Now, the hallowed names of the Real NAS (National Aviation Services) team can be added to the Dutch pantheon after they claimed the silverware in GHI’s inaugural Delegate Football Tournament at the 21st Annual Conference in Amsterdam last month.

Step forward Lars Barsoe of Vestergaard; Chris Holland and Peter Slater of CMAC Group; Nigel Daniel of S-P-S; and their captain, Cisse Abdouylae of NAS. They might talk ground handling services at GHI Conferences by day – but this collection of five delegates showed that they also do a pretty decent turn on the pitch, too. The Real NAS Team went unbeaten in the four-team tournament and played with an attacking verve that would have brought a nod of approval from Johan Cruyff and Co.

The five-a-side tournament took place on the final day of the 21st Annual GHI Conference and was held at the Powerleague in Amsterdam. A band of delegates shrugged off the fatigue of three days on their feet networking to don their kit for an 11am kick off. The players were allocated into four sides: Real NAS, FC Jetex, Textron United and AC Apron. All comprised an international mix of GSE suppliers, airlines, airports, ground handlers and our own GHI staff.

Special mention goes to Stuart Key of Menzies Aviation who arrived for his pre-match warm-up about the same time the

rest of us were hitting the snooze button on our alarms. Unconfirmed reports suggest that Stuart was performing shuttle runs and unleashing his Exocet-like left foot strikes from 8am.

A few hours later, once the international TV crews had secured the best camera positions in the gantry, the players walked out on to the pitch. The tournament format meant everyone played each other once in a 15 minute match. The referees gave their pre-match debrief and the first fixtures got underway, with Real NAS taking on Textron United and AC Apron playing FC Jetex.

Within minutes, it was clear that the ref’s stipulation on ‘no tackles’ had gone in one ear and out the other as the GHI Conference Chairman thundered into GHI Delegate Sales Manager, George Lydon (winning the ball entirely cleanly, of course). The game was on and seconds later the boot was on the other foot as GHI’s Libby Swayland and Alice Williams took a leaf out of NHL ice hockey as they lined up a ‘friendly’ board slam on an AC Apron opponent. A nervy encounter ended 2 - 2 after late penalties for both sides. Meanwhile, Real NAS showed their early form with a comfortable 5 - 2 victory over Textron United.

Round two saw Real NAS once again show their class as they notched up five goals against FC Jetex. AC Apron, with their sunshine Maldives midfield connection of Sulthan Rasheed and Ibrahim Hareef, overcame Textron Utd, despite the best efforts of the self-titled ‘Spanish Messi’ aka



Willie Martinez from Textron. It was then down to a final match showdown between Real NAS and AC Apron to decide the title.

True to form, the heavens opened and the rain-drenched players at least had an excuse for the deteriorating standard of football. AC Apron surged back from a goal down to lead 3 - 2 with a few minutes to play. But, just as the trophy engraver began to carve the apex of an ‘A’, they were sent scrambling for the Tippex as Real NAS secured a decisive equaliser.

Well done to our Champions, Real NAS for a deserved victory. We look forward to you defending the silverware at our Delegate Football Tournament at the 22nd Annual in Copenhagen. The tournament is open to all delegates and we encourage you to get involved.

Just remember those gloves and beanie hats, as December in Denmark is just a little bit chilly, we hear...

Thanks to our tournament sponsors NAS, Textron and Jetex.



THE BIG DEBATE

How much to turn an A320?

Ground handlers receive an average fee of €955 per turnaround for an A320 or narrow body equivalent in Europe, according to GHI's Ground Handling State of the Nation research.

A panel of industry leaders claimed the figure was 'too high' when compared to their own pricing data, as they met to discuss the research findings at GHI's 21st Annual in Amsterdam last month.

Panellists from operators including Norwegian, Aviapartner and Groundforce Portugal cited a typical rate of €600-700 per turn as more representative of their European stations. The inflated GHI figure was likely to be linked to labour cost discrepancies across Europe, panellists explained.

"The price we're seeing here of nearly €1,000 is higher than I expected," said Koen Slembrouck, Head of Ground Contracting at Norwegian. "A lot depends on where you are operating in Europe. Around 70% of our cost is the cost of labour and that fluctuates significantly within Europe," added Richard Prince, COO at Aviapartner.

All panellists urged a step change in attitudes to ground service procurement from airlines and handlers. "We must work collaboratively and shift the emphasis to creating value, not just fixating over cost," said Steve Tarbuck, Airport & Ground

- **€955** average fee being paid to turn an A320 or narrow-body equivalent in Europe

- **42%** of airlines would pay a premium for a faster turn time (while guaranteeing safety/quality)

- **84%** of GSPs have introduced process improvements in their ramp services this year

- **45%** of airlines said they incentivised GSPs



Operations Specialist at Vivaaerobus.

GHI's 'How much to turn an A320?' Ground Handling State of the Nation Survey was completed by more than 160 aviation business leaders operating in Europe. But, only a third of respondents chose to answer questions on average pricing details for turnarounds. From those that did complete the research, GHI found GSPs charging LCC airlines an average figure of €832 per turn for an A320 or narrow body equivalent on a regular agreement. The figure increased to €986 for full cost carriers. Meanwhile, airline respondents cited an average per turn price charged by handlers of €1,047. The average of all three rates gave the headline €955 per turn figure.

Nearly 70% of respondents said the price given was not split between above the wing (ATW) and below the wing (BTW) services. The most popular services included were self service check-in and lost and found baggage tracking (ATW) and passenger steps, pushback/towing and cleaning (BTW). Ground handlers said that they earned a typical gross margin of 19% on the per turnaround fee.

How much to turn an A320/narrow body equivalent? How do our figures compare with your station? Email us your views at max@groundhandling.com

Audiobestock



MEET THE GHI DELEGATE

Nicolas Verin of TLD on a love for loaders - and going green

GHI: What/who inspired you to seek a career in aviation?

Nicolas: "While working in a state-of-the-art technology sector, navigating in an international and multicultural environment is really what guided me to join this sector."

GHI: What's your favourite piece of GSE and why?

Nicolas: "The loaders are really what we call by nature a product of continuous improvement. That piece of equipment is

the most solicited unit on the ramp, cycling up and down, and very exposed to damage. These big babies need to be robust and bring more and more technology on board to reduce the impact on aircraft."

GHI: What one thing would you change about our industry and why?

Nicolas: "I would enforce the focus on a greener ramp as the technology is totally available today."

GHI: Best bit about your career so far?

Nicolas: "Working in a foreign country and managing the people of this is the most valuable experience I ever had. I have worked two years in Angola and five years in Canada: this is engraved in my memory forever."

GHI: What's your favourite GHI Conference memory?

Nicolas: "The busy activity on our TLD booth, with meetings queueing up one after the other. A great opportunity to meet all our fellow customers as well as new opportunities."

