NEWSLETTER

PASSUR KNOW NOW™

PASSUR Aerospace, Inc.

Spring 2025
Volume 1, Issue 2

In The Know

AEROMEXICO CELEBRATES A KEY MILESTONE

PASSUR is an important contributor to Aeromexico's award of #1 On Time Performing Airline in the world

In 2024, Aeromexico was recognized as the global leader in on time performance, according to Cirium, a major supplier of aviation analytical data.

In it's 2024 On Time Review, Cirium said: "Aeromexico has consistently demonstrated superior on time performance, earning recognition as one of the most reliable airlines worldwide. In September, the airline achieved an OTP of 91.13%, a nearly 5% improvement from August's 86.54%. These results reflect Aeromexico's effective operational strategies, meticulous scheduling, and proactive approach to minimizing delays across its network."

PASSUR's ARiVA platform is an essential component of that outstanding achievement. You can read about how it contributes to Aeromexico's operational efficiency on page 3 in this issue of 'In the Know'.

Celebrating 25,000 Tow Operations on ARiVA

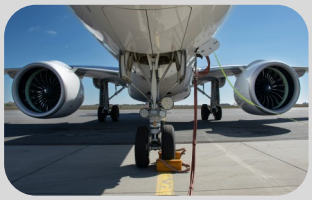
On March 7, Aeromexico hosted a celebration and recognition event at one of its maintenance hangars at Mexico City International Airport (AICM), to mark the occasion of 25,000 aircraft tows visualized and managed on the PASSUR ARiVA Software Platform through an operations procedure developed by Aeromexico. Aeromexico was honoring the ground operations aircraft tow teams, who received specialized training to activate each aircraft's transponder before each tow operation, to ensure that the aircraft movement is fully visualized on the ARiVA live operations map, and who manage the entire tow sequence on ARiVA software.

Here are photos from the celebration event held at the Aeromexico hangar operations facility at ACIM, as well as a visit from PASSUR CEO Brian Cook with Aeromexico senior operations leaders at Aeromexico's headquarters:

Photo left — Celebration and recognition of the Aeromexico ground operations team at Mexico City International Airport (AICM), to mark the occasion of 25,000 aircraft tows visualized and managed on the PASSUR ARiVA Software Platform through an operations procedure developed by Aeromexico.

Photo below right — Left to right: César Alejandro Vázquez, ground operations lead for Aeromexico at Mexico City International Airport (AICM); Juan Carlos Almanza, Director of AICM Operations/Underwing for Aeromexico; Ron Dunsky, Senior Vice President, Global Business Development, PASSUR Aerospace.

Photo left — Celebrating the ongoing, successful business partnership between Aeromexico and PASSUR Aerospace. Left to right: Aeromexico Chief Operating Officer Santiago Diago; Aeromexico Senior Vice President, Global Airports and Customer Service Alejandro Perez; PASSUR Aerospace CEO Brian Cook.



Click to view PASSUR's video about ARiVA at Aeromexico:

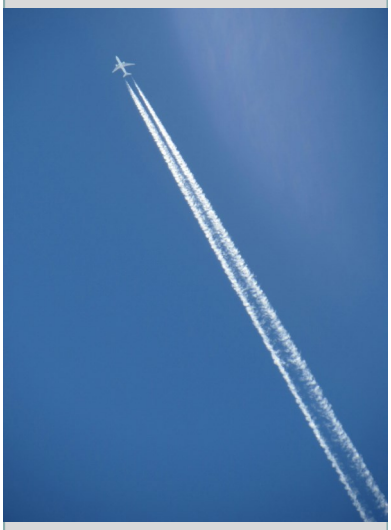
English version
Spanish version

INSIDE THIS ISSUE

HIGHLIGHTS

- Aeromexico launches advanced tow operations.
- xETA demonstrates improvements in forecasting.
- New Community Portal Solution includes a customizable dashboard with an array of interactive tools.
- Update on PASSUR product and technology pipeline and its benefits for customers.

INDUSTRY NEWS



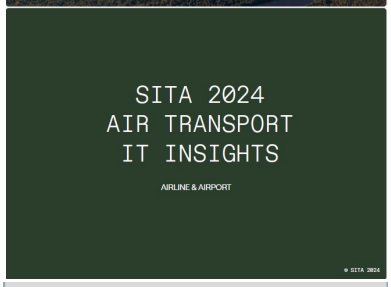
Emissions

ICAO adopts global framework

The International Civil Aviation Organization (ICAO) aims to cut CO_2 emissions in international aviation by 5% by 2030, compared to "zero cleaner energy use."

