

for inter airport Europe from Momberger Airport Information #1224 / August 5th, 2024

Amsterdam Airport Schiphol (The Netherlands) and KLM are advancing their trial of Ohmio's electric self-driving buses. The second phase, now underway, involves testing a fixed, pre-programmed route to and from the apron for the KLM Cityhopper crew. This follows a successful initial trial earlier this year focusing on technical features and usability.

The current phase tests the shuttle in a complex apron environment characterized by high activity levels, including aircraft operations and crew transport. The self-driving bus, equipped with sensors, special cameras, GPS, and LIDAR technology, offers a 360° view and can detect objects up to 30 meters away. The trial aims to familiarise crew with autonomous vehicles, enhancing trust in the technology and paving the way for future integration of self-driving vehicles. Jan Zekveld, head of innovation at Royal Schiphol Group, emphasised the importance of punctuality and safety in this trial.

By 2050, Royal Schiphol Group aims to achieve fully sustainable and emission-free ground operations, replacing all vehicles with autonomous, zero-emission models and automating associated processes. Staff will shift to supervisory roles, ensuring smooth operations.

Dynell, along with its partners, has commenced testing its hydrogen-powered ground power unit (GPU), the DHM 090 model, at Amsterdam Airport Schiphol. This initiative aims to demonstrate the viability of hydrogen GPUs as alternatives to diesel and battery units. The initial test on an Embraer aircraft was successful, indicating that the hydrogen GPU can effectively provide ground power without disrupting airport operations.

The DHM 090, part of the European Union's TULIPS program, integrates a 50kW fuel cell with a battery to handle peak power demands, offering 350kWh for 90kVA operation. Future tests will focus on endurance, including trials in different climates at airports in Italy and Cyprus, to assess the unit's performance in varying conditions.

Potential advantages of hydrogen GPUs include quick refuelling, more than double the energy storage compared to battery GPUs, and scalability for larger aircraft. Dynell plans to gather data over the coming months to refine and optimise the hydrogen GPU's design and functionality.

Stuttgart airport in Germany has tested an unmanned electric cargo tractor, the Auto-Dolly Tug, developed by British company Aurigo International. The Frankfurt University of Applied Sciences managed the tests in collaboration with the Fraunhofer Institute for Material Flow and Logistics and the airport management companies Flughafen Stuttgart and Fraport.

The vehicle was tested for moving containers between the logistics centre and aircraft, recognising aircraft lifts, delivering goods, detecting obstacles, and interacting with manual vehicles and pedestrians. This initiative aims to enhance the efficiency and safety of cargo handling, contributing to a digital and interconnected air transport chain.

Rosenbauer Deutschland GmbH, part of the Rosenbauer Group, has secured a major long-term contract with the German Armed Forces to deliver up to 60 airport firefighting vehicles over the next twenty years. This contract includes 35 PANTHER 8×8 vehicles featuring a 12,500-litre

water tank and a High Reach Extendable Turret (HRET), to be delivered by 2029, with the first batch expected by 2026.

These vehicles will enhance fire protection at German airports and during international deployments. Rosenbauer CEO Sebastian Wolf emphasised the PANTHER model's longstanding reputation for performance, safety, and reliability, noting the significance of this agreement as the largest in the company's history.

The contract is crucial for the German Armed Forces, given the essential role of airport operational capacity in national defence and overseas missions.

JFK Millennium Partners (JMP), responsible for building and operating the new USD 4.2 billion Terminal 6 at John F. Kennedy International Airport, has chosen Materna IPS to provide advanced hybrid self-service bag drop (SSBD) equipment for the terminal. This state-of-the-art system, set to debut when Terminal 6 opens in 2026, will allow passengers to check their bags in less than 30 seconds using biometric verification.

The new system, which offers both self-service and agent-assisted options, aligns with the terminal's goal of providing a digital-first experience while catering to passenger preferences. This installation will be one of the largest in the U.S. and represents a significant milestone for Materna IPS in the Americas.

dnata, a global air and travel services provider, has upgraded its ground support equipment fleet at São Paulo International Airport (GRU) with the addition of 24 electric tugs, costing USD 1.7 million. This move is part of dnata's strategy to reduce carbon emissions and enhance environmental efficiency. The new electric tugs are expected to prevent the release of over 420 tonnes of CO2 annually.

dnata, operating at 29 airports in Brazil and handling over 200,000 aircraft turnarounds yearly, aims to phase out diesel engines and switch to more sustainable options like electric and hydrogen-powered vehicles while also focusing on minimising fuel consumption and promoting responsible driver behaviour. The company reported significant improvements in its environmental performance for the 2023-24 financial year, reducing carbon intensity across its operations.

