* HERRANSPORT ORGANISATION THE MAGAZINE

15 | JULY - SEPTEMBER 2021

JOSE RICARDO BOTELHO

Executive Director & CEO - ALTA



15 | JULY - SEPTEMBER

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EDITORIAL



Dr Kostas latrou Director General Hermes - Air Transport Organisation

BACK ON TRACK Dear Hermes member,

The air transport industry after a positive summer starts to get back on track. More than ever before cooperation and collaboration are important for our industry.

In September all the position papers for the 2021 recommendations on the topic Resilience and efficiency through Leadership and Cooperation were uploaded to the Hermes website. Hermes participated in the 2021 IATA Annual General Meeting that took place in Boston from 3 to 5 October. With the great support from IATA, Hermes hosted its traditional reception attended by numerous Hermes members. During the reception, Salvatore Sciacchitano, President of the Council of ICAO, received the 2021 Hermes Award.

Between 12 till 22 October I, in my capacity as Hermes's Director General, represented Hermes at the virtual High Level Conference on COVID-19 (HLCC 2021) organised by ICAO.

Finally, I am pleased to welcome the interview from our industry partner and member, Jose Ricardo Botelho, Executive Director and CEO of ALTA.

Enjoy reading,

Kostas latron

TOP NEWS July - September 2021

01/07/2021

IATA WELCOMES ROLLS-ROYCE COMMITMENT TO OPEN AFTERMARKET BEST PRACTICE

The International Air Transport Association (IATA) and Rolls-Royce plc have signed a joint statement that clarifies the engine manufacturer's ongoing commitment to an open and competitive approach to its maintenance, repair and overhaul (MRO) services. The document was finalized after several months of productive and collaborative dialogue on industry best practice for engine MRO services.

Both organizations are aligned on four key principles that underpin the Rolls-Royce approach to the MRO ecosystem and are included in the official statement:

- Rolls-Royce does not prevent the development of

legitimate non-OEM parts or non-OEM repairs by MRO providers and independent parts manufacturers, as long as they are approved by the appropriate airworthiness regulator;

- Rolls-Royce's policy is to grant airlines, lessors and MRO providers non-discriminatory access to OEM parts, repairs and support (including access to Rolls-Royce Care);
- Rolls-Royce does not discriminate against airlines, lessors or MRO providers that use non-OEM parts or repairs;
- Rolls-Royce will not insist that airlines or lessors subscribe to Rolls-Royce services.

01/07/2021

SESAR JU ANNOUNCES APPOINTMENT OF INTERIM EXECUTIVE DIRECTOR

The SESAR Joint Undertaking today announced the appointment of Rich-



ard Frizon as its interim Executive Director, following the departure of Florian Guillermet. Effective as of 5 July, Frizon will ensure the smooth and effective continuation of the current work programme of the SESAR JU, until the appointment of a new Executive Director is made in early 2022.

06/07/2021

OVER 100 STATES NOW PARTICIPATE IN ICAO'S CARBON OFFSETTING AND REDUCTION SCHEME FOR INTERNATIONAL AVIATION (CORSIA)

ICAO Secretary General Dr. Fang Liu announced today that 16 small island and lesser-developed States had notified her of their



decisions to voluntarily participate in ICAO's Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), bringing the total number of participating states to 104 and adding significant momentum in support of ICAO's climate work. The 16 States are Bahamas, Barbados, Belize, Cook Islands, Gambia, Grenada, Kiribati, Nauru, Oman, Saint Kitts and Nevis, South Sudan, Suriname, Tonga, Trinidad and Tobago, Tuvalu, and Vanuatu. CORSIA is an important element to complement the basket of measures that ICAO is promoting to reduce the climate impact of flying. The other measures being undertaken include technological innovation, operational improvement, and the implementation of sustainable aviation fuels. While the CORSIA implementation of CO_2 monitoring, reporting and verification has been fully on-track, more participating States will bring ICAO States closer to meeting the global aspirational goal of carbon neutral growth for international aviation. This goal was agreed through ICAO.

TOP NEWS 🚱

ISTANBUL AIRPORT FIRST TO EARN ACI REACCREDITATION FOR COVID-19 HEALTH MEASURES

Airports Council International (ACI) World and ACI EUROPE have today announced that Istanbul Airport is the first airport in the world to be reaccredited through the Airport Health Accreditation programme. Accreditation is granted for 12 months. Istanbul Airport was first in the world to be accredited in 2020 and now the airport is the first in the world to be reaccredited for another 12 months since ACI opened the



programme reaccreditation in June. The programme is supported by the International Civil Aviation Organization (ICAO). It has been updated this year and remains aligned with the latest ICAO Council Aviation Recovery Task Force (CART) Recommendations and with the ACI EUROPE Guidelines for a Healthy Passenger Experience which are, in turn aligned with the EASA/ECDC Aviation Health Safety Protocol. The programme is also aligned with industry best practices including ACI's own updated Aviation Business Restart and Recovery publication. Since the programme was launched in July 2020, more than 600 airports of all sizes have signed up to the programme.

06/07/2021

ROTTERDAM THE HAGUE AIRPORT IS WORLD'S FIRST TO ACHIEVE CARBON ACCREDITATION STRAIGHT IN AT NEW HIGHEST LEVEL

Rotterdam The Hague Airport (RTHA) in the Netherlands has achieved Level 4+ 'Transition' of Airport Carbon Accreditation, the only global carbon standard for airports. The successful first-time accreditation at the highest level of the renowned CO_2 reduction programme is a worldwide first and a testament to RTHA's exceptional carbon management strategy, fully aligned with global

climate goals.

Attaining Level 4+ represents a step change in the carbon management of an airport, requiring setup of a long-term goal and strategy oriented towards absolute emissions reductions, including an emissions trajectory and interim milestones. RTHA's actions to realise tangible CO2 emissions reductions of its own emissions are now aligned with the Paris Agreement (global warming limited to below 2°C and ideally 1.5°C). The airport has also included broader emissions in its carbon footprint that include all the significant operational sources on- and off-site. Furthermore, it has demonstrated evidence of actively engaging and leading its stakeholders towards delivering emissions reductions.