At its Third Conference on Aviation and Alternative Fuels, ICAO adopted a Global Framework for Sustainable Aviation Fuels (SAF), Lower Carbon Aviation Fuels (LCAF), and other cleaner energies. The Framework promotes harmonized regulations, equitable financing, and flexibility for states to address their unique circumstances. This effort builds on ICAO's 2022 pledge for net-zero carbon emissions by 2050. ICAO leaders stress the need for significant investments to achieve these goals while supporting countries with special needs.

ICAO's Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is the first global market-based measure for any sector and represents a cooperative approach that moves away from a "patchwork" of national or regional regulatory initiatives. Read about CORSIA here.



Airport IT Spending

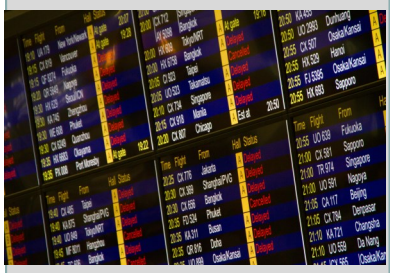
SITA 2024 Air Transport IT Insights now available

SITA's 21st annual IT Trends Survey, published in February 2025, offers insights into global airport technology trends. This year's research covers airports handling 23% of global passenger traffic.

Business intelligence is a key investment focus, cited by 47% of airports, with emphasis on data access and dashboarding. AI is the most transformative technology, primarily used to boost internal efficiencies (57%). AI adoption is also growing in aircraft turnaround (36%) and flight operations (30%), enhancing efficiency.

These trends highlight airports' increasing reliance on AI and data-driven solutions to optimize operations and passenger services. The survey underscores the industry's commitment to leveraging technology for improved efficiency and service quality.

You can download the report here.



Delays

New Automatic Refund Rules Take Effect

In October 2024, the U.S. Department of Transportation implemented new regulations requiring airlines to provide automatic refunds to passengers when their flight is canceled or significantly changed. This means passengers will automatically receive a cash refund if they decline a revised flight schedule, rebooking on an alternative flight, or other forms of compensation, such as flight vouchers.

Passengers are entitled to automatic refunds for flights that are canceled, significantly delayed, or experience a "significant change" for any reason—including "uncontrollable" factors such as weather. These new rules apply to flights to, from, or within the United States, regardless of whether they are operated by foreign or domestic carriers.

PASSUR ARiVA software and data services provide airlines with alerts and awareness tools to stay ahead of disruptions that can result in refund events if actions are not taken proactively.

AEROMEXICO LAUNCHES NEXT PHASE OF ADVANCED AIRCRAFT TOW OPERATIONS

For several years, Aeromexico has managed aircraft tow operations for their hub at Mexico City International Airport on PASSUR ARiVA software. This collaborative workflow management solution allows the airline to create a daily tow schedule for advance planning, then manage each individual aircraft tow through each step of its operational milestones. The Tow Manager solution has been a core contributing factor in Aeromexico's status as a global On Time Performance leader.

In summer 2024, Aeromexico launched the next phase of its advanced aircraft tow operations at Mexico City International Airport. Aeromexico ground crews have now been certified on all the airline's aircraft types and variants to activate the aircraft transponder during all aircraft tows. Transponders are now mandated "on" for all tow operations.

This new Standard Operating Procedure ensures that all aircraft tows are visible in real time on the PASSUR ARiVA visualization platform. Every single aircraft tow in the complex, congested Mexico City Airport operation is managed on ARiVA, with multiple stakeholders collaborating in real time – including Mexico air traffic controllers (SENEAM) and the airport operator (AICM) – enabling each to perform their role in the airfield operation without the need for repetitive radio communications, phone calls, texts or emails.

Through the day, aircraft can be added to the tow list (or removed) as needed. Tow operators manage tow operation "milestones" on their wireless mobile devices tablets from the cockpit by activating a sequence of "aircraft states" through a simple "electronic flight strip" interface – including creating a distinct "Tow ID;" indicating the start and end point of the tow; tracking the maintenance, tow team, and ATC tower components of the tow; and then tracking the actual tow status in real time. Once completed, airline operators can then use the ARiVA software to transfer the flight into a Departure Manager (DMAN) state for further departure sequencing.