NOTICEBOARD

✦ Ground Handling and proud

Congratulations all of our Pride of Ground Handling 2019 winners who were crowned at the 21st Annual GHI Conference in Amsterdam. Gloria Martinez (pictured), Station Manager at Aviapartner Girona, picked up the Best Station Award on behalf of her team. The Rising Star Award went to Sofiya Maksymchuk, Airport Terminal Services, Toronto. Eugeniusz Gawryszewski of LS Airport Services, Warsaw Chopin airport won the Unsung Hero Award. For a full list of winners visit: awards.groundhandling.com



✦ Join us in Istanbul

GHI's 2nd Leaders Academy will be held at the Grand Hyatt, Istanbul on 5-6 February and includes a chance to tour Celebi's operations at the new Istanbul airport. Join us for a conference examining the leadership skills essential to enabling employee engagement, high performance teams and hitting back against skills shortages. See leaders.groundhandling.com

✦ Happy New Year

The GHI team wishes all of our delegates, exhibitors and sponsors a Merry Christmas and a Happy New Year. Thanks for your ongoing support and we hope you enjoy a well earned break.

BIRDSNG

The best tweets from the GHI Conference Community. Follow the GHI team [@GroundHandling](https://twitter.com/GroundHandling)

@Aviationscout Nov 7
Busy days and good discussions with customers worldwide at Ground Handling International Conference GHI in Amsterdam. Thanks to our sales team, well done!

Ground Handling @ GroundHandling Nov 7
#Groundhandling supplier

#Menzies signed up by #Sunwing Airlines at three US airports. More: <https://bit.ly/2WPUsA5>

@ICRON Nov 14
We had an amazing time last week at the 21st Annual Ground Handling International Conference in Amsterdam! Check out the video https://www.youtube.com/watch?v=mWHO_TmTJo4

DATES FOR YOUR DIARY

5-6 February: 2nd Leaders Academy
Where: Grand Hyatt, Istanbul
More: leaders.groundhandling.com



17-19 March: 13th Asian GHI Conference
Where: Marina Bay Sands
More: asia.groundhandling.com



12-13 May: 9th GHI Safety Conference
Where: TRYP Barcelona Apolo hotel
More: safety.groundhandling.com



TIMSAN

Durable and Safe
High Quality
Tractors

TIM17 Electric TIM25 Electric

TIM17 E has 17 KN/21 tonne drawbar pull capacity.
TIM 25 E has 25 KN/30 tonne drawbar pull capacity.
It serves to aircrafts/cargos.



TIM25

It has 25 KN/30 tonne drawbar pull capacity. It serves to aircrafts/cargos.



TIM45/TIM 55

TIM45 has 45 KN/54 tonne drawbar pull capacity. TIM55 has 55KN/66 tonne drawbar pull capacity. It serves to aircrafts.



TIM45 4x4

It has 45 KN/54 tonne drawbar pull capacity. It serves to aircrafts.

Pushbacks

TIM80 (Max. 80 KN/96 tonne)
TIM100 (Max. 100 KN/120 tonne)
TIM120 (Max. 120 KN/144 tonne)

are the pushback models.



www.timsantraktor.com

İzmir/Türkiye

timsan@timsantr.com

+90 232 376 89 03

@TimsanTraktor

> contact with us via timsan@timsantr.com

MARKET MOVERS

GHI closes the year with its annual focus on the pushback market. Alwyn Brice reports.



In the US, it has been a time of consolidation for Textron, says the company's Brad Compton. This has occurred in the wake of the takeover of the UK business Douglas, which Textron (through its TUG offshoot) has sought to absorb and create into one homogenous family that will see the same product being built both in the US and in the UK, and with the requisite CE certification.

That family is marketed under the Alpha label, with models ranging from the 4 (for widebody usage) to 1, the tractor that can cover the smaller aircraft. The numerical values correspond to IATA guidelines to create a degree of uniformity between manufacturers. Compton says that there is now a backlog for the model 4 and 3, which gives an indication of their popularity.

In terms of motive power, petrol, diesel and li-ion are all available, type 1 benefitting the most from the variety. Electric, he admits, is a positive idea but Compton states that Textron is in no great rush to jump on the bandwagon. "We've done electric before, but this time around we want the result to be a hundred percent right," he says.

Much thought has been given to the construction of these pushbacks. Safety devices (ranging from sensors on the

cab roof through a low profile build to a centrally placed seat in the cab) are increasingly found; and he adds that access to the engine bay has been improved; maintenance is also a lot better. Output today is four units a month (with capacity for six) and order books are full to next spring; innovation is present, he says, but changes to the range have not been drastic.

Consolidation has also been the name of the game at JBT AeroTech.

David Bunting is Regional Director – EMEA for JBT, and he relates that the company's B250 has been the best-selling pushback over the last year and whilst there have been no major upgrades in that time, the acquisition of the Lektro brand has been the main development. "Interest for electric pushbacks has grown, but demand is constrained by charging infrastructure," he observes. In terms of geographical reach, no one area has been dominant in taking JBT pushbacks.

Thomas Liput, who is Regional Director – Asia, adds that a B250 demonstration unit will soon be in Australia with Qantas (in Perth) and that it is hoped that another demonstration unit will be placed in India shortly. In terms of Lektro sales, Australia and New Zealand have seen the most activity.

"An electric tractor customer is waiting

for us to release the B650e and the B950e as soon as possible," he enthuses.

Business up in Thailand

In Thailand, Bliss-Fox Panus' Simone Livraghi reports that his company has witnessed an increase in activity of 20% in total, especially in the rental business sector. "We have seen an increase in orders for the military also," he reveals.

Out of its comprehensive range of tractors, the baggage tractor F1-40 and F1-80 models have proved to be the best sellers, he says. Environmental considerations have not been overlooked, though. "We have noticed an increase in the number of enquiries, especially from the EU. Trial units are lined up and will be going to London and Australia." Insofar as sales are concerned, Livraghi declares that south-east Asia, the Middle East (particularly Saudi Arabia), the Philippines and Thailand have all figured prominently.

German engineering

Trepel's Carsten Schimkat reports that his year has also been busy. Aside from the physical pushbacks, Trepel has introduced a simulation package that allows would-be drivers to train in the safety of a classroom environment. Readers can learn more

about the technology in the InterAirport review article elsewhere in this issue. But back to the pushbacks.

“Regarding our pushbacks, last year has been the most successful year in terms of sales for Trepel so far, with the conventional pushback tractors Challenger 150 and 280 being the most popular models. These models are now also available as electric versions and have the same aircraft towing range as the equivalent diesel versions. Requests from customers regarding electric-powered GSE are continuously growing, especially in Europe and the US. We are also looking forward to growing markets in Asia. At the same time, all our diesel equipment is now available with the most recent exhaust treatment regulation system: engines fulfil Stage 5 /Tier IV Final emission standards, including diesel particle filters and ad blue (SCR) that help to reduce pollution.”

