

ACI World AIRPORT DEVELOPMENT NEWS

A service provided by ACI World in cooperation with Momberger Airport Information www.mombergerairport.info
 Editor & Publisher: Martin Lamprecht martin@mombergerairport.info Founding Editor & Publisher: Manfred Momberger

Contents

Focus on North America & The Caribbean	1
Other Regions	9
Green Airports	11

Focus on North America & The Caribbean

CANADA

In his annual address to the Greater Vancouver Board of Trade (GVBOT), Craig Richmond, President & CEO of **the Vancouver Airport Authority, announced another year of record-breaking growth at Vancouver International Airport (YVR)**. In 2017, YVR welcomed 24.1 million passengers, an 8.4% increase. "This growth puts YVR as one of the fastest growing airports in North America," said Richmond. Growth projections show 31 million passengers by 2022, with 29 million passengers targeted for 2020. YVR has also updated its target to serve 144 destinations by 2020, up from 127 non-stop destinations worldwide at present. The change in forecasting is attributed to a number of factors including a strong British Columbia economy and an impressive year for new air services due to ConnectYVR, YVR's five-year rates and charges programme.

In keeping with YVR's innovative approach to business and forward-looking strategy, Richmond spoke about a number of unique ways to address the growth, including: **Remote Stand Operations (RSOs)**. As YVR continues to grow, cost and operationally efficient bussing operations will be added. The addition of a bus stand costs about CAD 12 million, a quarter the price of a contact gate, which is around CAD 50 million. **Primary Inspection Kiosks (PIK)**: The new self-service border kiosks are capable of processing nearly 100% of all international travellers and have greatly reduced wait times. Introduced by Vancouver Airport Authority's Innovative Travel Solutions, the team has sold over 1,300 kiosks to 39 airport and seaport locations in North America, the Caribbean, and Europe. Profit from the kiosks is reinvested directly into the airport.

Capital Plan: Over the next three years, CAD 1.7 billion will be spent on major projects that enhance the airport experience. Projects include YVR's Pier D expansion in the International Terminal, which - once complete in 2020 - will increase capacity to accommodate eight additional aircraft; four contact gates, and four bussing gates. In addition, the new **Central Utilities Building (CUB)** will consolidate YVR's heating, cooling and backup electrical system, and a new parkade will feature a range of sustainability initiatives such as a rainwater harvesting system, electric vehicle charging stations, and an automated guidance system.

YVR is owned and operated by Vancouver Airport Authority, a community-based, not-for-profit organization that is governed by a non-political Board of Directors appointed from the community. Every dollar earned by the Airport Authority is reinvested into the operation and growth of the airport to improve facilities, enhance services, reduce costs, and support community initiatives. YVR plays a key role in driving economic benefits to the region. This includes helping to facilitate CAD 16.5 billion in total economic output, CAD 8.4 billion in total Gross Domestic Product, CAD 1.4 billion in total Government revenue across B.C., and more than 24,000 jobs on Sea Island. Fifty-six airlines serve YVR, connecting people and businesses to more than 127 non-stop destinations worldwide. YVR was voted 'Best Airport in North America' for the eighth consecutive year in the Skytrax World Airport Awards in 2017.

ACI World AIRPORT DEVELOPMENT NEWS

A service provided by ACI World in cooperation with Momberger Airport Information www.mombergerairport.info
Editor & Publisher: Martin Lamprecht martin@mombergerairport.info Founding Editor & Publisher: Manfred Momberger

Edmonton International Airport generated significant growth along diverse business lines in 2017, serving more than 7.8 million passengers and moving forward with many impressive cargo, commercial development and infrastructure projects that will benefit the local and regional economy. The airport is focused on stimulating long-term growth for the Edmonton Metro Region and had attracted hundreds of millions of dollars in private investment in 2017 in many different lines of business, demonstrating strong confidence in the airport and the regional economy, said Tom Ruth, the airport's President & CEO, adding: "Our passenger numbers have grown, particularly in domestic and transatlantic-international flights, as travellers continued to support our non-stop flights enabling us to drive regional business growth."

Edmonton Airport celebrated multiple new air services offerings in 2017. The overall passenger counts grew by 3.8% over 2016's numbers. Domestic travel increased by 6.9%. Edmonton maintained its international traveller numbers, with the region continuing to support the non-stop services of Icelandair to Reykjavik, KLM to Amsterdam, and the seasonal WestJet service to London-Gatwick. Significantly, the number of inbound international travellers using these flights to travel to Edmonton increased by over 20%, while U.S. travel experienced a net 4.0% decrease in 2017.

On the ground, multiple new warehousing facilities provide over 250,000 ft² of additional capacity. Aeroterm opened its new CAD 10 million logistics distribution centre, including 50,000 ft² of airside flight kitchen and air cargo support facilities. Tenants in this new facility include Gate Gourmet, ATS and Swissport.

Construction is under way on the new, 25,000-ft² freight forwarder building for Runway Developments. The facility is for mixed-use cargo, with leasing opportunities available for customs brokers, logistics companies, and freight forwarders. The building will be ready for occupancy in the first quarter of 2018 and opens with committed tenants like Flying Fresh Air Freight, Farrow and Livingston International. In the air, mainstay carriers Air Canada, AF/KLM, Canadian North, Cargojet, DHL, FedEx, and Icelandair executed strong performance and their services offerings were supplemented by Nippon Cargo Airlines, Korean Air Cargo, and Atlas Air operating multiple transpacific and transatlantic charter services continuing the expanding role of Edmonton as an international cargo centre. All cargo facilities operate within the Port Alberta Foreign Trade Zone (FTZ), reducing trade barriers and enhancing access to key Canadian markets. The airport is open 24 hours a day, seven days a week – with no curfews, operational restrictions or slot restrictions.