"PASSUR is an important contributor to Aeromexico's award of #1 On Time Performing Airline in the world. Our optimized aircraft tow operation, managed by Aeromexico's skilled ground operations team on the PASSUR ARiVA platform, is an essential component of that outstanding achievement — part of a larger integration of the ARiVA platform into Aeromexico's operations. We are very pleased with the Aeromexico-PASSUR partnership."

Juan Carlos Almanza, Director of Mexico City International Airport Operations/Underwing for Aeromexico.

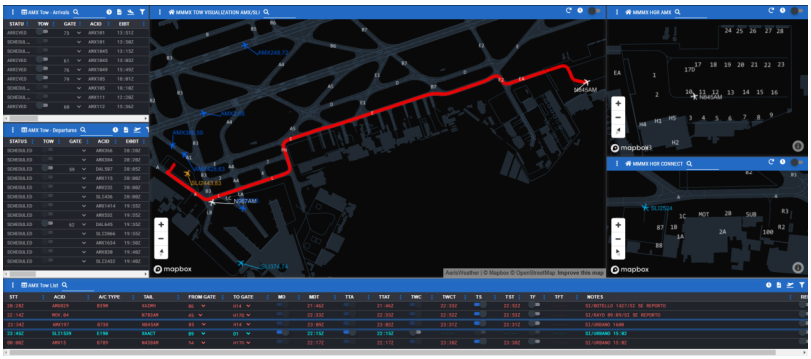
The Mexico City tow program uses standard ARiVA software capabilities, modified with collaborative input from the Aeromexico team. It ensures that tows are executed at exactly the right time, avoiding disruption of active flights, and supporting the most efficient delivery of the airline's schedule.

At a large, complex, high-demand airport like Mexico City International, with a lot of physical constraints, aircraft tows are essential for freeing up gates and repositioning aircraft. The tow operation is a key component of the airline's on-time and turn-time performance – and of its commitment to fuel conservation and reduced carbon emissions.

Recently, Aeromexico was named "the most on-time airline in the world"[1]. The Aeromexico tow operation, managed on the PASSUR ARiVA platform, is an essential component of that outstanding achievement. Aircraft tows are just one part of Aeromexico operation powered by ARiVA, which is also used to support gate optimization, taxi time optimization, and network integrity.

The successful implementation of the latest phase of the Aeromexico Tow Operation builds on the multi-year partnership between Aeromexico and PASSUR. Both organizations are proud to be collaborate on this innovative pairing of operational excellence and technology leadership.

1. *Cirium Aviation Analytics, 2024*



Below: one of the many highly configurable ARiVA layouts Aeromexico hub operations teams use to optimize airfield operations at Mexico City International Airport: left-side of the screen, a summary of all scheduled tows for the day (arr./dep.); center and right, live maps of the near-in airfield and ramps; bottom, dynamic interface to manage and track real-time tows through each operational milestone.

PRODUCT UPDATES

PASSUR's Next Generation xETA Service uses Machine Learning to Minimize the Effects of Disruptions on Airline and Airport Operations.

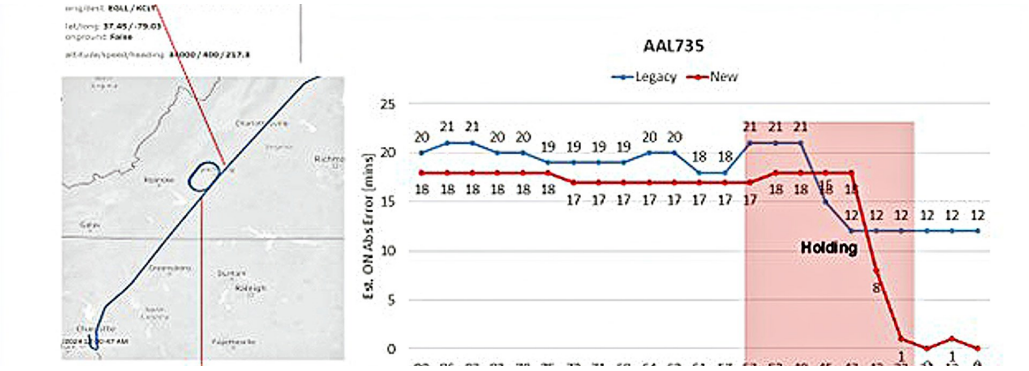
PASSUR's Third-Generation xETA Solution Revolutionizes Flight Forecasting: PASSUR has unveiled its third-generation xETA solution, powered by machine learning, to address the challenges of predicting accurate ETAs for flights that have been impacted by weather and traffic management disruptions. This latest version not only enhances overall forecast timelines and accuracy but focuses on improving predictions for the most disruptive flights, such as those impacted by re-routes and holding patterns.