TOP NFWS 🚱

AIRLINES LAUNCH GLOBAL ACTION GROUP TO IMPROVE HANDLING OF DISABILITY MOBILITY AIDS

The International Air Transport Association (IATA) announced the launch of a global Mobility Aids Action Group to examine and improve the transport journey of mobility aids, including wheelchairs, with the objective of improving the handling of this vital equipment for travelers with disabilities.

The Action Group will be the first of its kind aimed at tackling issues around the safe and secure transport of mobility aids—an issue of huge importance to a growing number of travelers. It will also provide advice and recommendations to airlines and other stakeholders concerning



the establishment of policy, process and standards related to the handling and transport of mobility aids.

08/07/2021

TRAINING ESSENTIAL TO RIGHT-SKILL POST-PANDEMIC AVIATION WORKFORCE

The International Air Transport Association (IATA) released research on the training requirements for the aviation workforce as the industry starts to recover from the COVID-19 crisis. According to a global survey of some 800 human resources (HR) leaders in the aviation industry responsible for learning and development, right-skilling existing workers and ensuring that



new hires from outside aviation can quickly acquire the necessary skills will be key to successfully building the post-pandemic workforce. To achieve this, training programs will need to be adapted, with around half the HR respondents stating that their top priority is to assess available workforce skills and map these against their organization's competency requirements.

This will form the basis for the required training curriculums. The pandemic had already forced many airlines and other companies in the value chain, like ground service providers, to assess what overall skills their employees possessed to adapt to new operational requirements. A case in point was the need to load cargo in cabins of passenger aircraft repurposed to carry cargo only.





VIRGIN GALACTIC SUCCESSFULLY COMPLETES FIRST FULLY CREWED SPACEFLIGHT

fourth rocket-powered spaceflight.

including the Company's founder, Sir Richard Bran- training program at Spaceport America. son.

Virgin Galactic today announced that VSS Unity suc- The crew fulfilled a number of test objectives related cessfully reached space, completing the Company's to the cabin and customer experience, including evaluating the commercial customer cabin, the views of Today's flight was the 22nd test flight of VSS Unity Earth from space, the conditions for conducting reand the first test flight with a full crew in the cabin, search and the effectiveness of the five-day pre-flight



13/07/2021

ELECTRIC AIRCRAFT SET TO TAKE FLIGHT BY 2026 UNDER NEW AGREEMENTS WITH UNITED AIRLINES VENTURES, BREAKTHROUGH ENERGY VENTURES, MESA AIRLINES, **HEART AEROSPACE**

United Airlines Ventures (UAV) announced today it, along with Breakthrough Energy Ventures (BEV) and Mesa Airlines, has invested in electric aircraft startup Heart Aerospace. Heart Aerospace is developing the ES-19, a 19-seat electric aircraft that has the potential to fly customers up to 250 miles before the end of this decade. In addition to UAV's investment, United Airlines has conditionally agreed to purchase 100 ES-19 aircraft, once the aircraft meet United's safety, business and operating requirements. Mesa Airlines, United's key strategic partner in bringing electric aircraft into commercial service, has also agreed to add 100 ES-19 aircraft to its fleet, subject to similar requirements.



TOP NEWS 🚱

ACI: STARK IMPACT OF COVID-19 ON GLOBAL TRAFFIC PERSISTS AMID IMPROVING OUTLOOK

New Airports Council International (ACI) World data shows the lasting adverse impact of the COVID-19 crisis is forecast to remove an additional five billion passengers by the end of this year compared to the pre-COVID-19 forecast. Compared to 2019 levels this is expected to be -47.3% by year end with domestic passenger traffic recovering faster than international traffic. Globally, domestic traffic will continue the recovery started in 2020 to reach close to 3.3 billion passengers by the end of 2021 (61.4% of 2019 levels).

Linked to traffic reductions, ACI World estimates that, globally, airports will suffer the reduction of more than \$108 billion (figures in US dollars) in revenue by the end of the year, down by more than half of expectations (-54.6%). It is expected that each quarter of 2021 will show improvements compared to the previous one, moving from a decline of -71.4% in the first quarter of 2021 to a decline of -37.2% in the fourth quarter.

28/07/2021

T&I COMMITTEE ADVANCES MULTIPLE BILLS DURING MARKUP, INCLUDING LEGISLATION TO PREVENT A RACE TO THE BOTTOM IN INTERNATIONAL CIVIL AVIATION

The House Committee on Transportation and Infrastructure approved a slate of measures during a committee markup today, including bipartisan legislation led by Chair Peter DeFazio (D-OR) to preclude

14/07/2021

EUROPEAN GREEN DEAL: COMMISSION PROPOSES TRANSFORMATION OF EU ECONOMY AND SOCIETY TO MEET CLIMATE AMBITIONS

Today, the European Commission adopted a package of proposals to make the EU's climate, energy, land use, transport and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels. Achieving these emission reductions in the next decade is crucial to Europe becoming the world's first climate-neutral continent by 2050 and making the European Green Deal a reality. With today's proposals, the Commission is presenting the legislative tools to deliver on the targets agreed in the European Climate Law and fundamentally transform our economy and society for a fair, green and prosperous future.

22/07/2021

ACI WORLD LAUNCHES UPDATED AIRPORT DIGITAL TRANSFORMATION GUIDANCE

Airports Council International (ACI) World has today launched comprehensive guidance to help airport executives approach digital transformation as the industry enters a post-pandemic environment. The second edition of the Airport Digital Transformation Handbook – supported by Honeywell and Mott MacDon-



ald – examines how new technologies and digitalization of existing manual processes can lead to new ways of addressing airport capacity challenges as the aviation industry recovers to pre-pandemic levels of air traffic.

The handbook provides advice on focus areas of technology adoption and how to approach digital transformation, and case studies and has been adapted to include the challenges and opportunities brought by COVID-19.

new foreign airlines from operating to and from the United States that exploit "flags of convenience" to avoid the regulations of their home countries, or otherwise undermine labor standards. The legislation is now ready for consideration on the House floor.



TOP NFWS 🚱

JUAN CARLOS SALAZAR OF COLOMBIA BEGINS MANDATE AS ICAO SECRETARY GENERAL

Mr. Juan Carlos Salazar of Colombia officially assumed the office of ICAO Secretary General today, succeeding Dr. Fang Liu of China.

He assumes this role as CEO of the UN's specialized agency for civil aviation as the international flight network continues to assure the efficient global movement of food, vaccines, e-commerce, and other essential supplies and personnel, despite the air transport industry still being severely confronted by COVID-19, greatly diminished routes, and slowly rebounding international air travel and tourism.