2017 ended with strong growth for Québec City's 'Jean Lesage International Airport' (YQB).

The number of passengers travelling through the airport increased 3.4%, peaking at 1,670,880, despite repairs to the main runway that limited access for large aircraft from 23 May to 9 August 2017. "With an average of more than 1,000 extra passengers a week, we're very happy with this growth, which shows yet again that people in the greater Québec City area are choosing YQB for their air travel," said Gaëtan Gagné, the airport's President & CEO. "These results are no accident. They reflect our hard work and major investments in our facilities to give our passengers a world-class airport. In 2017, domestic flights were a major success story. Developments like the addition of more than 70 WestJet Encore flights a week to Montréal and Toronto gave local passengers more frequent service to these destinations and worldwide access, thanks to code-sharing. Our main runway was repaired on schedule, allowing us to resume flights to Europe in fall 2017," added Gagné.

With a new international terminal to better serve Québec City and meet the challenge of fast-growing passenger traffic, YQB has emerged as a driver of economic development for the greater Québec City area. Some dozen airlines offer multiple routes to destinations in North America, Central America, the Caribbean, Mexico, and Europe, with daily service to major hubs in north-eastern North America. -- Aéroport de Québec Inc. (AQI) is the private non-profit organization that has managed, operated, maintained, and developed YQB since 1 November 2000.

ACI World AIRPORT DEVELOPMENT NEWS

A service provided by ACI World in cooperation with Momberger Airport Information www.mombergerairport.info
Editor & Publisher: Martin Lamprecht martin@mombergerairport.info Founding Editor & Publisher: Manfred Momberger

With a jump in passenger traffic of 80% in 2017 over 2016, Hamilton's 'John C. Munro International Airport' has become the country's fastest growing airport. It handled 599,146 passengers in 2017, up from 333,368 in 2016. Cathie Puckering, the airport's acting President and CEO, said she expects continued growth in coming years, thanks to new services for 2018. The airport also continues to be the country's largest overnight express cargo hub. In 2017, its cargo volume rose 13% as it asserted itself as a strategic gateway for facilitating goods movement from coast to coast and across the globe. "This is an exciting time for Hamilton International as more passengers discover the ease and convenience of travelling from Hamilton," Puckering said in a news release. "The passengers are originating from Hamilton and surrounding areas including Toronto and beyond thanks to the wide variety of destinations being served. Low-cost carriers have opened leisure air travel to millennials and young families which can be seen in our airport terminal daily." -- The airport invested almost CAD 5 million to improve and upgrade facilities in 2017, including projects such as a new covered and heated international walkway, improved and convenient vehicle parking pay stations, rehabilitation of the roadways and runways and renovations to the duty-free location.

U.S.A.

Los Angeles World Airports (LAWA) has awarded a USD 336.5 million contract to extend three terminals and build some infrastructure for the future peplemover, an elevated train that will shuttle passengers around the airport. Austin Commercial will design and build the extensions that will see the construction of seven structures from the airport's nine terminals. The peplemover will also provide a direct link between the airport and Metro's Crenshaw and Green lines via the future Airport Metro Connector 96th Street Station. Peplemover trains are scheduled to run every two minutes, 24/7, for free. The terminal extension project involves building three new structures to expand the terminal space, creating room for walkways, escalators, elevators, and other installations necessary to help people move between the terminals and the peplemover trains. "These new structures will also provide space that can be used for offices, baggage claims, restrooms, airport lounges, or other airport uses," LAWA, which operates LAX, said in an announcement. LAWA says the extension project will enlarge Terminals 5 and 6, plus the Tom Bradley International Terminal. The project is expected to begin construction in early 2019 and be complete in 2021. Four additional terminal expansions will be built on a different timeline by American Airlines, Delta Air Lines, and Southwest Airlines at the other terminals. Those are expected to be operational by 2023, when the people mover comes online. LAWA Planning and Development Group Deputy Executive Director Cynthia Guidry added: "**By connecting LAX by an elevated train to Metro, parking, and other transportation options, we will usher in a new era of convenience and accessibility for all who visit LAX.**" "This project will connect our guests to our regional transportation system, and create construction jobs, ensuring that the local workforce is part of building the future of LAX," LAWA CEO Deborah Flint says: "I'm pleased to begin 2018 with a significant advancement of the LAMP programme, one that will create a world-class experience when travelling to and from the airport, and within our terminals."

Construction has started on the first phase of the USD 2.1 billion South Terminal at Orlando International Airport. The first phase - an effort to relieve pressure on the existing North Terminal - will see the addition of 16 gates as a prelude to the 120 total gates planned for the project. Airport officials said the new terminal would make it possible for the airport to handle 60 million to 80 million passengers a year, which will put it on par with Atlanta's Hartsfield-Jackson Airport. Orlando's airport passenger capacity is 38 million, although it processes more than 44 million per year at present. The South Terminal construction marks the first time in ten years that Orlando International Airport has added gate and terminal space. The project is expected to employ 2,200 construction workers at peak activity and is scheduled for completion in 2020. In June 2017, the Greater Orlando Aviation Authority (GOAA) approved a USD 350 million increase to the terminal's price tag, citing inflation and rising labour and material costs brought by a robust local construction economy, a high-priced baggage system, and other high-end technology necessary to

ACI World AIRPORT DEVELOPMENT NEWS

A service provided by ACI World in cooperation with Momberger Airport Information www.mombergerairport.info
Editor & Publisher: Martin Lamprecht martin@mombergerairport.info Founding Editor & Publisher: Manfred Momberger

complete the project. Airport officials said they would pay USD 149 million of the extra costs with the USD 70 million in user fees it collects each year.