Innovative Technology: At the core of the xETA solution is an advanced process known as ***Ensemble Learning by Decision Trees.*** This methodology leverages data such as airport flow, aircraft location, speed, altitude, and heading to predict outcomes with greater precision. A key innovation is the handling of missing data through a technique called "path-specific imputation," ensuring more reliable forecasts even when certain data points are unavailable.

Addressing a Critical Challenge: Flight disruptions, such as unexpected holding patterns caused by storms or other unforeseen events, present significant challenges for airlines and airports. While regular tracking of location, speed and route can manage routine operations, irregular flights often defy conventional forecasting methods.

These disruptions create a ripple effect, impacting passengers, ground crews, gate operations, and other resource allocation. For instance, knowing about a delay and the resulting impact on on-time performance in advance can allow personnel at airport to reassign gates or better coordinate luggage handling, and gate management resources towards minimizing the overall operational disruption.

Demonstrated Improvements in Forecasting: The new xETA system demonstrates measurable improvements in forecasting accuracy. For example, data from flight AA735 on September 1, 2024, illustrates how the enhanced system performs.



The grey chart on the left shows the aircraft route and holding pattern for this flight. The chart on the right shows time before touchdown in minutes and how much the predicted ETA varied from the actual time of arrival.

Legacy System (blue line): During the holding period, the previous xETA model improved its estimate by 10 minutes but still deviated from the actual arrival time by 12 minutes.

New AI-Driven System (red line): The updated model made slight adjustments to reduce initial errors before the holding pattern began. Halfway through the holding period, the system recalibrated to provide an improved forecast that was accurate to within one minute of the actual landing time 32 minutes from arrival.

Operational Implications

These enhanced capabilities have significant implications for airports and airlines. The improved forecast, available 30 to 60 minutes before arrival, falls within the critical "golden time" for decision-making. This window allows station managers to optimize gate assignments, coordinate ground crew schedules, and streamline resource utilization, reducing delays and improving the passenger experience.

Looking Ahead

Currently, PASSUR customers can conduct evaluations of the xETA predictive system. The fully integrated third-generation solution will be released in Q2 2025, promising to mitigate the impact of disruptions on flight operations with its advanced predictive capabilities.

By harnessing machine learning, PASSUR's xETA system represents a significant step forward in tackling the challenges of unpredictable flight disruptions, creating smoother operations for airlines and airports alike.

NEW PASSUR COMMUNITY PORTAL

PASSUR Launches Community Portal Solution for Airport Community Engagement

PASSUR recently announced the launch of a new Community Portal solution for our airport customers.

The Community Portal is a customizable toolset designed for PASSUR's airport customer community members to explore, understand, and communicate with the airport, information related to aircraft operations and its impact on them. The tool includes extensive analytical capabilities and provides users with information for their education and to submit community aircraft noise complaints.

The Community Portal contains access to the Symphony PublicVue website for real-time (or airport-imposed delay) flight tracks, historical playback, online complaint filing, and more.

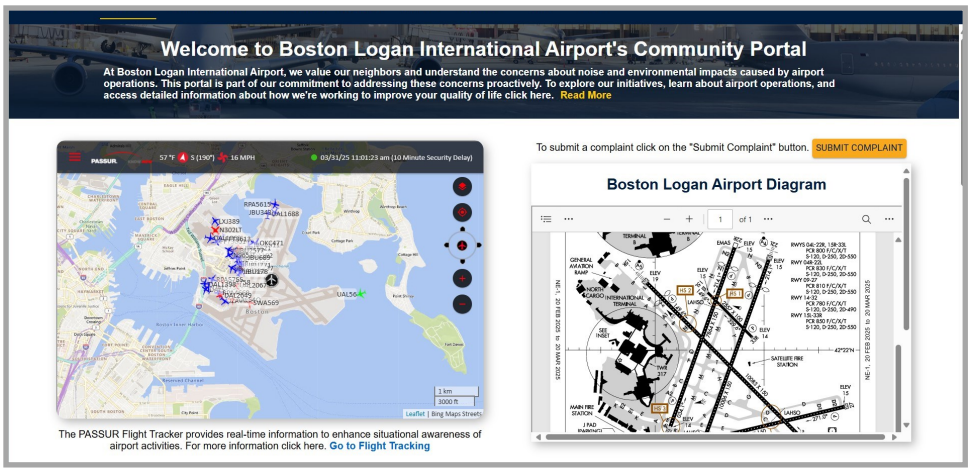
The Community Portal includes a customizable dashboard with an array of interactive tools.

