

Published biweekly – available by annual subscription only – <u>www.mombergerairport.info</u> Editorial office / Subscriptions; Phone: +1 519 833 4642, e-mail: <u>info@mombergerairport.info</u> Managing Editor / Publisher: Martin Lamprecht <u>martin@mombergerairport.info</u>

for inter airport Europe from Momberger Airport Information #1152 / September 10, 2021

ATP, a provider of aviation software solutions and information services, has secured a significant growth investment from Accel-KKR, a global technology-focused private equity firm. This transaction follows Accel-KKR's initial investment in ATP in mid-2020 in partnership with existing investor ParkerGale Capital. The new investment will fuel continued market expansion for ATP and Flightdocs by accelerating go-to-market and M&A strategies in pursuit of the company's vision of becoming the market leader in aviation information and workflow software solutions serving every segment of aviation. ATP is the source for aircraft technical publications and real-time regulatory information, and the leading provider of maintenance, operations, inventory, repetitive defect analysis, and troubleshooting software. The company's applications help reduce operating costs, improve aircraft reliability, and supports technical knowledge sharing and collaboration.

"Since AKKR's initial investment in the company, we have seen up-close the sizable opportunities for ATP together with Flightdocs, and for the aviation software industry at large," said Dean Jacobson, Managing Director of Accel-KKR. "Despite the changes in air travel brought on by the pandemic, flight maintenance and safety remain paramount to our customers. Our new investment today represents a strong continued vote of confidence in ATP, and in the exciting opportunities that lie ahead for the aviation software industry at large."

Accel-KKR initially partnered with ATP in June 2020 when the firm invested alongside ParkerGale, a technology-focused buyout fund based in Chicago, in backing ATP's acquisition of Flightdocs. ParkerGale acquired ATP from its founder in 2015 and subsequently added on CaseBank Technologies in 2016.

Cologne Bonn Airport (CGN) in Germany has renewed its IT infrastructure with the help of the software firm PSI Logistics. This covers software and control computers, along with monitoring and display systems in baggage handling. As part of the project, the airport's control computer has been replaced with modern hardware with migration to a new database. PSIairport/BHS replaced the old system from 2006. This solution has been deployed for automatic control of the entire baggage handling system behind the 86 check-in counters in the two terminals.

For improving the monitoring and coordination of the baggage handling system's processes, PSI Logistics has provided a new CCTV system. This enables the continuous documentation and tracking of luggage. According to the company, this marks the first time the PSIairport/BRS baggage reconciliation system has been deployed at the German airport. In a statement, PSI Logistics said: "The BRS takes over the control and documentation of process sequences for baggage handling in-ground traffic between the airport building and the total of 111 aircraft positions on the nine aprons as per international security guidelines." In addition, the software company also delivered the flight information display system (FIDS). These new display systems at the baggage carousels have been linked to the new airport systems. In May, Cologne Bonn Airport partnered with IT service provider NTT to develop a wholly private 5G mobile phone network across its 1,000-ha premises.

DataBeacon is introducing the first Digital Assistant that will be ready for operational air

traffic control rooms – the Victor5. Victor5 is powered by an AI engine that can guide air traffic controllers through potential conflicts—all on the cloud, with no local computing capacity required. This engine runs on a flexible ML ops platform that will ultimately grow to support air traffic controllers in a variety of traffic scenarios, allowing them to safely and efficiently cope with post-Covid increases in traffic levels and potential challenges. Victor5 will be ready soon, too: Victor5 functionalities have been in development and validation since 2021 and will be validated in operational rooms in 2022. ANSPs continue to face strong challenges: reducing costs, preventing delays by opening airspace capacity and maintaining safety. Environmental concerns also put pressure on providers to ensure that they monitor the environmental efficiency of routes. And while free-flight airspace allows airplanes to fly straighter routes, this increases the complexity of managing said airspace when compared to traditional route structures. That's why AI digital assistants will revolutionise the operational room by anticipating complex traffic scenarios, forecasting airspace sector workload, and allowing more efficient and environmentally friendly routing—all while increasing safety.

Indeed, in the coming years, AI digital assistants will make us completely rethink workload and capacity in air traffic control operations. Air Traffic Control Systems are on the brink of a ground-breaking transition—one that embraces AI and digitalisation despite the complexity of Controller Working Positions (CWP). Big data and cloud computing have paved the way for the processing of massive historical datasets, and these same datasets can now train AI algorithms to support air traffic controllers by identifying conflicts and non-conflicting traffic. This means that organisations like DataBeacon are now ready to launch tools that help provide early warning signs of complex traffic scenarios. Even more, Victor5 will be able to propose separation instructions that ensure safety whilst minimising capacity restrictions and emissions.