"It is a great honour to be assuming this role at this time, and to have the opportunity to help governments and ICAO play an important part in how this sector builds back better and recovers from the global pandemic," Mr. Salazar commented.

"We are still facing some tremendous challenges to the restoration of global air connectivity today, and with many regions and populations all over the world facing prolonged economic, social, and emotional hardship as a result."



Source: ICAO

TOP NFWS 🚱

SAS 75 YEARS OF PROUD AVIATION

August 01, marks the founding of SAS 75 years ago and we have been the proud carrier of travelers to, from and within Scandinavia during all these years. Scandinavia would not be the same today without a strong Scandinavian airline, and we will naturally continue to play and integral role in Scandinavian infrastructure also in the future.

Innovation has been a natural part of SAS in all these years. From the world's first flight over the North Pole, thereby shortening flying time between continents, to the current and future drive toward sustainable aviation. The latest aircraft in our fleet offer more comfort, less noise and up to 30% lower carbon dioxide emission – and represents just one of many initiatives on the journey toward sustainable aviation. This journey is critical, and SAS will in cooperation with the entire ecosystem, maintain its leading position in this work.



02/08/2021

ACI WORLD UPDATES AIRPORT OPERATIONS BUSINESS RECOVERY GUIDANCE

Airports Council International (ACI) World has today published updated guidance for airports to aid in their recovery from the COVID-19 pandemic and its impact on their operations.

As the industry prepares to sustain a long-term recovery, the third edition of Airport Operations Business Restart and Recovery has been retitled to Airport Operations and COVID-19: Business Recovery.

ACI has not only updated its guidance on the practical and efficient health and operational measures that can be introduced to support safe travel, but has also expanded the guidance to include information on health passes and vaccinations, as well as risk management when returning to operations, with a particular focus on human factors during recovery. TOP NFWS 🚱

IATA: AIRLINE INDUSTRY STATISTICS CONFIRM 2020 WAS WORST YEAR ON RECORD

The International Air Transport Association (IATA) released the IATA World Air Transport Statistics (WATS) publication with performance figures for 2020 demonstrating the devastating effects on global air transport during that year of the COVID-19 crisis.

-1.8 billion passengers flew in 2020, a decrease of 60.2% compared to the 4.5 billion who flew in 2019

- -Industry-wide air travel demand (measured in revenue passenger-kilometers, or RPKs) dropped by 65.9% year-on-year
- -International passenger demand (RPKs) decreased by 75.6% compared to the year prior -Domestic air passenger demand (RPKs) dropped by 48.8% compared to 2019
- -Air connectivity declined by more than half in 2020 with the number of routes connecting airports falling dramatically at the outset of the crisis and was down more than 60% year-on-year in April 2020
- -Total industry passenger revenues fell by 69% to \$189 billion in 2020, and net losses were \$126.4 billion in total
- -The decline in air passengers transported in 2020 was the largest recorded since global RPKs started being tracked around 1950

05/08/2021

NEW DATA ANALYSIS AGREEMENT TO OFFER INSIGHTS INTO CARBON MARKET DEVELOPMENT

As the implementation of the Carbon Offsetting and Reduction Scheme for International Aviation (COR-SIA) continues, a new data and analysis agreement between ICAO and Forest Trends' Ecosystem Marketplace (EM) will enhance States' and stakeholders' understanding of the development of carbon markets.

Through ICAO, States have agreed to CORSIA, which is the first global market-based measure for any sector.

Complementing a broader package of aviation CO_2 reduction measures, such as technological innovations, operational improvements and sustainable fuels, it contributes to the achievement of States' aspirational goal of carbon neutral growth from 2020 by requiring the purchase of high-quality emission units.

A total of eight programmes have so far been recognized by the ICAO Council as eligible, under the stringent quality criteria, to supply units for compliance with offsetting requirements in the 2021-2023 pilot phase of CORSIA.



05/08/2021

ACI WORLD LAUNCHES NEW GUIDANCE ON DEVELOPING CARGO OPERATIONS AT AIRPORTS

Airports Council International (ACI) World has today published a complimentary report to help airport operators develop successful cargo strategies that can contribute to the sustained recovery of the industry by developing alternative revenue streams.

The Developing Cargo at Airports guide has been prepared in collaboration with – and sponsored by – Netherlands Airport Consultants (NACO) and InterVISTAS. The guide includes inputs from global airports and air cargo industry experts. Air cargo remains an engine of economic growth and its crucial role during the pandemic has created positive momentum as the industry enters its recovery phase. Many airports have managed to sustain or even grow their cargo operations during the pandemic, which has proven crucial in providing liquidity for airport operators

and in some cases, even ensured the longer-term solvency of the airport business.



TOP NFWS 🚱

EASYJET HAS INTRODUCED NEW CABIN CREW AND PILOT UNIFORMS MADE FROM RECYCLED PLASTIC BOTTLES

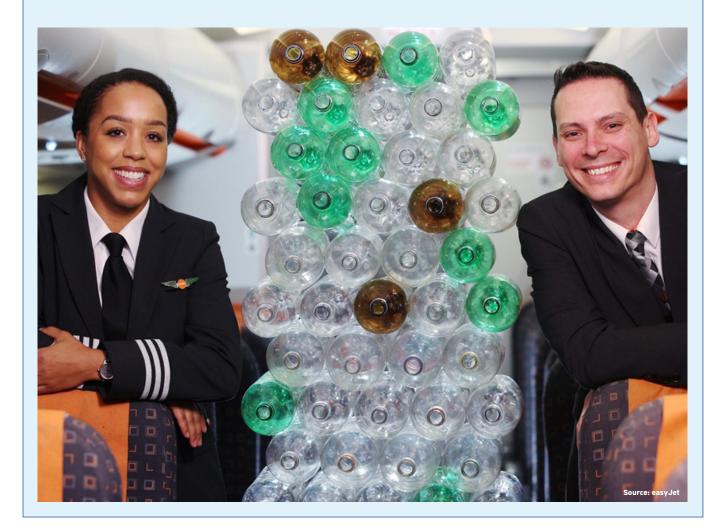
easyJet, Europe's leading airline, has announced today that it is introducing a new uniform for cabin crew and pilots, each made from around 45 recycled plastic bottles as part of its commitment to mitigate waste and search for innovative change beyond carbon reduction. Manufactured by Northern-Ireland based Tailored Image and created with unique hightech material, the new uniform will be introduced into cabin crew circulation this month. The roll-out across the airline is estimated to prevent around half a million plastic bottles from ending up as plastic waste each year.