With the Charger 380, Trepel has now also a towbarless aircraft tractor in the marketplace; this was developed for the handling of aircraft ranging from the

ERJ170/190 up to the A340-600 and B777. Geographically, he says, the US and Asia remain the most popular areas for Trepel sales.

Still in Germany, Erich Traub, Goldhofer’s Marketing Manager, relates that the past 12 months have been very successful in terms of the company’s

complete pushback portfolio.

“As reported at InterAirport, since the introduction of the Phoenix (AST-2) in 2016, we have placed over 200 vehicles at the market. In addition, our Sherpa has sold well: we have sold more than 250 vehicles since its introduction in 2017. As you can see from these figures, ▶



Bliss-Fox sales of both civil and military applications have risen this year

A NEW KIND OF EFFICIENCY.

2019 PRODUCT LEADER OF THE YEAR
www.aviationspro.com

Meet us!

Singapore Airshow
Feb. 11-16 2020
Singapore

13th Asian GHI Conference
March 17-19 2020
Singapore

Only Mototok excels with these and other unbeatable advantages:

- Electric driven –**
Green technology: low maintenance and no CO₂ emissions
- Cost effective –**
Reduces pushback delays by about 70% (British Airways)
- Easy Operation –**
Remotely controlled, excellent all-round visibility

Mototok – the world’s most innovative, safe and money saving remote controlled Pushback Concept. Electrify your Ground Handling!

Contact us: +49-2151-65083-82 · www.mototok.com · info@mototok.com · [fb.com/MototokTugs](https://www.facebook.com/MototokTugs)

easy moving

Innovative remote controlled electric driven tugs



Weihai Guangtai's output hasn't been helped by the recent US trade sanctions

ON A ROLL IN ASIA

Emerson Bonoan at Mascorp has been using Bliss-Fox tractors since the company started up ground handling operations back in 1999: a sole F1 450 for wide-bodied aircraft was deployed at that time. Today the enterprise has 26 Bliss-Fox units in all, ranging from the F1 40 to the F1 450. Amongst the reasons that he is happy with the brand he cites robustness, power and reliability. Commonality and availability of spare parts are other strong factors.

User-friendliness and simplicity of maintenance are also mentioned and the familiarity and commonality of operating procedures ensures that his operators can easily adapt. Finally, he says that he is pleased with the support service, which is committed both during and out of the warranty period.

Another customer is Kevin Robins, Director Ground Equipment Maintenance, at Bangkok Flight Services. "Our first Bliss-Fox tractor, the P 160, was purchased in 2014; we now have a total of 14 units, namely nine P 160s, two F1 150s, two F1 400s and a F1 500.

"Our reasons for buying Bliss-Fox are that it is local to us in Bangkok, the tractors are well designed and engineered and the product after-sales and spare parts support is exceptional."

the Phoenix and Sherpa products are in great demand and promise great growth. In addition, our new conventional Bison tractor series is also enjoying very high demand and market acceptance."

He adds that Goldhofer has now electrified its complete range of tractors and with the debut of the Phoenix E at this year's Munich event, Goldhofer effectively closed its E-Mobility range with the first electric towbarless aircraft tractors. Goldhofer, he adds, enjoys a global reputation, with a product portfolio that is accepted worldwide. "With our professional sales and service network, and with subsidiaries like Fliteline in the US and Goldhofer India, as well as our representative office in Dubai and the

regional logistics hub CW Aero Service in Singapore, we are well placed."

Guenter Bertolini is Head of GSE Fleet, Lufthansa Engineering and Operational Service.

"LEOS has operated Goldhofer tow trucks for more than 20 years," he relates. "Currently we are operating around 30 Goldhofer tractors, starting with our workhorse AST1X down to the newest available towbar tractor, the Bison D370. Our second supplier is Kalmar from whom we also operate from the biggest to the smallest unit available, with a similar number of tractors in our fleet.

"Goldhofer tractors have proven to perform reliably day after day. Especially in Frankfurt, where we are towing A380s

from the north all around the airport to the maintenance facilities located in the south."

He concludes that electrification is currently a big trend, with manufacturers improving performance and maintenance and mission data collected. "This brings new challenges for operators but helps to improve efficiency and cost savings," he observes.

The Chinese outlook

Zheng Junyue from Weihai Guangtai brings news that despite US tariffs, the manufacturer has managed to weather the storm.

"While the global economy market is facing a huge challenge this year, the overall sales of Guangtai tractors in 2019 have not been severely affected, and reached a value of US\$11m by August," Junyue relates. Currently, sales of Weihai Guangtai aircraft tractors in the international market total around one third of overall sales. Yet, although Weihai's tractors have been sold to over 30 countries, China remains a solid market, with in excess of 150 airports there utilising this company's pushbacks.

Two models, the WGQY15 and WGQY27, have always been Weihai's best sellers in both domestic and international markets, while in the past few years, the model WGQY45 has been gaining adherents. "In Asia, the WGQY15 has been the most popular Guangtai aircraft

Absorption of Lektro by JBT AeroTech has contributed to electric sales enquiries



tractor, while it is expected that the WGQY27 and the WGQY45 will soon become the mainstream focus, as the Airbus A350, Boeing 777 and 787 are replacing the A380 and Boeing 747.”

This year has seen Weihai modifying both its diesel and electric range of tow tractors. Modifications to the diesel tractors are focused on the domestic emission requirement, which has involved updating a series of tractor models, some to reach the Chinese emission standard stage VI, others Euro 3 standard (while reaching the Chinese stage VI as well). “Until now, we have been capable of providing diesel tractors with a full range of emission standards – whichever standard you are required to meet, Weihai Guangtai can fulfil it for you.

“In terms of the electric tractors, we have developed a series of heavy duty, electric aircraft tractor models; and the models in the small to medium sizes have also been updated with batteries and power systems. For example, the GT15D and GT27D have been updated from a lead-acid battery system to a lithium-iron phosphate combination.”

Junyue adds that the Chinese domestic market has been going green for quite a few years now. Although currently the

market for electric-driven models is still a very small fragment compared with that of the combustion models, it is predicted that the market will go greener.

At Ground Team Red, Malaysia, Lim Seng Hong has been using Weihai Guangtai equipment since 2014. He relates that he runs a very large fleet of this particular company’s pushbacks but that in the mix are also units from Bliss-Fox and TLD. As a user he is in constant communication with the manufacturer in terms of modification suggestions and

enhancements and says that a key factor in choosing this supplier has been its after-sales support.

Elsewhere in Europe

Giancarlo Fresia, Sales Director at the eponymous Italian constructor, considers his output of pushback tractors something of a niche product that is mainly destined for military applications, whereas the company’s small 4x4 tractors are requested much more.