The Community Portal is also integrated with PlaneNoise ComplaintBox for enhanced complaint dashboard visualization and graphics capabilities.

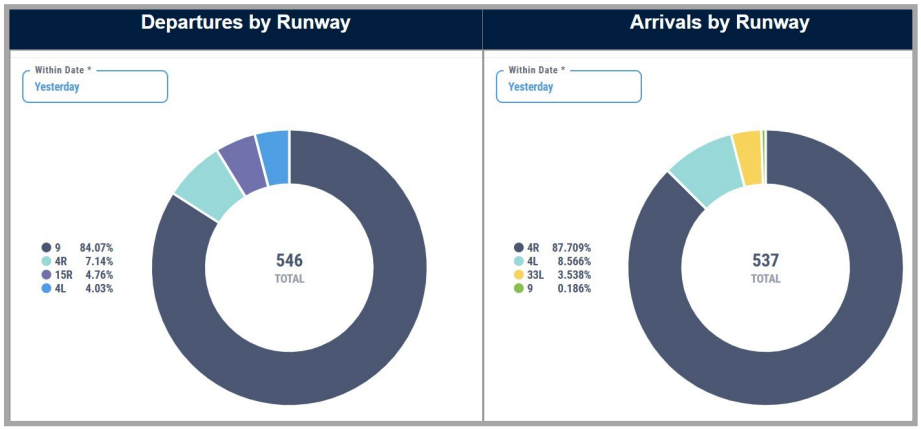
Out of the box, the Community Portal includes a customizable dashboard with an array of interactive tools and capabilities via gadgets. Gadgets include aircraft mapping tools, weather information, informational charts, airport news, FAQs, PlaneNoise Complaint Box integration, complaint entry, and more.

It also includes the ability to add other useful links from your airport, the FAA, and other sources you wish to provide to the greater community. Its modern UI can be tailored to an airport's specific needs and the airport has the ability to choose which gadgets to display in their dashboards, along with how they are organized.

For more information on how the Community Portal can benefit your community relations please contact us at sales@passur.com



Community Portal users can view real-time and historical flight track and airport information.



Airports can fully customize the types of operational data and graphics they provide to the airport community members.

CUSTOMER NEWS

PASSUR wins Massport Enterprise Contract

PASSUR is pleased to announce that it secured a renewal enterprise contract with Massport to maintain and manage the Noise and Operations Monitoring System (NOMS), Operations and ADS-B tracking systems after a competitive bid process. The PASSUR NOMS, Ops and ADS-B solutions will provide Boston Logan International Airport (BOS), Hanscom Field (BED), and Worcester Regional Airport (ORH) the most complete, advanced and integrated set of capabilities designed to meet Massport's current and future operations and noise monitoring technical specifications and is in full compliance with all relevant FAA guidance, orders and advisory circulars.

PASSUR and its legacy organizations have been providing the key NOMS, operations and aeronautical billing solutions to Massport for 20 years and has supported and continued to adapt our solution portfolio to meet the evolving needs and challenges of Massport through the changes in its operations and the surrounding airspace.

Denver International Airports Selects PASSUR for Noise and Operations Monitoring System (NOMS)

PASSUR was recently selected by Denver International Airport (DEN) to continue to maintain its NOMS system at the airport for the next three years with two option years. As part of the contract, DEN will utilize PASSUR's EnvironmentalVue, PublicVue, Community Portal and Contours with VNMs software solutions.

In addition, PASSUR will replace and maintain DEN's 26 Noise Monitoring Terminals (NMTs) at different locations around the airport. PASSUR was selected after a competitive NOMS evaluation.