Not only does the fabric reduce plastic waste, but the high-tech material is made using renewable energy sources and has a 75% lower carbon footprint than traditional polyester.

The new fabric, adapted to the airline's current style,

was first trialled last year for suitability in the cabin and flight deck environments. Compared to the non-recycled alternative, it is more abrasion-resistant. It also provides even more elasticity, a four-way stretch, improving fit and freedom of movement for enhanced comfort and durability. This development can lead to it being long-lasting for the wearer, reducing the need for more uniform items to be produced in the long term.

Beyond the new fabric, plastic has also been replaced in all clothing-related packaging in favour of recyclable and biodegradable materials: replacing plastic collar strays with recyclable cardboard ones, plastic shirt clips with metal shirt clips, non-recyclable white coated card with recyclable cardboard card and polypropylene outer shirt covers with biodegradable shirt covers.





UNCTAD, IATA EXTEND PARTNERSHIP TO FACILITATE GLOBAL TRADE

UNCTAD and the International Air Transport Association (IATA) have extended their collaboration to facilitate international trade, particularly e-commerce. The extended partnership will enrich their history of working together. This includes the successful integration of air cargo messaging standards (Cargo-XML) into UNCTAD's automated customs management system, ASYCUDA-World.

For the 100 counties choosing to deploy the latest version of ASYCUDAWorld, this enables more efficient processing of air cargo shipments.

25/08/2021

19/08/2021

EU AND UK DIGITAL COVID CERTIFICATES RECOGNIZED BY IATA TRAVEL PASS

The International Air Transport Association (IATA) has announced that the EU Digital COVID Certificate (DCC) and UK NHS COVID Pass can now be uploaded into IATA Travel Pass as verified proof of vaccination for travel.

Travelers holding an EU DCC or UK NHS COVID Pass can now access accurate COVID-19 travel information for their journey, create an electronic version of their passport and import their vaccination certificate in one place. This information can be shared with airlines and border control authorities who can have the assurance that the certificate presented to them is genuine and belongs to the person presenting it.



DELTA AIR LINES ORDERS

Delta Air Lines has ordered 30

additional Airbus A321neo aircraft to help meet the airline's

future fleet requirements. The

newly-ordered aircraft are in addition to the airline's exist-

ing orders for 125 of the type, bringing the outstanding or-

ders from Delta to a total of 155

30 ADDITIONAL AIRBUS

A321NEO AIRCRAFT

24/08/2021

FAA AWARDS \$20.4M TO REDUCE AIRPORT EMISSIONS, PURCHASE ZERO-EMISSION VEHICLES

The U.S. Department of Transportation's Federal Aviation Administration (FAA) awarded \$20.4 million in grants to reduce emissions and improve air quality at airports across the country. The awards will fund zero-emission airport vehicles, including their electric charging infrastructure, and will electrify the ramp equipment used to service planes at the gate.

27/08/2021

ICAO VDS GAINS ACCEPTANCE FOR GLOBAL HEALTH PROOF VERIFICATION

With countries working to re-establish global travel and trade through aviation, the need to provide internationally verifiable health proofs to travelers has become an urgent global concern.

The new ICAO Visible Digital Seal (VDS), originally adopted by countries for travel document verification, is now gaining expanded international acceptance as an affordable and efficient solution to this critical global challenge.

Surce Aibus

A321neos.

ICAO AFRICA AND MIDDLE EAST AIR TRANSPORT SYMPOSIUM RENEWS KEY MULTILATERAL COMMITMENTS ON PATH TO RECOVERY

ICAO's Africa-Middle East Air Transport Symposium concluded with renewed regional commitments on addressing pandemic recovery efforts, the harmonization of regional air transport regulatory frameworks, cross-border investments in airlines, the impact of levies and charges on air transport sustainability, and financing approaches for the modernization of aviation infrastructure. Focused around the theme of Promoting and harnessing the benefits of liberalization, the virtual event brought together high-level policy makers, air transport regulators, industry representatives, aviation professionals, and other stakeholders to drive important progress on regional air transport coordination and recovery.

07/09/2021

ICAO STOCKTAKING EVENT SPOTLIGHTS LATEST INNOVATIONS, CONCRETE COMMITMENTS, AND NEW OPPORTUNITIES FOR AVIATION DECARBONIZATION

ICAO's 2021 Stocktaking for in-sector CO_2 reductions concluded with strong calls for high ambition from governments and industry leaders, and highlighting important new innovations in technology, operations, and fuels to accelerate the realization of sustainable aviation.

Aeronautical pioneers, industry leaders, technical experts, researchers, innovators, and national authorities shared their ambitious plans for decarbonizing international aviation during the four day event which ended last Friday with over 1,000 virtual participants from every world region.

08/09/2021

ACI ANNOUNCES EVOLUTION OF INDUSTRY LEADING AIRPORT SERVICE QUALITY PROGRAM

Airports Council International (ACI) World has today announced a major new evolution of its industry-leading Airport Service Quality program as the third annual Customer Experience Global Summit kicked off in Montreal.

ASQ surveys measure passengers' satisfaction while they are travelling through an airport and provide the research tools and management information for airports to better understand passenger views, what they can improve, and the services passengers want from them.

To ensure that this program addresses what members and passengers need and to remains relevant and responsive to changing passenger attitudes, expectations, and needs, ACI announced to participants at the global summit a major new evolution of the ASQ Departures Survey:

- New key performance indicators to better monitor the evolving customer journey
- New demographic and behavioural questions to better understand passengers' needs and expectations
- Customer emotional response will also be measured through the questionnaire to understand how this impacts their level of satisfaction with the airport experience
- New ASQ Departures Plus offered only via tablet – will include the capacity to choose additional questions to deploy from a catalogue of pre-defined ones.