“Our most popular models are tractors ▶



THE FRENCH EVOLUTION

For TLD, it has been a solid 12 months, with sales having exhibited useful growth across the board – so declares Nicolas Verin, speaking for the manufacturer’s pushback side of the equation. What is interesting, he discloses, is that he has been seeing more and more enthusiasm for electric solutions; the move towards the battery-powered pushback has resulted in TLD fulfilling increased orders for towbarless tractors. Two years ago this change was not at all discernible – but that is all changing.

“It’s a lighter proposition,” he notes, “so there are savings in energy expended; and it’s a safer option than the conventional pushback tractor.” The key, though, has been the towbarless concept: TLD is not witnessing the same shift in customer preference when it comes to the conventional electric pushback tractor. There, Verin reflects, the market is highly competitive; and indeed, many clients are still using diesel-powered pushback solutions. Other news concerns the company’s TaxiBot. This innovative approach to aircraft handling has taken root in India (there are currently five units operating there) and it has also found an appreciative audience in the US and China. In October, in Delhi, the first Taxibotting (as the French like to call it) operation with the A320 occurred, which was a milestone for the airport. Meanwhile its big brother, TLD’s wide-body focused TaxiBot, awaits certification. Looking ahead, he foresees electric solutions gathering momentum as 2020 unfolds, and cites China as a good example of environmental thinking. If the GSE exists in battery-powered format, Chinese handlers are encouraged to invest when ordering for their fleets. And, as electric’s popularity soars, so diesel production will decline, he predicts.

Textron has had a busy time of it, assimilating both the Douglas and TUG brands



Italian flair from Fresia: its pushback applications have been popular in Scandinavia

not readily made by our competitors, with weights between five and eight tonnes but with four wheel drive and four wheel steering, which cater to very specific needs," he says. "We have been using the latest emission engines on all models, since our clients are in Europe. There have been many cold region tweaks performed on the tractors to make them suitable for the harshest winter conditions possible. In terms of electric, we're thinking about it but for now it is not a priority for our customers." He goes on to say that for Fresia the most popular geographical areas are the Nordic countries, which require four wheel drive but that Fresia has also built a few much bigger units (the SP 300, at 60 tonnes) which recently ended up in remote regions for NATO use.

Celebration time for Kalmar, which has a decade of battery use under its belt



A special year

For Kalmar Motor, 2019 represented a sixth successive record sales year, although this fact was overshadowed by the other events at the company.

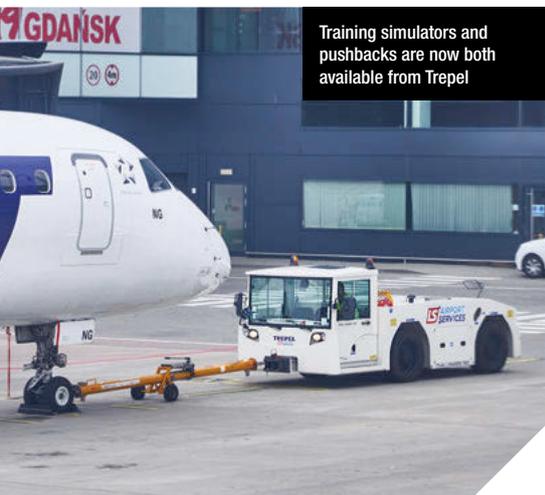
"What made 2019 extremely special," says Sean Bryan, "was the fifty-year anniversary, along with thirty years of towbarless operations and ten years of airside operation of tractors using the new lithium-ion battery technology. All this was celebrated at Kalmar Motor's new base and production facility, located in its home city of Kalmar, which was officially opened in June 2019."

The new facility comprises 42,000 square metres and is the new home for the administration teams and production of all tractors except for the TBL100E, for which manufacture will remain at the old Kalmar Motor facility.

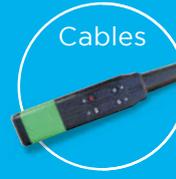
"Furthermore, with the investment and collaboration with our partner Vestergaard Company, the sales and after-sales for our products are now offered from our joint facilities in Europe, the US and Asia, ensuring Kalmar Motor customers will always be supported to

the highest possible level. This record year included sales across the globe, with the TBL100E and the TBL190 being the most popular tractors, because of their superior handling capabilities allied to reduced operating and maintenance costs. Once again, we saw an increase in orders for electric-hybrid tractors, and during 2019 all tractors, both towbarless and conventional, and up to A380 handling specification, became available with this drive." In fact, Kalmar Motor has become the first tractor manufacturer to offer its range of models with a full electric drive.

"For Kalmar Motor, 2019 finishes following an extremely successful InterAirport show; we have a larger order book and a fast-growing customer base. In support of our customers, the environment and the industry, Kalmar Motor will remain focused on being an industry leader and innovator as we enter 2020." *ghi*



Training simulators and pushbacks are now both available from Trepel



ZERO EMISSIONS AND REDUCED NOISE

The ITW GSE 7400 eGPU offers flexibility, zero emissions, silent operation and reliable power. It simply changes how airports think about ground power.

itwgse.com/7400



It's all about connections

ground handling INTERNATIONAL

9th GHI SAFETY Conference

12-13 May 2020

TRYP Barcelona Apolo Hotel

Are you being kept awake by the thought of an operative being injured at one of your aprons? Do you want to discover how new technology can help better protect your people and prevent aircraft ground damage?

Yes? Then we urge you to join us on 12-13 May for best practice safety advice from leading industry operators on improving safety standards within the aviation industry.



"Good for sharing information, knowledge and experience."

Altan Meydanli, Chief of Ground and Cargo Safety, Turkish Airlines



Presentation topic areas will include:

- ▶ **Autonomous GSE and using new technology to reduce accident risks:** examining how artificially intelligent GSE could help eliminate common accident risks on the apron. Will robots lead to a safer ramp?
- ▶ **Human factors- getting people to do what you want safely:** examining human behaviours and how you can harness

safety focused thinking to minimise risks during turnaround and pushback.

- ▶ **Creating a high safety culture:** the role of employee engagement in creating a more proactive near miss reporting culture explored.
- ▶ **Your role as a leader in delivering a strong safety culture:** identifying the right

safety behaviours among aviation leaders and the impact they can have on frontline attitudes to risk.

- ▶ **IGOM/ISAGO:** the latest updates.
- ▶ Enjoy candid case studies and panel discussions from leading airlines/GSPs that will offer you best practice advice on enhancing safety at your station.



PLUS
enjoy extensive networking opportunities and the chance to expand your business network.

Visit: safety.groundhandling.com



LOUD AND CLEAR

Felicity Stredder turns up the volume on the airside communications sector.

While a niche area of equipment for airfield operations, ramp communications systems and their manufacturers play a vital role in the turnaround process and ensuring safety on the ramp. The technology may not change dramatically from one year to the next, but improvements in the capabilities continue – as the suppliers confirm – and the business continues as steadily as ever.