The first phase of the project was to have gone to PCL Construction, but GOAA cancelled the company's contract due to questions around its cost-savings strategies and its alleged attempt to shift too much risk back to the airport. At the time, GOAA said the joint venture between Kiewit and Turner Construction would work on the second phase, which will tackle runway and taxiway infrastructure, loading bridges, landscaping, lighting, concessions and security.

Orlando International Airport has proactively planned for this scenario for the past 30 years as part of a comprehensive, long-term strategy. A USD 3.5 billion capital expansion programme is well under way thanks to a USD 923 million bond issue, the largest in the airport's history. AA ratings from the three major rating agencies validated our board's fiscal stewardship.

Phase 1 of the expansion - the South Airport Automated Peoplemover complex and a six-storey, 2,400-space Parking Garage C – opened in November 2017 and is already helping to ease overcrowding. Passengers can check in remotely, print boarding passes for participating airlines, and take the new people-mover train right to the Main Terminal. Construction on the Intermodal Terminal Facility, which will serve Brightline train connections to West Palm Beach, Fort Lauderdale and Miami, has also been completed. When Brightline arrives at the airport, Orlando will be the only airport in the United States to have an on-airport hub for intercity rail.

North Terminal improvements have begun, too, including an expanded lobby, international arrivals facilities, new self-service kiosks, and an upgrade of the baggage-handling systems. **The North Terminal Complex projects are to be completed by year-end 2018 - as construction moves forward on the new South Terminal, which is anticipated to come on line in 2020.** To accommodate growing international traffic, the airport needs more Federal personnel for more efficient processing.

The Port Authority of New Jersey & New York took on the replacement of the LaGuardia Airport Central Terminal B by handing over the design, financing, construction and operations to LaGuardia Gateway Partners (LGP), the private piece of a public-private partnership (P3), a USD 4 billion project. Also, at LaGuardia, Delta is building a USD 4 billion terminal. Delta will finance USD 3.4 billion of the 37-gate project and the Port Authority will pay for the rest. Taken together, the USD 8 billion of new terminals is the biggest airport construction undertaking since Denver International was completed in 1995.

The Allegheny County Airport Authority is searching for a design team for the Pittsburgh International Airport's USD 1.1 billion terminal modernization programme. The plan includes a three-level, 632,000-ft² main terminal, expanded security checkpoint, improved baggage-handling system, and new layouts for passenger check-ins and international arrivals. The landside and airside terminals will be connected, thereby eliminating the existing tram system. Twelve new gates will be added to the 39 ones in operation. Other features will include a six-storey, 4,500-ft² parking garage that will double as a rental-car operations facility, a ground transportation centre, parking, and an internal road network. -- An architect-engineer will be chosen likely by early summer 2018; a contractor will be selected later. Construction is slated to begin in 2019 and be completed in 2023.

In November 2017, Kansas City voters decided to push forward with a USD 1 billion renovation of the city-owned airport. The City Council had voted to void a memorandum of understanding with Edgemoor Infrastructure & Real Estate, the company selected to design a new, single-terminal Kansas City Airport. According to press reports, a proposed community benefits package seems to have been the reason for the dissent. The City may be negotiating with another firm in the future for development or may resume negotiations with the original firm. An updated MoU with the full city council is awaiting approval or rejection.

ACI World AIRPORT DEVELOPMENT NEWS

A service provided by ACI World in cooperation with Momberger Airport Information www.mombergerairport.info
Editor & Publisher: Martin Lamprecht martin@mombergerairport.info Founding Editor & Publisher: Manfred Momberger

Tampa International Airport held a ribbon-cutting and dedication ceremony on 7 February 2018 for its new SkyConnect peplemover system and a 2.6 million ft² rental-car centre. "This is a great day for Tampa Bay," TIA CEO Joe Lopano said. "This project is worthy of our history and will be admired just as we admire designs from the past." The 1.4-mile SkyConnect system links the main terminal to the economy garage and a new rental-car centre with 16 rental companies, which opened on 14 February 2018. From one end to the other, the ride takes less than 5 minutes, and the train can carry 2,700 passengers an hour, but Gov. Rick Scott said the economic effects of the project will be felt for years to come. "It's making it a place where people want to work. It's making it a place where people want to come here as tourists," Gov. Scott said. The peplemover system and rental-car centre are expected to cut down traffic around the airport. With these elements complete, the USD 971 million first phase of the airport expansion is coming to a close.

Mitsubishi Heavy Industries built the SkyConnect electric, rubber-tired cars at a factory in Japan. "They will not only be supplying the trains, they will be contributing to local jobs because they will be maintaining and operating the trains," said Ken Okaniwa, consul general for Mitsubishi Heavy Industries. In addition to the new peplemover system and rental-car centre, the airport has redone its main terminal transfer level, adding 55,000-ft², including four outdoor terraces. The airport also has completed work on many of the 69 new shops and restaurants. With the first phase of a nearly USD 1 billion expansion wrapping up, the airport will be ramping up the second phase, which includes the construction of new curbsides and a commercial development area. Phase 3 will include construction of a new airside with additional gates. Once finished, the airport will have the ability to serve 34 million passengers a year.