09/09/2021

SKYTEAM MEMBERS UNANIMOUSLY COMMIT TO IATA'S 25BY2025 INITIATIVE TO DRIVE GREATER GENDER EQUALITY ACROSS AVIATION INDUSTRY

All 19 SkyTeam member airlines have signed up to the International Air Transport Association's (IATA) 25by2025 initiative, as the global airline alliance advocates for greater gender diversity in the industry. Launched in 2019, 25by2025 is a voluntary commitment to increasing the number of women in senior positions and under-represented areas by 25% or up to a minimum of 25% by 2025.



SKYTEAM MEMBERS UNAN-IMOUSLY COMMIT TO IA-TA'S 25BY2025 INITIATIVE TO DRIVE GREATER GEN-DER EQUALITY ACROSS AVIATION INDUSTRY (► cont'd)

By committing to IATA's 25by2025 initiative, SkyTeam airline members will:



• Increase the num-

- ber of women in senior positions and under-represented areas by 25%, or up to a minimum of 25% by 2025
- Report annually on key diversity metrics
- Increase female nominations from their airlines for IATA governance roles to a minimum of 25%

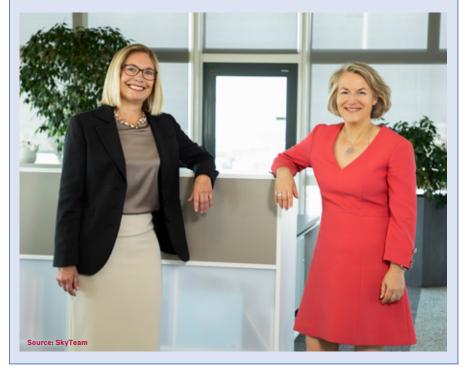
09/09/2021

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09/09/2021

U.S. AIRLINES ANNOUNCE 3-BILLION-GALLON SUSTAINABLE AVIATION FUEL PRODUCTION GOAL

Today, Airlines for America (A4A), the industry trade organization representing the leading U.S. airlines, announced that our member carriers have pledged to work with government leaders and other stakeholders to make

3 billion gallons of cost-competitive sustainable aviation fuel (SAF) available to U.S. aircraft operators in 2030.

In March, as part of a commitment to work across the aviation industry to achieve net-zero carbon emissions by 2050, A4A members pledged to work toward a rapid expansion of the production and deployment of commercially viable SAF to make 2 billion gallons available in 2030. TOP NEWS 🚱

UNITED, HONEYWELL INVEST IN NEW CLEAN TECH VENTURE FROM ALDER FUELS, POWERING BIGGEST SUSTAINABLE FUEL AGREEMENT IN AVIATION HISTORY

United and Honeywell today announced a joint multimillion-dollar investment in Alder Fuels – a cleantech company that is pioneering first-of-its-kind technologies for producing sustainable aviation fuel (SAF) at scale by converting abundant biomass, such as forest and crop waste, into sustainable low-carbon, drop-in replacement crude oil that can be used to produce aviation fuel. When used together across the fuel lifecycle, the Alder technologies, coupled with Honeywell's Ecofining[™] process,

could have the ability to produce a carbon-negative fuel at spec with today's jet fuel. The goal of the technologies is to produce fuel that is a 100% drop-in replacement for petroleum jet fuel.

As part of the agreement, United is committing to purchase 1.5 billion gallons of SAF from Alder when produced to United's requirements. United's purchase agreement, which is one and a half times the size of the known purchase commitments of all global airlines combined, makes this easily the largest publicly announced SAF



agreement in aviation history. United's purchase agreement with Alder also surpasses the previous record set by the airline in 2015 through its investment in Fulcrum BioEnergy with its option to purchase up to 900 million gallons of SAF.

10/09/2021

FAA AWARDS \$100M TO DEVELOP NEXT GENERATION OF SUSTAINABLE AIRCRAFT TECHNOLOGY

The U.S. Department of Transportation's Federal Aviation Administration (FAA) has awarded more than \$100 million for companies to help develop technologies that reduce fuel use, emissions and noise. The award is part of a series of steps President Biden is taking to coordinate leadership and innovation across the federal government, aircraft manufacturers, airlines, fuel producers and

more to position American aviation to soar towards net zero emissions by 2050. This FAA announcement is part of those efforts.

10/09/2021

FUTURE OF AVIATION SECURITY FOCUS OF AVSEC2021 AND 9/11 COMMEMORATION

World leading aviation security and counter-terrorism experts exchanged views and expertise at the ICAO Global Aviation Security Symposium 2021 (AVSEC2021), providing a crucial forum for an international exchange on means to mitigate evolving threats to the international civil aviation network as the system begins its COVID-19 recovery. The three-day event was a unique occasion to take stock of the opportunities and challenges inherent in carrying on or resuming operations in the midst of a global pandemic, where health measures have become a critical piece of the aviation puzzle. Discussions focused on a broad

array of challenges to keep employees and passengers safe, mitigate the spread of the COVID-19 virus, and respond to dramatic shifts in air travel demand, all while maintaining the appropriate levels of security and facing new challenges of a reduced workforce and financial constraints. Panellists provided unique insights into means to enhance the resilience of aviation security operations moving forward, including through the illustration of ways to foster



TOP NFWS 🚱

FUTURE OF AVIATION SECURITY FOCUS OF AVSEC2021 AND 9/11 COMMEMORATION (► cont'd)

innovation that is efficient and effective, from human, operational and financial perspectives. The event concluded with a commemoration of the 20th anniversary of the 9/11 attacks and reflected on how aviation security has strengthened over the last two decades and discussed how lessons learnt address major challenges in aviation security. It was also an opportunity to reaffirm the international responsibility towards passengers, and to remember why it is so important to persist in making security the cornerstone of the aviation sector. The proceedings underlined the joint effort undertaken by all stakeholders that allowed for a great upgrade of existing security measures at the time, setting the grounds for a more robust and consistent global aviation security system.



13/09/2021

AAPA AIRLINES COMMIT TO NET ZERO CARBON EMISSIONS REDUCTION BY 2050

announced its commitment to a goal of net zero emissions by 2050.

The more ambitious goal of net zero emissions surpasses the existing industry commitment to halving carbon emissions by 2050. AAPA has fully embraced the aviation industry's climate change commitments

The Association of Asia Pacific Airlines (AAPA) today to date, with it being a leader amongst global sectors in establishing a comprehensive sustainability agenda.