The world of wireless

When Dominique Retali founded GlobalSys in 1999, it was the first supplier in the world to develop a wireless duplex communication system for use in civil aviation between aircraft crew and airport ramp operatives, he asserts. “Wireless enables you to walk to the tail of the aircraft without losing communication with the pilot, for example if you need to shut the cargo door or remove chocks,” explains Retali of the benefits. This is safer than having to disconnect and reconnect to complete certain tasks, as with a 10-12 metre wire, as well as offering savings on time and resources for aircraft turns. While wireless was the first product offered, GlobalSys also sells a wired equivalent, although this represents less than 10% of sales, Retali says.

The business has expanded over the last year by 100%, he continues. Recent

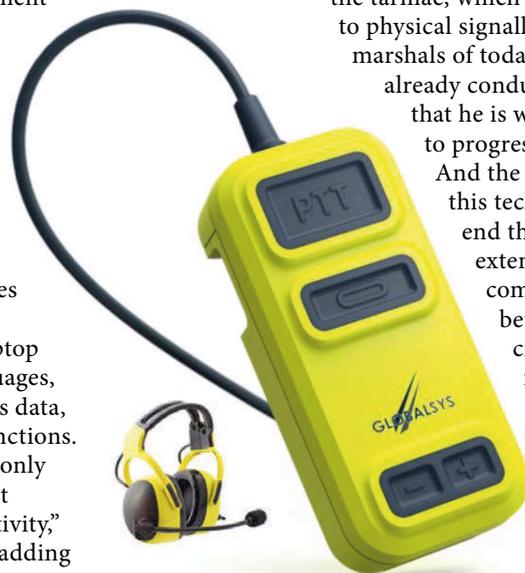
customers include ANA Japan, to whom the company has started delivering an order for 400 systems, while last year saw it delivering to BA at London Heathrow’s Terminal 5. An early adopter of wireless was Qantas, to whom GlobalSys delivered 250 systems ten years ago, Retali recounts. “Only now are they starting to need replacements for these units.” By region, he asserts that GlobalSys is addressing North America, having sold 150 systems to dnata for 12 of its US stations in early 2019.

Now in its fourth generation, Retali relates that equipment enhancements include audio wideband for crisp, high quality audio, and a rechargeable lithium battery. A USB system, meanwhile, enables the systems to be connected to a laptop to configure languages, timings and access data, amongst other functions. “I think we’re the only ones in the market with USB connectivity,” Retali comments, adding

that another “world premier” feature is the ability to replay recorded audio – particularly useful in the event of any incidents and follow-up inquests.

Plans for further enhancements to the system’s capabilities are also afoot. “We are consistently working to establish a future system to be implemented on board aircraft,” Retali enthuses.

An EU-funded Proof of Concept with Airbus has already been completed for the integration of a system within the aircraft to enable communications with the aircraft as soon as it touches down on the tarmac, which could see an end to physical signalling by the ramp marshals of today. With research already conducted, Retali says that he is waiting on Airbus to progress the development. And the possibilities of this technology don’t end there. “We could extend it to wireless communications between the cabin crew on the aircraft in flight. Even passenger call buttons could be integrated into a mobile device in the future,” he concludes. ▶



GROWING SALES - AND APPLICATIONS

Bob Daigle, Systems Product Manager at David Clark Company, conveys a strong growth market in spite of the challenging world economy, with global sales continuing apace. "Asia Pacific as a whole is one of the most successful regions, particularly for wireless," he says. Wireless is the most popular choice across the board, he reports, owing to its myriad benefits, including guaranteed safety in all weathers. "This is particularly important in regions where lightning is a high risk, like at Singapore Changi. Some 90% of gates there use David Clark wireless headsets."

The US market represents a big region of growth. He reports that sales of its Series 9900 wireless communication system for pushback and ramp communications have substantially increased over the last two years. "Our wireless headset communication systems are now in use by most major domestic airlines and many regionals across the US as standard equipment for ramp personnel. The fact that these carriers have made an investment in the Series 9900 wireless system underscores their respective, strong commitment to safety," says Daigle. "Comfortable, robust headset design and weatherproof components, including wireless gateways and belt stations, as well as durable and comfortable headsets, provide reliable performance that ground crews can count on, flight after flight."

David Clark reports helping to pioneer the use of headset communication systems for the airline industry. "Many of our customers date back nearly 40 years to the introduction of our wired systems for de-icing and pushback operations," says Daigle. "Now, with the additional benefits of the wireless system, there is a general consensus among the airlines that clear voice communication is a welcome enhancement to traditional hand signals and safety protocols in the busy ramp environment," he says, highlighting the dangerous and costly nature of any ground incident.

In addition to the more typical uses for the wireless headset system, ground personnel are continuing to expand the range of applications beyond pushback and de-icing, thanks to the system's ease of use and freedom of movement, he continues. Crew Chief for customer American Airlines at JFK airport, Paul Mozeak, provides an example. "Sometimes they use them [Series 9900 system headsets] for the whole flight. You might have a wide-body with the crew chief on the ground and a clerk on the hi-loader; he can communicate with that hi-loader and tell him 'look we're sending up a couple of pallets, put them on the nose' or put them in another area of the aircraft. It's a great tool," he says, offering positive feedback.



TECHNOLOGY DEVELOPING

DBD Communications started out life in the UK rail industry, finding its niche by resolving serious issues in the communication methods between railway workers, who were seeing fatalities occur with alarming regularity.

After gaining an 80% market share in rail communications, the company realised its application in air transport in around 2013, developing a wireless system (offering wired if requested) for ramp communications using Bluetooth technology. This is the future of the technology, reckons David O'Connell, Managing Director. "The future of DECT technology is questionable with the onset of 4 and 5G coming into households. This has the power to replace the old DECT requirements."

While dBd is a relative newcomer to the sector, he highlights a 15-20% growth in market share in aviation communications, despite some reluctance by the industry to invest in new technology. While Asia is probably the most embracing of wireless technology, the market is still nervous towards it, O'Connell observes. This is largely owing to cost, with wireless technology costing as much as five times more than wired. "But the total cost of ownership is much lower because there are no repairs to an interface cable and accidents are fewer as the environment is safer," he explains. "Initial competitors in the field launched too early and there were limitations to the technology," he admits,



"but they've now rectified this." Early issues included range, speech quality, connectivity and battery life, O'Connell explains, noting that dBd's headsets maintain functionality at full power for 24 hours. The company has always used Bluetooth technology for its systems, chosen for its robustness. "It's coded so it can't be linked to anything else – there's no risk of accidental pairing with another aircraft, which would be dangerous. It has happened – but it can't happen with ours."