Turner Construction Company and Flatiron Construction have been chosen as the joint venture to manage the USD 700 million expansion of Denver International Airport, which is part of the airport's nearly USD 1.5 billion expansion programme. The project will add more than 530,000 ft² (49,238 m²) to Concourse A and 91,000 ft² (8,454 m²) to Concourse B. The expansion will also include the addition of 16 aircraft gates and two international nodes, with provisions for three more. Construction was scheduled to begin in February 2018. Aaron Wiebelhaus, Vice President & General Manager at Turner, commented: "Together with our partner Flatiron, we're gearing up to streamline and enhance the passenger experience for the more than 58 million travelers who fly to, from, and through Denver every year." Eric Taylor, Vice President of Flatiron's Central Division, added: "We are proud to be part of the team expanding and continuing the growth of Denver International Airport. We are also glad to be partnering once more with our sister company, Turner, as their vertical construction experience is a strong complement to our heavy civil expertise. Our selection as a joint venture reflects our past shared success as well as the trust and confidence placed in us by the city and county of Denver."

For the seventh consecutive year, passenger travel at Seattle-Tacoma International Airport has set a record. Demand for air travel at Sea-Tac Airport increased 41% the last five years, rising from 33.2 million passengers in 2012 to 46.9 million passengers in 2017. Increased demand for air services means more airport-related jobs and local economic activity. A new airport economic impact analysis by Community Attributes Inc. found that the airport supports USD 22.5 billion in total economic activity, 19,100 jobs at the airport, and a total of 151,400 jobs directly or through multiplier effects. When all 350 airport employers are combined, the total number of on-site jobs makes Sea-Tac Airport the 5th largest employer in King County.

"It takes a highly skilled village to serve 46 million passengers while simultaneously building world-class facilities," said Courtney Gregoire, Port of Seattle Commission President. "Record-breaking demand is not enough. We also need to deliver record-breaking results for local businesses, local workers, and neighbourhoods closest to the airport. Between airport construction and airport-related development in the area, we are partnering with communities to make even closer connections on job and business opportunities."

ACI World AIRPORT DEVELOPMENT NEWS

A service provided by ACI World in cooperation with Momberger Airport Information www.mombergerairport.info
Editor & Publisher: Martin Lamprecht martin@mombergerairport.info Founding Editor & Publisher: Manfred Momberger

The airport is currently undertaking USD 2 billion in construction projects aimed at serving more passengers and improving the travel experience. It further expects to spend USD 3.2 billion on capital development between 2017 and 2022. **In 2017, the airport broke ground on the new International Arrivals Facility and North Satellite Modernization, major projects designed to meet growing demand, enhance the passenger service, and provide more dining and retail options to travellers.** On 8 February 2018, the airport started a new high-profile USD 17 million renovation to add 10,000 ft² to the Central Terminal dining area. No taxpayer dollars are used to fund airport projects.

"In addition to increasing its economic development programmes, the Port of Seattle has expanded its community development investments in neighbourhoods most affected by a busier airport. Recently the Port of Seattle created a new Airport Communities Ecology Grants programme, began offering airport advertising opportunities for neighbouring cities, established a local cities stakeholder roundtable, and became an active participant in a University of Washington study to examine the health impacts of ultra-fine particulates from aircraft. The Port of Seattle is also involved in efforts to create a similar study at the Federal level.

While President Trump is pursuing his project of a wall between the U.S. and Mexico, **Arizona is proposing 'Sky Bridge Arizona', an international air cargo hub to house both Mexican and U.S. customs.** The USD 230 million scheme is based on the imminent establishment of a joint U.S.-Mexican customs facility at Phoenix-Mesa Gateway Airport (AZA) to expedite customs clearance. Arizona's Governor Doug Ducey announced that the first-of-its-kind service will enable e-commerce companies, manufacturers and other commercial interests conducting business in Mexico and throughout Latin America to more efficiently and cost-effectively transport goods between countries, while ensuring proper inspections and safety controls. At full build-out, the park could encompass between 325,000 and 465,000 m² of office, warehouse, logistics/cargo, hospitality, and retail space on a 360-acre site. The project is expected to increase cargo flights out of AZA by 2,000 a year, eventually reaching 10,000 by 2036. Currently, Phoenix-Mesa has some passenger services by low-cost carrier Allegiant Air. Website: www.gatewayairport.com

JAMAICA

MBJ Airports Ltd, subsidiary of Mexico's Grupo Aeroportuario del Pacífico (GAP), has signed loan agreements with The Bank of Nova Scotia Jamaica Ltd and The Bank of Nova Scotia. The loan proceeds will be used to fast-track Montegoa Bay Airport's Capital Development Programme for 2018 and 2019, as well for other investments. The airport wants to provide better amenities for passengers and airline crew, both in the terminal and on the taxiways. The improvement programme comes as Sangster International Airport is reporting a record throughput of 4 million passengers in 2017, up 8.4% year-on-year. The rehabilitation of the taxiways and apron by Mandeville-based contractor, S&G Road Surfacing Materials, began in 2017 and will be completed in 2018. The design of the ticketing hall has been completed and a contractor has been selected for the renovation, but MBJ is awaiting Gapproval to start the project. Other infrastructure improvements to be implemented in 2018 include the replacement of air-conditioning chiller units and an expansion of the airport's commercial space.