> This includes 1.5% fuel efficiency improvement, stabilising net CO₂ emissions through carbon neutral growth, as well as a new more ambitious long-term goal of net zero carbon emissions by 2050.

TOP NFWS 🚱

U.S. AIRLINES SHOW FIRST PROFIT SINCE COVID-19 IN 2ND QUARTER 2021

U.S. scheduled passenger airlines reported a second-quarter 2021 after-tax net profit of \$1.0 billion despite a pre-tax operating loss of \$3.6 billion. The second-quarter results represent the first quarterly profit since the fourth quarter of 2019, the last quarter before the COVID-19 pandemic began.

In the second quarter of 2021, the airlines reduced their first-quarter losses by 124%. The second-quarter after-tax net profit of \$1.0 billion was a \$5.2 billion net change from the first-quarter loss of \$4.2 billion. The second-quarter pre-tax operating loss of \$3.6 billion was a \$9.1 billion reduction from the first-quarter loss of \$12.7 billion.



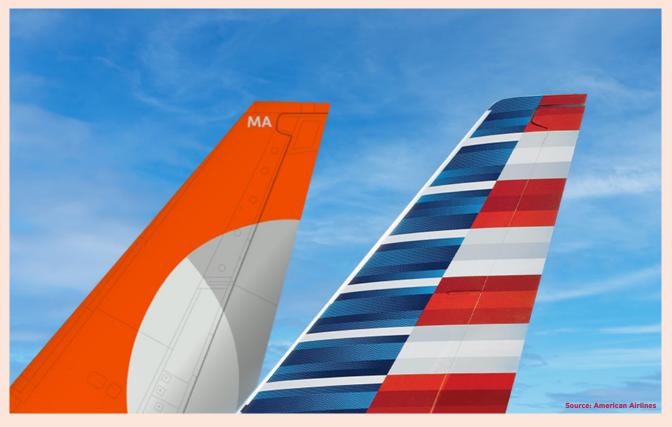
Source: US DOT

15/09/2021

AMERICAN AIRLINES AND GOL TO FORM AN EXCLUSIVE PARTNERSHIP THAT WILL CREATE BEST NETWORK AND LOYALTY PROGRAM ACROSS THE AMERICAS

Today, American Airlines announced that it has entered into a letter of intent to further solidify its partnership with GOL, Brazil's largest airline. Building on the two carriers' initial codeshare offering in 2020, the expanded partnership includes an exclusive codeshare agreement, a larger and more lucrative joint SMILES and AAdvantage[®] loyalty program partnership. It also

expects to increase commercial cooperation with GOL to accelerate growth and create a more seamless experience for all customers.



TOP NFWS 🚱

FAA INVESTS \$431.8M TO INCREASE SAFETY, REDUCE ENVIRONMENTAL IMPACT AT AIRPORTS

The U.S. Department of Transportation's Federal Aviation Administration (FAA) awarded more than \$431.8 million in grants to build safer, more sustainable and more accessible airports across the United States. The funding from the final round of Fiscal Year 2021 Airport Improvement Program grants will pay for projects at 60 airports in 31 states plus Puerto Rico and the U.S. Virgin Islands.

21/09/2021

AIRBUS, AIR LIQUIDE AND VINCI AIRPORTS ANNOUNCE A PARTNERSHIP TO PROMOTE THE USE OF HYDROGEN AND ACCELERATE THE DECARBONIZATION OF THE AVIATION SECTOR

Airbus, Air Liquide and VINCI Airports, three major players in the aviation, hydrogen and airport industries, are working together to promote the use of hydrogen at airports and build the European airport network to accommodate future hydrogen aircrafts. The airport of Lyon-Saint Exupéry (France) will host the first installations as early as 2023. This partnership reflects the three groups' shared ambition to combine their respective expertise to support the decarbonization of air travel. Lyon-Saint Exupéry Airport (VINCI Airports' center of excellence for innovation) has been chosen as the pilot airport by the partners. The implementation of this project includes several phases:

 From 2023: deployment of a hydrogen gas distribution station at Lyon-Saint Exupéry airport. This station will supply both the airport's ground vehicles (buses, trucks, handling equipment, etc.) and those of its partners, as well as the heavy goods vehicles that drive around the airport. This first phase is essential to test the airport's facilities and dynamics as a "hydrogen hub" in its area of reach.

- Between 2023 and 2030: deployment of liquid hydrogen infrastructures that will allow hydrogen to be provisioned into the tanks of future aircraft.
- Beyond 2030: deployment of the hydrogen infrastructure from production to mass distribution of liquid hydrogen at the airport.



AIRBUS REVEALS THE NEXT GENERATION OF CITYAIRBUS

Airbus has announced plans for a new CityAirbus at the Company's first #AirbusSummit on "Pioneering Sustainable Aerospace" as the emerging Urban Air Mobility (UAM) market begins to firm up. Ushering in the next generation of CityAirbus, the fully electric vehicle is equipped with fixed wings, a V-shaped tail, and eight electrically powered propellers as part of its uniquely designed distributed propulsion system. It is designed to carry up to four passengers in a zero emissions flight in multiple applications.



21/09/2021

UNWTO AND AFRAA TO COOPERATE TO RESTART OF AFRICAN TOURISM AND TRAVEL

UNWTO has signed a memorandum of understanding (MoU) with the African Airlines Association (AFRAA) to work more closely together and strengthen the relationship between the aviation and tourism sectors. The MoU was signed by Abdérahmane Berthé, AFRAA's Secretary-General and UNWTO Secretary-General Zurab Pololikashvilil. Under the terms of the agreement, both parties will consult each other on matters and activities of mutual interest to develop greater connectivity and advance seamless travel across Africa. The two parties will also work together to encourage greater cooperation and dialogue between the transportation and tourism sectors within the continent.

22/09/2021

VOLOTEA, AIR NOSTRUM AND DANTE AERONAUTICAL UNVEIL PLANS FOR A FIRST 100% ELECTRIC AIRCRAFT

The consortium expects their first aircraft with this technology to be certified for flights in 2024.

The 100% electric aircraft project led by Volotea, Air Nostrum and Dante Aeronautical will mean an important step towards a future with emission-free aviation. This aircraft will play a crucial role in establishing zero-emission regional air transport, enabling connections to be made between small pop-

ulation centres, thanks to its reduced operating costs compared to much larger aircraft.