PASSUR to deploy ADS-B Vehicle Tracking at Dekalb Peachtree Airport

Dekalb Peachtree Airport (PDK) recently selected PASSUR to provide the installation, support, and maintenance of Vehicle Movement Area Transponders (VMATs) to be deployed on PDK airport vehicles. The PASSUR VMAT allows accurate, real-time tracking of vehicles on the surface area of the airport, providing increased operational situational awareness and safety. VMATs can be deployed at any size airport to improve situational awareness for the aircraft pilots, vehicle operators, Air Traffic Control and Ramp Tower personnel and operations staff.

ARiVA Global Feed Updates

SITA — Through SITA's Mission Watch platform, which is used primarily by airline dispatchers, PASSUR's ARiVA Global Feed (AGF) is now powering operations for more than 3,500 aircraft worldwide. AGF is also powering SITA Borders' Intelligence and Targeting capability; and helping to optimize SITA air-to-ground communications services.

CAE — Through CAE's FlightExplorer Platform, also used primarily by airline dispatchers, PASSUR's ARiVA Global Feed (AGF) is now powering dozens of airlines globally. Recently, CAE customer LATAM Airlines Group added satellite surveillance coverage for 100% of its global fleet through AGF.

Aeromexico — The AGF Predictive Services data stream is powering Aeromexico's operations into Mexico City International airport, integrated into the airline's key operational systems at its largest hub to ensure timely allocation of ground operations capacity and staff.

American Airlines — The AGF Predictive Services data stream is powering all flights in American Airlines US domestic operation, into hundreds of airports across the country. This capability is playing a key role in ensuring the just-in-time allocation of ground handling teams to arriving aircraft.

PASSUR PRODUCT AND TECHNOLOGY ROADMAP UPDATE

PASSUR is continuously investing in its product portfolio, with a robust pipeline of innovative enhancements and releases that range from essential R&D, to underlying core technology enhancements that benefit all products, to the actual data and software products themselves that are consumed directly by our customers. The following are samples of a much larger list of ongoing work.

Core Technology Enhancements (benefitting all ARiVA products, all ARiVA customers)

Machine Learning (ML-Driven Predictive Technology: Continued planned releases driven by enhanced use of ML for predicting aircraft behavior and status, as well as airspace and airport conditions that are driven by demand and capacity forecasts.

Advanced Geofencing Engine: New releases in our capabilities that generate precise geographic delineations of specific aeronautical spaces ("Region of Interest" or "Polygons") in order to generate data about aircraft movements and milestones within each relevant geographic zone. The ARiVA geofencing engine is highly sensitive and configurable, ensuring exact measurements needed to support both real time and archival milestones, metrics, reporting and analyses.

ADS-B Spoofing, Jamming, and Jitter: Continued releases in refined business logic to identify and filter out conditions – both deliberate and not – that create anomalous flight position reports.

Synthetic Logic: Continued enhancements in our process that uses AI, Machine Learning, and other tools to complete missing data or add more detail. For example, synthetic logic correlates aircraft tracking data to physical runway, gate, hard stand and parking positions to calculate detected actual touch time, actual takeoff time, actual on-block time, actual off block time, as well as landing and departure runway information.

Specific Capabilities for ARiVA Global Feed (AGF) Data Services AND ARiVA Software

FAA SWIM Services: PASSUR is one of only a handful of organizations selected by the FAA to integrate the newest delay management programs like Terminal Flight Data Manager (TFDM) and En Route Time-Based Flow Management (TBFM), which includes enhanced information about flight status and delay, ATC delay programs, airport status, and airport/TRACON constraints. These services are essential for any airline operating in the US.

Data Warehouse: Further rearchitecting of our global data warehouse – which includes all data about global flights, airports, and airspaces – to support user-directed reporting and analytical capabilities accessed in both AGF and ARiVA Software.

Enhanced Geofence Analytical Tools: Specific reports and analytical tools to support key performance metrics driven by the geofence engine, e.g., deice pad/slot throughput reports, gate latency, wait for park, runway occupancy, taxi times, flight delays, and aircraft separation.