The loan amount of USD 40.0 million is available for disbursement up to 24 months from the closing date and will be utilized as per the progress of the capital works. The characteristics of the loans are as follows: I) Loan from Bank of Nova Scotia Jamaica Ltd Principal: USD 11.5 million; interest rate: Libor plus 285 basis points; interest period: monthly maturity: 7 years (a) two-year bridge period from the initial disbursement (b) fine-year period fully amortized over term; repayment: Ten equal semi-annual payments of USD 1.15 million, following the two-year bridge period; disbursement fee: 0.35% payable at closing

Loan from Bank of Nova Scotia - Principal: USD 28.5 million; interest rate: Libor plus 285 basis points; interest period: monthly maturity: 7 years (a) two-year bridge period from the initial disbursement (b)

ACI World AIRPORT DEVELOPMENT NEWS

A service provided by ACI World in cooperation with Momberger Airport Information www.mombergerairport.info
Editor & Publisher: Martin Lamprecht martin@mombergerairport.info Founding Editor & Publisher: Manfred Momberger

five-year period fully amortized over term; repayment: ten equal semi-annual payments of USD 2.85 million, following the two-year bridge period; disbursement fee: 0.35% payable at closing

Grupo Aeroportuario del Pacífico, S.A.B. de C.V. (GAP) operates twelve airports throughout Mexico's Pacific region, including the major cities of Guadalajara and Tijuana, the four tourist destinations of Puerto Vallarta, Los Cabos, La Paz, and Manzanillo, and six other mid-sized cities: Hermosillo, Guanajuato, Morelia, Aguascalientes, Mexicali, and Los Mochis. In February 2006, GAP's shares were listed on the New York Stock Exchange under the ticker symbol 'PAC' and on the Mexican Stock Exchange under the ticker symbol 'GAP'. In April 2015, GAP acquired 100% of Desarrollo de Concesiones Aeroportuarias, S.L., which owns a majority stake of MJB Airports Ltd, a company operating **Sangster International Airport in Montego Bay, Jamaica**, the third largest airport in the region and an important gateway into the island, **facilitating 74% of traffic to Jamaica**. Over the years the Airports passenger throughput has been growing steadily. With more visitors arriving in Jamaica, this kind of investment by MJB Airports Ltd will offer improvements to safety and operational efficiency on the airside of the airport, customer comfort, and greater efficiency in handling throughput in Immigration and arrival areas.

DOMINICAN REPUBLIC

At a recent bilateral meeting, the President of the ICAO Council, Dr Olumuyiwa Benard Aliu, encouraged the Dominican Republic to pursue its strategic and exemplary focus on aviation as a lever for national socio-economic growth, and to enhance its contributions to the global momentum on sustainable aviation development. The meeting took place during Dr Aliu's mission to the Dominican Republic and was attended by the Permanent Representative of the Dominican Republic to ICAO, Ambassador Carlos A. Veras, and ICAO's Regional Director for the North American, Central American and Caribbean Region, Melvin Cintron.

In his meeting with Chancellor Vargas Maldonado, Dr Aliu underscored that these achievements were made possible by the support given by highest levels of the Dominican government to the efforts undertaken by the Dominican Institute of Civil Aviation (IDAC) and its Director General, Dr Alejandro Herrera Rodriguez. Dr Aliu further highlighted another aspect of the Dominican Republic's model approach to aviation in a meeting with the Vice-President of the Republic's Senate, Dionis Sánchez, and members of the National Congress, where he highlighted the importance of legislative bodies to air transport systems for providing the legal mechanisms enabling sustainable air connectivity. These points were also reiterated in meetings with Herrera Rodriguez and with the President of the Civil Aviation Board, Luis Ernesto Camilo.

The Dominican Republic has achieved tremendous progress in terms of its compliance with ICAO's Standards and Recommended Practices (SARPs), with audits showing it is now a world leader in this area. It has further committed to supporting its neighbours, notably by acting as a Champion State for ICAO's 'No Country Left Behind' (NCLB) initiative. Compliance with ICAO SARPs enables States to access the international civil aviation network and unlock the socio-economic developmental benefits of air services. The NCLB initiative is designed to ensure that all States have an opportunity to achieve this compliance and connectivity.

DUTCH CARIBBEAN

Curaçao International Airport is currently in the midst of a major transformation project, according to the Curaçao Tourist Board. The nearly USD 48 million project began in 2014 with the expansion of the airport's check-in area and airport boulevard; in 2016, the new arrivals hall and airport food & beverage services and stores made their debut. There is a popular bar in the arrivals area, something that is, surprisingly, unique for a Caribbean airport. The overall terminal expansion project is slated for completion by December 2018, when all construction, including a new immigration departures area, will be finished. That will also include a state-of-the-art duty-free shopping complex in the departure area with a walk-through design similar to that at Punta Cana Airport in the Dominican Republic, according to Bryan Elshot, Project Manager - Operation at Curaçao Airport Partners (CAP). The

ACI World AIRPORT DEVELOPMENT NEWS

A service provided by ACI World in cooperation with Momberger Airport Information www.mombergerairport.info
Editor & Publisher: Martin Lamprecht martin@mombergerairport.info Founding Editor & Publisher: Manfred Momberger

project will include added space in waiting areas, along with more shops and food & beverage areas, among other additions. CAP says **the project will increase the airport's annual handling capacity to at least 2.5 million passengers** from its current annual total of 1.6 million) and will "efficiently accommodate the anticipated demand by the airlines for new air service capacity." The project will also add a new boarding bridge capable of accommodating Airbus A380 aircraft, along with a new arrivals corridor and more commercial space.

"CAP is very pleased to actively promote the continued development of aviation in Curaçao, and to make the proposed investment, because we foresee a continued growth in passenger traffic, and we are confident in the future of Curaçao as a tourism destination and regional economic centre," CAP said in a statement.