30/09/2021

AIRLINES COMMIT TO TIMELY REIMBURSEMENT AFTER FLIGHT CANCELLATIONS

Following dialogues with the Commission and national consumer protection authorities, 16 major airlines have committed to better information and timely reimbursement of passengers in case of flight cancellations. The Commission had alerted the Consumer Protection Cooperation (CPC) enforcement authorities in December 2020 to address several airlines' cancellation and reimbursement practices in the context of the COVID-19 pandemic.





<u>3 October</u>

Hermes hosts a reception at the IATA AGM and Salvatore Sciacchitano receives the 2021 Hermes Award



During the IATA AGM held in Boston between 3 and 5 October Hermes hosted a reception wit the participation of numerous members of Hermes.

Dr Kostas latrou, Director General of Hermes started off by thanking and introducing Luis Felipe de Oliveira who became Hermes's Vice President & Treasurer in 2020. He continued by saying that it is a pleasure to meet physically although some of the attendants met last July in Athens. He went on to give a short briefing over what happened in Hermes the last couple of years. He thanked IATA for giving Hermes a premium slot, just before the beginning of the opening IATA AGM reception. "2020 despite being a tough year for the industry Hermes managed to organize our AGM online with the participation of almost all the industry leaders and we were the very first to get back to the face to face communication and organize a physical event in July this year". "We were very active signing MOUs with aviation organizations with the most important being for Airlines for America and I would like to thank all the A4A team and especially Nicholas Calio for making this cooperation happen as well as the University of the Aegean, Mr Theoharis, the Greek Minister of Tourism." "We still continue and work on our recommendation initiative, we continued with a "business as usual" spirit without interrupting our effort. We had a record of 15 organizations either with interviews or with position papers".

He thanked once again A4A, IATA, ACI and all organizations that participated with papers on the topic "RESILIENCE AND EFFICIENCY THROUGH LEADERSHIP AND COOPERATION" recommendation.

Believing that crises are for the brave ones Hermes decided to take initiatives and organized regional events "that were never part of our agenda". First an event Europe was organised with Hellenic Aviation Society back in February, with the help of Hermes member Juan Carlos Salazar -who is now the new Secretary General of ICAO- and with Aeronautica Civil another event in Latin America was organised and finally with our partner iPADIS was organised an event for focusing on Africa. He said that Hermes welcomed 2 new board members over the last months, Luis





<u>3 October</u>

Hermes hosts a reception at the IATA AGM and Salvatore Sciacchitano receives the 2021 Hermes Award (> cont'd)



Felipe de Oliveira and Eamonn Brennan. Finally, Dr latrou apologized for Hermes's decision to charge an annual fee to the members explaining the difficulty of getting sponsorship but at the same time it is an opportunity *"for the members to show their commitment"* and thanked all those that have already paid their fees. It will contribute to Hermes's existence and forward movement and help the organization keep its independence. With these fees members maintain their independence and their power to make the decisions on what happens in and with Hermes. "This is the agenda of the last year and as the situation seems to improve we plan to organize a lot of activities". He called the members to submit their ideas for next year's topic, "we need the interaction with our members and the organizations as this will ensure a good cooperation. After all, the organization belongs to you, the leaders of Air Transport."

He then called Luis Felipe de Oliveira to say a few words before the Hermes Award Ceremony. Luis Felipe expressed his joy for meeting his colleagues in person and being able to travel again in these difficult times. He then moved on to talk about Salvatore Sciacchitano, who did a great job in dealing with the greatest crisis in aviation history by introducing CART and bringing together stakeholders to discuss the issues of the industry and to find solutions. He achieved by being open and listening to all and realizing that only by working together the industry can ride the crisis wave. He thanked him for all his great effort over the last year.

Dr Kostas latrou said that the Hermes Award is given to people whose personalities contribute to air transport. The first recipient was Eamonn Brennan and Pieter Elbers received in 2020. It was an unanimous decision of the Hermes Board to bestow this year's award to Salvatore Sciacchitano for being a true leader in a difficult period in an industry that needs leaders.

Upon receiving the award, Salvatore Sciacchitano said that it is a great honour because he trusts Hermes as an organization and he trusts Hermes's mechanisms and the industry as a whole not individuals sectors. Hermes just as IATA under his leadership faces challenges in a different way by bringing the industry together.



12-22 October



Hermes participates in ICAO High-level Conference on COVID-19 (HLCC2021)



ermes participated in the ICAO High-level Conference on COVID-19 ran from 12-22 October, and featured the participation of 129 States and 38 international organizations, including key partnering global agencies such as the WHO and UNWTO.

The new ministerial Declaration, adopted in the presence of over 50 Ministers and Deputy Ministers, recognizes the severity of the COVID-19 crisis for civil aviation, and its cascading impacts on global supply chains and the many national economies which rely so significantly on international flights for tourism and trade.

It also recognized the critical role now being played by air transport and the ICAO Council's Aviation Recovery Task Force (CART) in keeping the essential supplies and personnel moving to where the world needs them most.

The participating countries committed to a multilayer risk management strategy for international civil aviation, and one which is adaptable, proportionate, non-discriminatory, and guided by scientific evidence.

To strengthen global public confidence in air travel, the countries emphasized that while vaccination should not be a precondition for travel, it is highly desirable that it be used to facilitate increased international mobility. Countries agreed to work with ICAO and other stakeholders to ensure the interoperability and accessibility of secure applications to validate pandemic-related testing, vaccination, and recovery certification.

They also committed to promoting, to the greatest extent possible, a harmonized and inclusive approach, including alleviating or exempting testing and/or quarantine requirements for fully vaccinated or recovered passengers, taking into account the different circumstances of individual States and their national polices. This is consistent with current World Health Organization (WHO) recommendations.

Hermes was represented by Dr Kostas latrou, Director General.



Italian Hipster smiles at Athens International Airport Ceramic, 2019 A.D.



THE AUTHENTIC SMILES



CALTA JOSE RICARDO BOTELHO Executive Director & CE0 - ALTA

(classiv



What are the shared goals of the stakeholders in the aviation industry?

Within the last months, we have met with the airline associations from other regions and we have confirmed that a common goal right now is harmonization. It is imperative to achieve a standardize regulation globally to facilitate recovery and, specially, to bring confidence to air transport users.