Users can go up to 175 metres away from the aircraft, too. "I believe it's the longest range with no drop-outs," he says, adding that there are two million variants of solutions in the company's current

portfolio, applicable not only to pushback operations, but also to maintenance, towing and even de-icing. The Bluetooth technology also enables what he terms "chatnets" of up to 16 duplex communications, to enable groups of people to communicate at the same time. The company was promoting its TIGAR (Turnaround Integrated Ground And Ramp) system at InterAirport Europe in October, which is designed to improve the efficiency of turnarounds by up to 10% by increasing communication connectivity between operatives on the ramp, flight deck and at the gate, while roaming up to 500 metres. There is also an option for voice-activated functionality, which frees people up to use their hands for other things when engaging the microphone.

Customers of dBd include Singapore Airlines, Macro Asia and Bangkok Flight Services. BFS' Ramp Operations and Maintenance Director, Colin Temple, first saw dBd headsets at an exhibition in Brussels, after which O'Connell brought a trial unit to the BFS operation in Bangkok. "During the trial we got great support and training to ensure we could gain maximum benefit. We ordered a batch that has been in operation successfully at Suvarnabhumi airport. We recently had half that batch modified from boom mike to cup style mike and have made a further order," he adds enthusiastically.

"My experience with David and the dBd team has all been positive and I have no hesitation to recommend them both for the products and the customer service." **ghi**



A FIRST FOR HEATHROW

GSE manufacturing and leasing company Rushlift is making a significant push on electric GSE at present, relates its Operations Director, Tim Willett.

Back in March the company took delivery of its first electric loader, a £250,000 investment in TLD's latest ReGen model, but was held back in its objective to deploy this on the ramp at Heathrow owing to a lack of charging infrastructure.

At long last this looks set to change, after the airport finally agreed to invest in the installation of additional power sockets. "We've been working with the airport through bureaucratic processes and permits. Power is going in, but it's taken us 18 months," said Willett this summer. "Hopefully by the end of the year we'll be fully operational. It's quite a quick process once it's started." As of November, however, installation had yet to get underway.

The battery-powered ReGen loader charges in eight hours to give a run time of a few days, and

if deployed, it would become the first TLD unit of its kind in the UK – and the most high-tech loader at Heathrow. This is definitely the way the industry is headed, however, believes Willett. "Most handlers are looking at electric loaders – Cobalt in particular," he says. Cobalt is to become Rushlift's trial customer for the electric ReGen unit at Heathrow when the equipment finally goes into service.

Rushlift already has other customers lined up, adds Willett. "I think we all know that electric vehicles are the future. And the airport will be a much nicer and healthier place to work. Once we've established the first few units, this will quickly move forward. All we need is the first one to go ahead."

Cobalt trialled an electric JBT loader in 2018 and is looking to test further battery-powered GSE in the coming months, mentioning a Trepel loader and a Bliss-Fox pushback tractor as examples on its list. Its ultimate aim is that of a 100% electric operation.

PUNTA CANA INVESTS IN AVIRAMP

Punta Cana International airport is one of the latest airports to trial the innovative Aviramp boarding system. After testing an International and a Continental model, ground handling company Aviam now has a total of 19 units within its GSE fleet.

Given the urgency of the handler's requirement, Aviramp manufactured the boarding aids back-to-back and installed the equipment in phases, from March through to July, and arranged for three dedicated Aviramp engineers to be on site throughout the process.

There were good reasons for this urgency. Firstly, the airport layout made it difficult to install fixed connecting terminal bridges, which were compounded by the increasing volumes of PRMs: this meant an alternative had to be found. Moreover, stairs and an ambulift combined could not cope with this growing demand, so Aviramp presented an ideal proposition. Furthermore, the benefits in driving turnaround efficiencies, alleviating difficult capacity issues and facilitating aircraft parking slots at peak times were highly compelling reasons for investing in the UK-manufactured solution.

SEEING THE WHOLE PICTURE

Retenua has developed a fully integrated advanced driver assistance system (or ADAS) for detecting people in the vicinity of industrial vehicles and forklift trucks. The Swedish start-up company uses a Vision Components embedded camera, which also detects reflective workwear with a near infra-red flash.

The compact and robust embedded system increases occupational safety, providing reliable detection in poor light conditions as well as under bright sunlight. The development of the product, marketed as emitrace, has been the result of a collaboration between the Retenua team and companies from the mining and logistics sectors. The new ADAS is also suitable for landfills and any other application where a driver's viewing angle is limited and where people are equipped with reflective clothing.

An integrated VC Z stereo camera from Vision Components detects reflectors, calculates the 3D position and speed of people and triggers an alarm if an accident threatens. The board camera features two remote sensor boards, a flash trigger interface, a 1Gbit Ethernet interface and an onboard Xilinx Zynq SoC that handles the entire image processing routines.

IN BRIEF

Telematics and fleet management software provider, **Transpoco**, has enabled Iberia to achieve significant operational savings by implementing its advanced fleet management solution on its ground support equipment in numerous airports across the airline's Spanish network.

Transpoco was selected for a proof of concept in Madrid and Barcelona on up to 200 motorised assets. As a result of proven savings and return on investment, Iberia will be rolling out the technology on up to 1,400 motorised assets across

further stations throughout Spain.

Help for the refueller

Fluid Transfer International launched a new Coupler Lift Assist Device (or CLAD) at InterAirport Europe and is now in discussions with a number of in-plane operators to upgrade their fleets.



CLADs mitigate the risk of operator back injury from below-the-knee handling and lifting of pit-coupler assemblies which, including a length of hose and fuel, can weigh in excess of 30 kilograms. They also contribute to reduced wear on the coupler and pit valve.

The Pit Buddy Mk2, weighing in at less than 12 kilograms, is not only much lighter than traditional



CLADs, but its compact design makes it far more manoeuvrable. It can be easily retrofitted to existing fleets of hydrant dispensers from any manufacturer.

Pit Buddy Mk2 is compatible with

Cla-Val and Carter hydrant pit couplers. Pneumatically powered, and with adjustable raise and lower speeds, Pit Buddy Mk2 is also easily connected to the vehicle's pneumatic system.

C IS FOR CONSISTENCY

On behalf of American Airlines, Tom Dombroski, Senior Manager Corporate Safety, offers his thoughts on what goes to make a realistic (and respected) safety policy.

Ramp safety briefings are an important piece of a broader topic: Safety Culture. At the foundation of a good safety culture is clear, consistent communication on safety from all levels of an organisation's leadership.

In addition to communication regarding safety, senior leadership must recognise that "safety first" is not just a catchy slogan. The importance of safety and following policies and procedures every time a task is completed cannot only be brought up when something has gone wrong. A good safety culture foundation requires consistent communication. This communication starts when a new team member is hired, continues throughout initial training, recurrent training and, of course, through regular ramp safety briefings. When safety is truly a priority for senior leadership it will be recognised at all levels of the organisation as a priority. Safety will then

be a topic that is discussed on a regular basis at nearly all meetings, regardless of the leadership level within the organisation. Having a good safety culture requires more than just having a safety manual or safety policies, and more than occasional communication. It also requires all levels of leadership to recognise team members when safe actions are observed and thank them for following the proper procedure.