Curaçao has been working to boost its tourism arrivals, particularly in the United States, something that got a significant push with the launch of JetBlue service to the island in late 2014. The airport also recently completed more than USD 10 million in renovations to its facilities that included the addition of air conditioning to check-in facilities and runway upgrades.

"We want to be one of the leaders in the Caribbean in terms of airport facilities," said CAP CEO Ralph Blanchard. "We also want to be an example of what a public-private partnership can be." -- Curacao Airport Partners expects that, by the time the expansion is completed at the end of 2018 the number of annual passengers will have reached 1.8 million, with the aim of eventually being able to process 2.5 million passengers each year, when the airport will need to expand again.

ST LUCIA

Hewanorra International Airport (UVF) near Vieux Fort is poised for a significant upgrade, according to Tourism Minister Dominic Fedee. The Minister made the disclosure at the 5th annual St Lucia showcase – North America. He said financing for the project has already been secured and the Government was now in the planning phase; reviewing designs to ensure the best expansion plans for the airport. "We realize that the capacity at the airport at peak times has been a chronic problem for St Lucia and there has been a lot of talk and so we have decided now that we have got to do well as it pertains to the implementation of this particular policy so that we can see a better airport facility," Fedee stated. The Tourism Minister said the expanded airport must be accompanied by an improved highway from the south of the island as the Government wants to reduce the travel time between the North and the south of the island. "This as well has been a long-standing policy discussion and we are hoping that we can see quicker and faster implementation as it pertains to that much needed infrastructure where we can avoid some of the hills and slopes and get your customers to the product up in the north in a quicker, faster and a more comfortable ride." -- The Saint Lucia Showcase – North America allows for networking and building business relationships between local hotels and other tourism partners.

* **St Lucia also has a smaller airport, 'George F. L. Charles Airport'**, located near the capital Castries which handles inter-Caribbean passenger flights, which are operated with turboprop aircraft.

GRENADA

Known for its spices and a 1983 invasion by the U.S.A., **the tiny Caribbean island nation has been given a comprehensive infrastructure and development blueprint by China.** Beijing's plan sees the construction of large projects on the island, home to around 100,000 people, including a highway connecting major towns and a railway encircling it. Deepwater ports for cruise and cargo ships, a large wind farm, and **a modernized airport with longer runways** are also envisaged. Drawn up by the China Development Bank at the request of the Grenadian government, the plan is complete and should be in the hands of the Grenadian government already. The plan also sees an economic future for Grenada as an offshore tax haven.

Thirty-four years ago, the U.S. under President Ronald Reagan caused international consternation for its invasion of the island, involving some 7,000 troops, which followed violent upheaval in Grenada's People's Revolutionary Government. A focus of tension in the run-up to the invasion was Grenada's plans for a new airport, which the U.S. claimed could be used by Soviet aircraft. The Chinese Foreign Ministry

ACI World AIRPORT DEVELOPMENT NEWS

A service provided by ACI World in cooperation with Momberger Airport Information www.mombergerairport.info
Editor & Publisher: Martin Lamprecht martin@mombergerairport.info Founding Editor & Publisher: Manfred Momberger

reported recently that the Grenadian government "assumed the primary responsibility for the development of their own country" but that China was "willing to provide necessary assistance to their economic and social development upon request". According to the plan, an economic centre would be built around the capital St George's with a central business district, industrial zone and cargo transport hub. Grenada's central mountainous area would be left as a national park, but five other districts would be dedicated to renewable energy, agriculture and fruit processing, fishing, general tourism, and medical tourism.

CAYMAN ISLANDS

The KYD 55 million Owen Roberts International Airport Expansion and Renovation Project is now under construction and being carried out in two main phases that includes the full renovation and expansion of the existing facility. The first phase, on the west end of the terminal, began in October 2015, which included the construction of an area in preparation of a new outgoing baggage system with an area for an in-line baggage screening room, airline administrative office space, a bag pick-up area, and a roof top mechanical room. The second phase consists of easterly and westerly expansions and renovations to the existing interior of the terminal building. All work in Phase 2 will be carried out in several sub-phases to enable the terminal to remain fully functional, safe and secure throughout the construction period. Phase 2 work started in September 2016 and is scheduled to be completed in 2018. Construction has started with the expansion of the Check-In Hall on the west end that ties in with Phase 1 works, construction of the new immigration and baggage claim area to the east, an additional roof top mechanical room, the installation and commissioning of the new baggage-handling system (inbound and outbound) and enabling works for the start of construction on the second floor administrative areas. These works were completed in 2017. Construction will continue with the renovation of the old Departure Hall, an enlarged security screening checkpoint, new immigration administrative area, and a new retail area. Construction of new arches, landside canopy and additional internal renovations will complete the project.

The Airport Master Plan 2032 is intended to be a blueprint for future development of the Cayman Islands airports including 'Owen Roberts International Airport' (GCM), 'Charles Kirkconnell International Airport' (CYB), and Little Cayman Airport (LYB), all of which will be managed and operated by the Cayman Islands Airports Authority (CIAA). The plan also serves to address the requirements of the CIAA's commitment to progressive, sustainable and customer-focused airport development which requires periodic reviews and updates of all its Airport Master Plans.

ANGUILLA

The Chief Minister, Victor Banks, has announced that plans are in place for the expansion of 'Clayton J. Lloyd International Airport' (AXA) and the reconstruction of the Blowing Point ferry terminal. The British government has indicated that in short order they will be responding to the need to expand Anguilla's airport. A team from the British Corps of Royal Engineers will oversee the project to extend the runway by 600 ft from its current 5,400 ft. This extension will allow the airport to accommodate operations from larger aircraft, including the B.737 series, used by a variety of North American carriers. The airport will remain open to private and commercial aircraft during this planned expansion period.