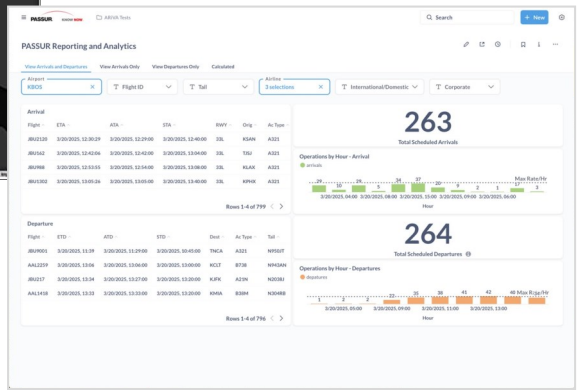
Further rearchitecting of our global data warehouse to support user-directed reporting and analytical capabilities.

ARiVA Software Only

Visual NOTAMs: enables a geospatial representation on the ARiVA airport map of the traditional text-based airport NOTAMs, providing a visual context to conditions and constraints at a given airport for all aviation stakeholders.

Gate Management: Further advances in our gate utilization and optimization module.

Departure Metering and Sequencing: Further enhancements in our module that enables dynamic reallocation of departure demand based on constraints and delay programs.



Above—Visual NOTAMs: Example of the integration of the NOTAMs map visualization capability will be represented in the ARiVA software platform – providing a visual context to conditions and constraints at an airport for all aviation stakeholders on ARiVA.

Right—Dashboards and Reporting: Rendition of the planned live and historical data dashboarding and analytics capability planned for ARiVA – user-directed access to operational metrics.

EVENTS

PASSUR representatives are attending these upcoming events. (Click for information)

April 8-10
Passenger Terminal Expo
Madrid, Spain

May 13-15
Airspace World
Lisbon, Portugal

May 14-15
Aviation Festival of the Americas
Miami, FL USA

May 15-17
ACI Asia-Pacific & Middle East
New Delhi, India

June 8—10
AAAE Conference
Atlanta, GA USA

Let us know if you can join us—contact sales@passur.com

Follow us on LinkedIn Facebook and **www.passur.com**

CONTACT PASSUR

PASSUR Aerospace, Inc.
3452 Lake Lynda Drive
Suite 190
Orlando, FL 32817
USA

E-mail: sales@passur.com

PEOPLE @ PASSUR

Employee Spotlight—Marianne Grimaldi, Senior Quality Assurance Data & Software Analyst.

With over 25 years of experience as a Software Engineer and Quality Assurance Analyst, Marianne has honed her expertise across the accounting, human resources, advertising, and aviation industries. For the past 18 years, she has been an integral part of PASSUR, currently serving as the Senior Quality Assurance Data Analyst for our Landing Fee Management (LFM) software.

In the dynamic field of flight data management, Marianne's meticulous attention to detail and unwavering commitment to data integrity ensure that PASSUR's LFM clients can confidently depend on our data to support their revenue cycles. Recently, Marianne expanded her role by joining the ARiVA Global Feed subscription maintenance team, further demonstrating her dedication to precision and data excellence.

PASSUR Expands its International Team.

PASSUR is excited to announce the addition of Ilya Gutlin to our international business development team as we continue to expand our global presence. Based in Singapore, Ilya will play a key role in promoting the PASSUR brand and driving business development across the Asia Pacific region.

In addition to his role with PASSUR, Ilya currently serves as the CEO of aeroLABS, an innovative Customer Data Platform company focused on aviation. He is also actively involved with SMEs and start-ups through his work with AKiDO Global, where he provides strategic guidance, targeted investment, and commercial expertise to accelerate growth.

Ilya also holds board and advisory positions in several aviation companies, underscoring his commitment to fostering innovation and achieving business success in the industry. Previously, Ilya held senior roles at SITA and Elenium, with responsibilities spanning Asia, Europe, and global markets.

PASSUR is also pleased to welcome Bruce Magallón to our international business development team. Based in Mexico, Bruce will lead efforts to expand PASSUR's clientele and solutions across Latin America.

Bruce brings extensive expertise in solving complex aviation challenges, particularly in Air Traffic Management (ATM) and safety. Most recently, as a consultant with the TAG Aviation Group, he developed innovative solutions to create secure, streamlined, and eco-conscious aeronautical ecosystems. His work included airspace master plans for Mexico and Costa Rica, as well as launching initiatives to enhance air traffic management across Latin America and the Caribbean.

Previously, as Director of Air Traffic Management for SENEAM in Mexico City, Bruce oversaw air traffic control operations at 59 airport towers, 36 Approach Control Units, four Area Control Centers, and managed 895 air traffic controllers handling over 2.2 million operations annually nationwide.