This positive reinforcement encourages additional safe behaviour from the team member in the future. Just as important, it requires all levels of leadership to discuss unsafe actions in a professional, respectful manner. It is critical that the team member understands the "why" behind the policy or procedure that was not followed properly and also realises that the leader cares about tasks being completed in a safe manner. Ignoring these unsafe actions is also known as tacit approval.



Tacit approval of unsafe behaviours encourages more unsafe behaviour, not just from the team member who performed the unsafe action, but from every team member who saw the unsafe action go unaddressed by the leader.

Making safety a priority

Conversely, if safety is not a priority for senior leadership, that will become apparent to the team members as well. If leaders only take the time to communicate the importance of operational metrics such as on time performance or mishandled baggage rates, those areas are where the focus of the team will be. To be clear, operational performance is critical to the success of any airline or ground handling company. We are all aware of what a competitive industry we work in. However, those operational metrics do not matter if someone sustains a serious injury or an aircraft is damaged while cutting

procedural corners to achieve these other operational goals.

A leadership team that is engaged in a positive safety culture is also engaged in their operation. This allows leaders to receive feedback from team members and, just as importantly, follow up on that feedback. Team members will quickly lose faith that safety matters if there is no follow-up on concerns that have been brought to their leader's attention. Listening and having professional, respectful conversations form a collaborative effort between leaders and team members that is very powerful. Safety should never be about blaming leadership or frontline team members, but always about improving the workplace for all.

At American Airlines we are promoting the use of the phrase "It is okay to S.T.O.P." We are encouraging team members that if something



Tom Dombroski
Senior Manager Corporate Safety,
American Airlines

LESSONS TO BE LEARNED

For this, the last issue of 2019, we take a look at the towing process, something that fits in well with this magazine's annual review of the pushback sector, which starts on page 44.

TOWING THE LINE?

A B787 was being towed on to stand. During the tow the tug driver initially didn't appear to understand the "brakes off" hand signal of a hand moved from a clenched fist to spread fingers. An additional thumbs up had to be given from the flight deck to convince him that he was clear to start towing. The tow to the stand started, although the centre line was not clearly visible because of a covering of snow melt (a salt and brine mixture) over the entire ramp area. The tow in line to this particular gate was a moderate curve followed by approximately 40 feet of straight line. Because the line was somewhat effaced, the driver had gone wide of the curve and upon his correction increased the towing angle of the aircraft, but with only slight aircraft forward motion. Although the driver never exceeded the maximum towing angle, without enough forward motion a strain was being put on the main wheels 1 and 5, to the extent that they started to oppose each other in the vertical plane. However, not at any point was there a threat of damage to the aircraft. During this manoeuvre the driver was being guided by an accomplice, who was at the head of the stand and using wands to direct his progress.

At the point where the transition from the curve to the straight line began, the pushback driver started to beckon his colleague. It appeared that he was now not confident in himself to continue the tow through being off the line and not where he had expected to be. Before the second handler approached the tug, several movements of levers inside the tug were made whilst the driver awaited his colleague. It now became apparent that the driver wanted his colleague to take over the tow and was ready to get out of the tug.

The driver then lifted his foot off the brake pedal and both the tug and aircraft moved backwards from their intended direction. The driver applied his foot to the pedal, stopping the motion; he then again made several lever movements in the cab. At this point the second ramp agent appeared at the door of the tug, whereupon the driver jumped out of the cab, again removing his foot from the brake pedal. Once again the aircraft and tug started to roll backwards until the substitute driver managed to get inside the cab and apply the brakes, correct the manoeuvre, and finish the tow at the

correct stop mark.

The aircraft had rolled back approximately five to six feet when there had been no driver in control. It happened very quickly and took the flight deck by surprise, especially when they witnessed the first driver departing the vehicle.

Overall, it would appear that insufficient training had been given to the original driver; it was quite clear that he was not comfortable with the tractor once he had strayed from the line. It was also evident that he had no comprehension of standard industry hand signals; further, not knowing how to apply the brakes and not understanding the consequences of departing a vehicle without the brakes applied when attached to an aircraft are very basic lessons that need to be understood by anyone in charge of a pushback.

DEALING WITH A DISCONNECT

Here, an A321 became detached from the tug during pushback. The crew were told by the pushback operative that he was ready for pushback. The crew were also told that the chocks were still in place but that he would remove them; the crew signified that they were still ready. Pushback clearance was received from ATC, cockpit checks were carried out and then clearance ("cleared to push, face east") was passed to the pushback operative. The driver asked the flight crew to release the parking brake, which they did. There followed a garbled exclamation of surprise from the headset operative, since the aircraft was moving back at a speed that would be normal for a Mototok-enabled pushback. Over the next few seconds, the operative made it clear that the aircraft and the tug were not as connected as they should have been, and that in fact they were moving further apart by the second, and that it would be necessary to use the aircraft brakes to stop the aircraft. The crew obliged. The park brake was set, the tug was reattached, and the push back continued as normal. The pushback operative had become slightly flustered when he had called "ready", but had then noticed the chocks. This seemed to have been the main cause of the incident. When the crew passed the clearance on to him, he asked for the aircraft brakes to be released before the aircraft had been lifted. When it was lifted, the aircraft then slipped from the Mototok. The ▶



does not look or feel right, it is okay to Stop Think Observe and only then Proceed. Also, we are stressing that asking for help early in a challenging situation is not only okay, but encouraged!

Ramp safety briefings are an important part of communicating that message and these briefings give our leaders a chance to demonstrate that we must have a "safety is our top priority" attitude from all at American Airlines.

While ramp safety briefings are a critical part of handling aircraft, we must remember that safety is a multi-faceted subject and it requires engagement and commitment from every level of an organisation. **ghi**

Do you have a story or incident that you would like to share? E-mail: Alwyn@groundhandling.com

LESSONS TO BE LEARNED

aircraft had moved approximately 15 feet before being brought to a halt.

CLEAN OUT OF SIGHT

Our third example relates to working under the vagaries of the weather and how that can impede the smooth running of an operation.

An uneventful push back of a B737 was executed in heavy rain, after which the aircraft started its engines, one at a time. When the pushback operative was told "clear to disconnect, awaiting visual clearance", she then presented "thumb and pin" to the right side of the aircraft and subsequently ran off to her left, presumably to get out of the heavy rain. However, this visual clearance was presented with the pushback tug still positioned under the nose of the aircraft. The flight crew then waited for the tug to move away completely from the aircraft before completing the taxi procedures checklist and

then calling for the taxi clearance.

No drama and no damage – but not an ideal termination of a push back sequence.