Other Regions

SAUDI ARABIA

The Government is working on SAR 14.6 billion (USD 3.89 billion) worth of development projects, including a new airport near Souk Okaz City as well as the industrial city project in Makkah province, along with other road, water and electricity projects, said a report. The projects, coming up in the governorates of Taif, Mawiyah and Meesan include New Taif projects costing a total of

ACI World AIRPORT DEVELOPMENT NEWS

A service provided by ACI World in cooperation with Momberger Airport Information www.mombergerairport.info
Editor & Publisher: Martin Lamprecht martin@mombergerairport.info Founding Editor & Publisher: Manfred Momberger

SAR 11 billion, SAR 899 million worth of road projects, SAR 1.8 billion of water projects, SAR 500 million of health projects, SAR 1.4 billion of electricity projects, and SAR 100 million of education projects, according to the *Saudi Gazette*, citing Prince Khaled al-Faisal, mir of Makkah. He was chairing the first meeting of the newly constituted local councils of the three governorates in Taif on 6 February 2018. Work is progressing well on top-priority projects such as the **new Taif International Airport**, Okaz City, Technology Oasis, Residential Suburb, Industrial City, and University City.

INDIA

On 18 February 2018, Prime Minister Narendra Modi started the Navi Mumbai International Airport (NMIA) project at the site of the future airport, officially giving the green light to the INR 160 billion (USD 2,486 billion) project. The airport location has been chosen near Ulwe in Panvel, on the periphery of Mumbai City, about 8 km off the Mumbai-Pune Expressway, 123 km from Pune, and 43 km from Mumbai's Chhatrapati Shivaji International Airport. Reportedly, the 1160-hectare site has been named Pushpak. As of now, not all the land that has been chosen for building the airport has been bought by the concerned government authorities. The Managing Director of the City & Industrial Development Corporation of Maharashtra (CIDCO), Bhushan Gagarani, is saying the airport will be ready by December 2019. However, as per the airport operator Mumbai International Airport Ltd (MIAL), the airport will be operational only between 2019 and 2022.

The Navi Mumbai Airport will have two runways suitable for simultaneous use with the capacity to handle 80 flights per hour. Provisions will be made to allow arrival and departure of widebody jets like A380. All in all, the new airport will relieve the burden of heavy air traffic that the existing Mumbai Airport has been dealing with. To promote accessibility to the new airport, the main roads close to the site are being developed to connect the airport to the commercial hubs of South, Central, and Western Mumbai. CIDCO will make arrangements to make a coastal road link with the airport. Navi Mumbai will also get its first metro on the Belapur-Kharghar-Pendhar-Taloja-Khandeshwar route.

PHILIPPINES

A 'super consortium' of seven of the biggest Filipino conglomerates seeking to overhaul Manila's 'Ninoy Aquino International Airport' has submitted an unsolicited proposal to the Government, promising to turn the terminal into a regional hub. The PHP 350 billion (USD 6.7 billion) project will improve and expand the current NAIA terminals under the first phase, while the second phase will involve construction of a second runway, which will raise the airport's capacity to 100 million passengers per year, the consortium said in a statement. Aboitiz InfraCapital, AC Infrastructure Holdings, Alliance Global Group, AEDC, Filinvest Development, JG Summit Holdings, and Metro Pacific Investments Corp. have signed a memorandum of agreement formalizing the venture, the partners said in a joint statement. The seven companies said they have a combined capitalization of PHP 2.2 trillion. "Through this proposal, we envision a new NAIA - a fully-integrated premier gateway that we Filipinos can truly be proud of, backed by the know-how of an experienced technical partner and the strong synergy of seven home-grown teams," said consortium spokesperson Jose Emmanuel Reverente. "The message is clear: We need this, and we can get this done," he said. Changi Airports International (CAI) will provide technical support to the super consortium. The upgrades could bring NAIA at par with Singapore-Changi and Bangkok-Suvarnabhumi.

The Bases Conversion & Development Authority (BCDA) and the Megawide-GMR consortium have concluded the engineering, procurement, and construction (EPC) contract to expand Clark International Airport. The International Finance Corporation (IFC), BCDA's transaction advisor for the EPC contract to build the airport's new passenger terminal, made the announcement. Clark is the second main gateway into the country and the new 100,000-m² terminal will double its capacity to 8 million passengers per year, boosting air transport capacity for the Greater Capital Region. The project is also expected to reduce the strain on the congested Ninoy Aquino International Airport (NAIA) and help create jobs and increase development to Central Luzon, a growing economic centre.

ACI World AIRPORT DEVELOPMENT NEWS

A service provided by ACI World in cooperation with Momberger Airport Information www.mombergerairport.info
Editor & Publisher: Martin Lamprecht martin@mombergerairport.info Founding Editor & Publisher: Manfred Momberger

"This builds on IFC's long-standing track record in advising the Government in delivering crucial infrastructure," remarked Yuan Xu, IFC Country Manager for the Philippines. "Infrastructure is key to the sustainable and inclusive economic growth of the country." **Over the past 25 years, IFC's Public Private Partnership (PPP) Transaction Advisory team has supported governments in over 100 countries.** During this period, eight PPP projects have been successfully implemented with the support of the IFC as transaction advisor to the Philippine government. **The IFC is also supporting BCDA for the second transaction under the Clark Airport project to identify a private partner to operate and maintain the airport, including both the existing and new terminals.** Earlier, the IFC also assisted BCDA in conducting a competitive and transparent bid process that took less than six months, one of the fastest PPP project mandates, and resulted in significant government savings. -- The IFC, a sister organization of the World Bank, is the largest global development institution focused on the private sector in emerging markets. The organization has worked with over 2,000 businesses worldwide, using its capital, expertise, and influence to create markets and opportunities in the toughest areas of the world. In 2017, IFC delivered USD 19.3 billion in long-term financing for developing countries, leveraging the power of the private sector to help end poverty and boost shared prosperity.