Large historical datasets are needed to train the AI air traffic control models; trajectory data is labelled and annotated with traffic conflicts, non-conflicting traffic, ATC instructions, meteo data and fuel consumption. Curating the training dataset and developing a big data ML platform ad-hoc for ATC is the first step to building digital assistants.

German technology developer Materna IPS has equipped more than 100 of its self-bag-drop (SBD) systems at Tokyo International Airport, Haneda (HND) in Japan, with the latest facial recognition technology. The Materna IPS One ID kiosk combines the SBD process with check-in by using biometric facial scanning technology to verify the passenger's ID. This not only streamlines the check-in process but also minimizes contact with staff, helping to improve efficiency and health and safety. Materna installed 104 SBD kiosks in Terminals 2 and 3 of the Japanese airport in 2020 and has now equipped them with the Face Express biometric technology in cooperation with Collins Aerospace.

London Heathrow Airport (LHR) in the UK has initiated a trial of touchless bag drop technology developed by the Spanish IT solution provider Amadeus. Using proximity sensors, the touchless bag drop technology allows passengers to check-in their luggage without physically contacting the screens on the kiosks. The new technology has been installed at six Auto Bag Drop (ABD) units, which were delivered by ICM Airport Technics, part of Amadeus. Heathrow Airport Process Improvement director Mark Burgess said: "We're preparing to welcome back more travellers, by looking for new and innovative technologies that will help to ensure the passenger experience remains safe and efficient in a post-Covid world."

The contactless solution has an infra-red proximity sensor deployed along the top edge of the bag drop screen, which can detect a passenger's finger within 3cm from the screen surface. ICM Airport Technics, which became part of Amadeus in 2019, has supplied more than 270 ABD units to Heathrow. ICM Airport Technics CEO Richard Dinkelmann said: "We're working closely with our airport and airline partners to deliver solutions that help them adapt passenger services to the new environment. Whether it's contactless bag drop, biometric boarding or off-airport check-in, we are working with airports to rethink how they can meet new traveller requirements."

Los Angeles International Airport (LAX), CA, has launched a new robotic ambassador for its online food and beverage ordering service – LAX Order Now. In partnership with Unibail-Rodamco-Westfield (URW), the LAX Order Now delivery service will pilot a two-wheeled, semiautonomous robot helper named NomNom. The cargo robot that will carry up to 18 kg of food as it follows behind delivery staff from AtYourGate, which delivers food ordered via LAX Order Now. The robot can move at speeds up to 9km/h and uses a series of cameras and sensors to recognise and follow its handler throughout the airport. LAX Order Now offers contactless order pickup from LAX restaurants, with optional delivery available directly to the gate areas in selected terminals. Guests can scan QR codes throughout the terminals or visit LAXOrderNow.com to browse menus, place an order and pay. When checking out, guests in eligible terminals can select the delivery option at checkout for a small additional fee. Guests will be notified on their mobile devices when orders are on their way and when they arrive in the designated gate area, and each participating restaurant will provide an estimated delivery time to help ensure food arrives prior to the customer's departure.

Stockholm, Sweden-based software company GpsGate has confirmed that the DigiMobi contract renewal by Airport Authority Hong Kong (AAHK) for Hong Kong International Airport (HKG). DigiMobi is a leading vehicle tracking services (VTS) provider in Hong Kong and a GpsGate customer for over a decade. HKIA has more than 200 aircraft parking bays and nearly 5,000 airport vehicles and ground support equipment including fuelling trucks, baggage tractors, and service vehicles. Since 2015, DigiMobi has provided vehicle tracking services to HKIA. The fleet management solution allows the airport authority to identify potential problems and solve them before they happen. The fleet management system includes all standard tracking features. It also includes apron road traffic detection and seamless indoor/outdoor tracking of baggage tractors. GpsGate Server displays the current traffic conditions on the apron through changing geofence colours, and the baggage tractors switch from GPS to Bluetooth & iBeacons for seamless outdoor/indoor tracking.

Publisher's note: The articles in this special report, compiled for **inter airport Europe**, are samples from the biweekly **Momberger Airport Information** newsletter, published since 1973. The newsletter is an advertising-free, global airport news service that consists of 8 modules and allows subscribers to customize their own newsletter package. The items in this report represent only a small sample of **Momberger Airport Information**. The modules that make up the biweekly newsletter are Airport Development (DEV), Calendar of Events (CAL), and the subscriber-selectable modules Airport Operations (OPS), 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 and to order an annual subscription, please visit <u>www.mombergerairport.info</u>