WATERWORKS

Finally, from towing to taking on water. In this instance, an Airbus 321 suffered an incident with potable water. This was uplifted from a vehicle which was being sterilised at the time. Measures that had been put in place to ensure that the water vehicle was not used appear to have been ignored: the driver's wheel had a cover over it, saying that it was not to be utilised; and the driver was meant to complete a dip test before every upload. The driver was actually seen on CCTV using this vehicle, which should not have been in service.

It appears that despite an Ops message to the effect that the water was not to be used and that it needed to be drained from

the vehicle, the CCS did not receive same. Unaware of the request, the CCS did not take action and the flight departed with the contaminated water uploaded: around 25% had been taken, since the aircraft's tank was about 75% full from the previous leg. Medlink was contacted for advice: they stated that any adverse reactions would become quickly apparent on the flight. Fortunately, there were no reports of illness.

A full investigation followed and the water truck's driver was suspended from duty.

Do you have a safety-related event or incident to share with the community? If so, send in brief details to the Editor alwyn@groundhandling.com Names and locations will not be used in the editorial.

TRANSFORM LIVES TODAY

Mercy Ships sails to some of the poorest countries in the world, delivering free surgery and medical care to people in desperate need.

WILL YOU JOIN US?

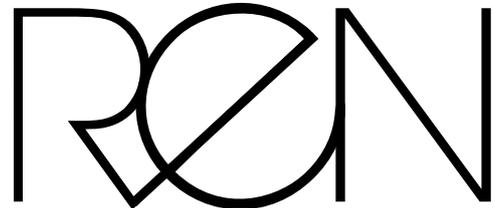
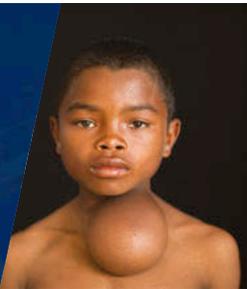


Registered Charity Nos: 1053055 (England & Wales), SC039743 (Scotland)

www.mercyships.org.uk

t 01438 727800 | e info@mercyships.org.uk

Connect with us on social media [mercyshipsuk](#)



RAMP EQUIPMENT NEWS

If you are interested in advertising your products and services in Ramp Equipment News and reaching over 11,000 key decision makers throughout the north and south American markets then please contact

Marc Young on +44 1322 221144 or at marc@groundhandling.com

Proven GSE



Better GSE. Period. AERO Specialties provides complete aircraft ground support equipment solutions to corporate, FBO, MRO, military, airline and general aviation customers worldwide.



+1 208-378-9888 | www.aerospecialties.com 

Goldhofer



E-MOBILITY AT GOLDHOFER THE FUTURE OF GROUND HANDLING

OUR »IONMASTER« TECHNOLOGY - EFFICIENT E-MOBILITY



WWW.GROUNDSUPPORTEQUIPMENT.DE

MADE FOR YOUR MISSION

A BREATH OF FRESH AIR

Felicity Stredder presents a selection of some of the more unusual and light-hearted stories from the sector...

You'd think people would have learned the rules of air travel by now but still the stories of passengers opening the aircraft door continue to pour in. In September, a Xiamen Airlines passenger on a flight from Wuhan Tianhe International airport in China opened the emergency exit while boarding was in process to let in some "fresh air" because the cabin was "too stuffy". Flight attendants had reportedly warned the woman and those around her not to touch the lever on the door.

Passengers were subsequently forced to wait in the aircraft while airport police arrested the woman for the offence and a one-hour delay ensued.

Other recent stories of this ilk have included a female passenger opening an emergency exit instead of the toilet door while on the ground on a Pakistan International Airlines aircraft in June, which caused the emergency evacuation slide to be deployed. Meanwhile, in October, an intoxicated Russian man in his thirties had to be tackled to the floor and wrapped in clingfilm on a flight from Moscow to Phuket to stop him from opening the aircraft door at 33,000 feet. Interestingly, the plastic food wrap used to restrain him was requested from fellow passengers via the aircraft's intercom system.

Romance gone wrong

We've seen it happen in sit coms and rom coms, but it's not remotely comical in Singapore...

A man who passed through security to go to the gate of his wife's departing flight, in a bold romantic gesture, was arrested at Singapore's Changi airport earlier this year and now faces



up to two years in prison.

The 27 year-old bought a flight ticket so he could access the departure area to say goodbye to his wife, but because he had no plans to travel, he was detained by Singapore Police. Under Singaporean law, it is an arrestable offence to enter the transit area if you do not intend to travel.

Singapore Police commented on the arrest on Facebook. "The Police would like to remind all passengers that the transit areas of Changi airport are gazetted as Protected Places. Those who misuse their boarding pass to enter into the transit areas, with no intention to proceed to their next destinations, are liable for an offence under the Infrastructure Protection Act," the comment read.

The man in question is liable for a fine of up to US\$20,000 and could be jailed for up to two years for the offence.

Some 33 people have been arrested under the same offence since January this year, including a woman from Macau who allegedly entered the transit area to get a tax refund. Last January, a 20 year-old woman was arrested after she bought a ticket so she could meet members of a South Korean boy band at the airport; while a separate arrest was carried out for a 23 year-old woman who used her boarding pass to go shopping at the airport.

Flying a-fraud?

A Cathay Pacific passenger was refused carriage and banned from flying with the airline for

life after attempting to gain a free upgrade.

Social media influencer Jacqueline Ng claimed to have been sent an e-mail by the airline, offering her an upgrade from premium economy to business class on her return flights from Taiwan to New York if seats were available at check in.

She was declined the upgrade when she showed the e-mail on her outbound leg from Taipei on May 30, but made a second attempt on her return journey on June 7, only to be told she was not allowed to board.

After a 30 minute wait at check-in, a member of staff accused her of forging the e-mail, cancelling her ticket and banning her from flying with the airline. Cathay refunded the cost of her ticket, but Jacqueline Ng was forced to pay US\$1,400 for an alternative flight back to Taipei.

After returning home, she contacted the airline to clear up the "misunderstanding", asking them to refund the cost of her new flight. However, Cathay confirmed that the e-mail was fraudulent and said that the only way to review the case was for her to provide the embedded information from the original e-mail, so they could trace it. However, Jacqueline failed to send over the e-mail in question. She confirmed, though, that she was suing the airline, in a bid to show that she didn't forge the documents for an upgrade.

Have you an unusual story to tell?

Please send your humorous aviation anecdotes to: felicity@groundhandling.com



ALL *Electric*
COMMANDER 30i

EASY TO OPERATE

EASY TO MAINTAIN

GREAT RELIABILITY

jbt.com/aerotech

COMMANDER





AT SGS WE CREATE PERFECTION AND EFFICIENCY...

Saudi Ground Services Company is a leading ground handling services provider in the Kingdom of Saudi Arabia, fully equipped to provide excellent support at all the 28 International, regional and domestic airports.



@Saudi_GS



SGSCARE



Saudi Ground Services-SGS



www.saudiags.com