INFORM Software is providing Talma, a major airport services company in Latin America, with its GroundStar (GS) Planning and GS WorkforcePlus optimisation software at airports in Colombia. The initial implementation at Bogotá airport will extend to major airports like Cali, Medellín, and Cartagena, impacting over 3,500 ground-handling employees. GroundStar solutions aim to streamline data processing, resource planning, and scheduling, improving efficiency and compliance with regulations.

Uschi Schulte-Sasse, Senior VP of INFORM Aviation, emphasised the partnership's goal to address Talma's resource planning challenges. Federico dos Reis, CEO of INFORM Latin America SSC, highlighted the software's role in managing upcoming labour changes and complexities.

Talma's Alejandro Molina V noted the software's benefits in resource optimisation and integrating existing technologies. INFORM's GroundStar suite offers comprehensive solutions for aviation processes, enhancing operational efficiency, punctuality, and passenger satisfaction. Talma operates in 20 airports across Colombia, with a focus on technological advancements and efficient operations.

Abu Dhabi Airports has partnered with the Federal Authority for Identity, Citizenship, Customs, and Port Security to launch a pioneering biometric Smart Travel project at Zayed International Airport (UAE). In collaboration with AI specialist Next 50, the project will be implemented in three phases, integrating biometric authentication systems across all security and operational touchpoints. This system uses the Federal Authority's databases for automatic traveller authentication, eliminating the need for prior registration.

The project was initiated with the launch of the new terminal in November 2023, incorporating biometric systems for services like automated traveller registration, self-service baggage delivery, and facial recognition at e-gates and boarding gates. The current phase includes extending these systems to five

additional airlines and installing new e-gates in transit areas. Future expansions will cover the Etihad Airways lounge and duty-free retail outlets.

Andrew Murphy, CIO at Zayed International Airport, highlighted the project's goal to enhance the traveller experience through advanced biometric systems, aiming for full implementation by 2025. Saeed Saif Al Khaili, General Director at the Federal Authority, emphasised the project's efficiency, reducing service time from 25 to 7 seconds and integrating ticket and document verification into one process. The initiative aims to improve security, streamline travel processes, and boost airline performance while avoiding costly infrastructure expansions.

SITA, an air transport technology provider, is set to enhance traveller experiences at Shanghai Pudong International Airport with advanced passenger verification and check-in solutions. SITA will install common-use self-service bag drops (SBD) and kiosks, making travel more efficient for international passengers. Pudong Airport, China's busiest international hub, will see 52 kiosks and 14 SBDs deployed to ease congestion and enable early check-ins.

As international travel rebounds post-pandemic, the increased number of flights and passengers demands faster airport operations. SITA's solutions aim to provide a seamless, low-touch, and safe check-in and verification experience. This initiative aligns with Pudong Airport's digital transformation strategy.

Sumesh Patel, President of SITA APAC, highlighted the global rise in air travel and the need for technology to streamline boarding processes and reduce delays.

CVC DIF has agreed to acquire HiSERV, a leading German aviation ground service equipment (GSE) leasing company, from AVECO Holding. The acquisition will be made through CVC DIF's CIF III fund. HiSERV, headquartered in Berlin, operates a fleet of over 5,000 GSE units across more than 30 European airports, serving a diverse customer base, including ground handlers, airlines, and airport operators.

Founded in 2017 by Roland Ückert after spinning off from WISAG Aviation Service, HiSERV has grown significantly, driven by post-COVID aviation recovery and a commitment to high-quality service. The company is known for its transparent pricing and premium equipment.

Ückert expressed gratitude for AVECO's support and excitement for future growth with CVC DIF. The transaction, pending regulatory approvals, is expected to close in Q3 2024.

Publisher's note: The articles in this special report, compiled for **inter airport Europe**, are a few select samples from the biweekly **Momberger Airport Information** newsletter, published since 1973. The newsletter is an advertising-free, global airport news service that consists of 9 modules and allows subscribers to customize their own newsletter package. The modules that make up the biweekly newsletter are: Airport Development (DEV), Calendar of Events (CAL), and the subscriber-selectable modules Airport Operations (OPS), Management, Ownership & Finance (MGT), Ground Support Equipment (GSE), Air Traffic Services (ATC), Consultant & Contractor / Sustainable Aviation (CON), Airport Information Technology (AIT), and Maintenance Base & FBO (MRO). For more information, a sample of a complete newsletter issue, and to order an annual subscription, please visit www.mombergerairport.info