Green Airports

Galápagos Ecological Airport/Seymour Airport (GPS) in Ecuador and Geneva Airport (GVA) in Switzerland are the latest hubs to be certified as carbon neutral through the independent and voluntary global programme Airport Carbon Accreditation (ACA). There are 211 airports across the world now certified at one of the four levels of ACA, which represents 41.8% of global air passenger traffic with 3.2 billion passengers a year. Of these, 37 airports are carbon neutral for emissions under their control. Galápagos Ecological Airport in Ecuador is the first carbon neutral airport in Latin America. Jorge Rosillo, general manager of Galápagos Ecological Airport, said: "It is a great honour for us to receive this certification at Level 3+ Neutrality as the first airport in Latin America and the Caribbean. Most importantly, our Neutrality status is the fruit of a group effort. The support for our ecological approach to running an airport came from all levels of our organization – from the top management at Corporación América to each and every employee, who takes pride in being part of Galápagos Ecological Airport."

In addition to reducing their carbon footprint through energy efficiency measures and the use of renewable energy, these airports invested in carbon offsets funding biomass and cook stoves projects, purchased under the UNFCCC Clean Development Mechanism (CDM) and Gold Standard.

André Schneider, general manager of Geneva Airport, commented: "We take pride in being able to say that we have delivered on the commitment we made last year, to reduce the net emissions under our control to zero. Now that we have reached Level 3+ of Airport Carbon Accreditation, we intend to continue our work on the various environmental aspects of our operations with the same zeal."

Dubai Airports, the operator of Dubai International (DXB) and Dubai World Central (DWC) Airports, has joined the emirate's aviation community in signing a pledge to purchase only 'green vehicles' in the future. The pledge was signed by Sheikh Ahmed bin Saeed Al Maktoum, chairman of Dubai Airports, and representatives from Emirates airline, Flydubai, Dnata, Dubai Police, Dubai Customs, and Dubai's General Directory of Residency and Foreign Affairs (GDRFA). "This commitment is fully aligned with the Dubai Government's aggressive goals to reduce energy consumption by 30% by 2030, as well as our sector's strategy to limit our environmental footprint while continuing our significant contributions to Dubai's employment and GDP," said Sheikh Ahmed.

DXB is home to a fleet of more than 6,345 ground service vehicles comprising various types ranging from water tankers to tow tractors to fork-lifts operated by a number of companies on the airfield site including airlines, control authorities, and ground handling services provider Dnata. Of these, DXB features a variety of green vehicles including BMW hybrid limousines for VIP services and RTA's fleet of

ACI World AIRPORT DEVELOPMENT NEWS

A service provided by ACI World in cooperation with Momberger Airport Information www.mombergerairport.info
Editor & Publisher: Martin Lamprecht martin@mombergerairport.info Founding Editor & Publisher: Manfred Momberger

Tesla taxis but wants to scale up efforts to convert the fleet to top hybrid or electric models. "Our goal is to get greener faster," said Michael Ibbitson, executive vice president of infrastructure & technology. "Together we have pledged to buy green going forward with a goal to replace the entire fleet with environmentally-friendly options by the end of the next decade. Dubai Airports' objective is to convert our portion of the total airport fleet - 352 vehicles - to green options by 2023. As a provider of infrastructure, Dubai Airports will also do its part by providing charging and fuelling stations to power the fleets operated by our stakeholders. Unfortunately, for some vehicle types such as tow tractors, scissor lift trucks and ground power units, there are no hybrid or electric options. We are calling on manufacturers to address these gaps and come up with cost effective, environmentally friendly alternatives."

KLM Royal Dutch Airlines has announced that Air Traffic Control the Netherlands (LVNL) will support the increased use of sustainable biofuels on flights by joining the airline's Corporate Biofuel Programme. LVNL, the agency in charge of air traffic control in Netherlands airspace, will buy biofuel for all business flights of its employees. The use of sustainable biofuels on a large scale could result in an 80% reduction in carbon dioxide (CO₂) emissions, compared with fossil fuels, but the price of the green fuel is still two to three times higher than that of kerosene, KLM explains. Participants in the Corporate Biofuel Programme pay a fee to cover the difference in price. The airline's goal is to create demand so that production of biofuels for the airline industry becomes stable and the price falls to an acceptable level. KLM aims to cut CO₂ emissions per passenger by 20% by 2020, as compared to 2011 levels. To do that it is investing in sustainable biofuels, sourced through SkyNRG, and in new aircraft and more efficient flight operations.

Publisher's note: The articles in this special report, compiled for **ACI World**, are edited 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 **ACI World** report represent only a small sample of the main module (Airport Development) of **Momberger Airport Information**. Additional modules that subscribers can select include: Airport Operations (OPS), Ground Support Equipment (GSE), Air Traffic Services (ATC), Consultant & Contractor (CON), Airport Information Technology (AIT) and Maintenance Base (MRO). An extensive Calendar of Events (CAL) is part of every subscription. For more information and to order an annual subscription, please visit www.mombergerairport.info