At this moment restrictions and travel requirements are complex and confusing with very little consistency among them and little scientific evidence. ICAO has led an unprecedented work between authorities and aviation industry to determine a path to ensure safe and harmonized operations, however there is still a huge opportunity to offer consistency and recover confidence.

It is important to remember that the CART group was composed by experts from government, and the guidance document is not an industry document, but a set of recommendations built together.

Who should assume a leadership role in industry decision-making? What is expected of leaders these days but also in the medium and longer term?

Collaboration has always been important, but now even more. Industry cannot work alone and governments need to listen to the industry in order to implement smart and efficient regulation. This is the moment to strengthen collaborative work between leaders and everyone in the entire value chain.

What are the upcoming challenges of the recovery phase?

In Latin America and the Caribbean it has been demonstrated once again the need of air transport and the willingness to travel. We see it with the speed recovery of domestic market in countries like Brazil, Mexico and Colombia. At this moment the excessive number of regulations and restrictions represent a challenge for recovery of travelers' confidence and for the recovery of industry operations. At the upcoming ALTA Airline Leaders Forum industry leaders and government representatives will meet to discuss how to better work ahead to offer





population a safe and efficient means of transportation.

What lessons have we learned from this global crisis?

Some of the lessons I would like to highlight are:

 Aviation plays a key role worldwide but specially in LAC region. Our geography makes air transport a need for the transport of people and goods.

- 2. Collaboration is critical.
- Crisis makes opportunities. The "COVID agility" has allowed us to implement innovations and optimize processes even fastee.

What role will the industry have to play with respect to ICAO postpandemic? How can industry stakeholders better engage with ICAO in the future?

For the first time industry stakehold-

ers and government sit in one table to discuss the future of aviation. This integration should prevail in the future.

What are the main challenges in Latin America?

The industry in the region has received very limited financial support and currently faces several restrictions and regulations that make it complex to travel. Harmonization is a key challenge to address, as well costs (for ex. as fuel and charges).



For another year, ATN – Air Transport News successfully organised the Summer Aviation Forum and hosted some of the most executive members of the aviation industry. The aim of the forum was to underline the challenges as well as the future of the industry, from the leaders and tourism point of view. Also, a special session on the Latin American market was held as well. In particular, the forum consisted of:

- Dr Kostas latrou, Director General, Hermes Air Transport Organisation
- Juan Carlos Salazar, Secretary General, ICAO
- Luis Felipe de Oliveira, Director General, ACI
- Alex de Gunten, SVP, HEICO
- Abderahmane Berthe, Secretary General, AFRAA
- Ismail Polat, Chief Planning Officer, iGA Istanbul Airport
- Dr David Ciceo, CEO, Aeroportul International Cluj & President, Romanian Airports Association
- Dr Michael Kerkloh, Board Member, Lufthansa Group
- Professor Andreas Papatheodorou, President, Hellenic Aviation Society





- Donal Handley Chief of Staff Director General's Office, EUROCONTROL
- Ilias Maragakis, COO, Fraport Greece
- Ioanna Papadopoulou, Director Communications and Marketing, Athens International Airport
- Tassos Raftopoulos, Director Alliances & Aeropolitical Affairs, Aegean Airlines
- Jose Ricardo Bothelio, Executive Director & CEO, ALTA
- Nikos Sofiadis, Managing Director, Goldair Airline Services
- Jeff Peet, Managing Editor, ALA



Dr Kostas latrou, *Director General of Hermes* – *Air Transport Organisation*, welcomed all the participants and pointed out the importance of the vaccines for the recovery of the industry. He presented the current situation, within the air transport market but he also highlighted the new industry trends, and needs, which occurred due to the global health crisis.

The newly elected Secretary General of ICAO, Juan Carlos Salazar, provided a highly encouraging and insightful speech. The event's first keynote speaker highlighted the great impact of Covid-19 in the aviation industry and its results on the domestic and international traffic. He expressed his belief that vaccinations are the key for the stable recovery of the industry as well as that air transport sector plays an important role on the supply chain and its recovery will positively affect other parts of the global economy. Moreover, Juan

Carlos Salazar pointed out the several challenges which the industry faces by implementing the CART guidelines. Through CART suggested procedures, establishment of harmonisation processes and rapid coordination the industry will be able to recover from the COVID-19 pandemic. In particular, he presented the VDS example which relates to a common database of health documentation for better and safer travels. In the last section of his speech, the Secretary General presented the future challenges of the industry as well as several actions for the future recovery. He identified the need for future risk management strategies, the urgent need for coordination with all authorities as well as the strong opportunities of the digitalisation of the aviation sector. Lastly, he reminded of the industry's commitment to invest in order to meet sustainability and decarbonisation challenges of the sector.

As the second keynote speaker of the forum, Luis









Felipe de Oliveira, Director General of ACI expressed his optimism regarding the signs of recovery in the industry. He pointed out that vaccinations are vital, however there are still several obstacles in the distribution procedures. Moreover, he highlighted several aspects which need to improve in the air transport sector. The acceptance of vaccines as well as the difficult travel procedures identified as the main issues now. Moreover, Luis Felipe de Oliveira highlighted the vital assistance of the CART guidelines and their fast adoption, as well as their implementation, by the majority of the airports. He presented the strong impact of the airport industry, on the social and economic development, as well as the need to "build back better" regarding the future expansion of airports. Last but now least, he referred to the future challenges of the airport sector. He identified sustainability, net zero-carbon emissions as well as collaboration among stakeholders as the main targets for a viable future.

The forum continued with the **ceremony for the 15th Anniversary of ATN – Air Transport News** in which Dr Kostas latrou, founder of ATN, thanked all the partners, as well as individuals, for their support and especially Athens International Airport by providing with a plaque for their cooperation.

Luis Felipe de Oliveira, Director General of ACI highlighted the importance of the implementation of

harmonised procedures, within the industry, in order to adopt to the new normality, achieve optimal passenger experience and ensure health safety measures. In this context, he presented the ACI Airport Health Accreditation Certificate which for the second year was awarded to the iGA Istanbul Airport; the respective plaque was accepted by Ismail Polat, Chief Planning Officer of iGA Istanbul Airport.



The first session of the forum was hosted by **Alex de Gunten**, *Senior Vice President of HEICO*, who warmly welcomed the panel and introduced briefly the current situation in the aviation industry. He expressed his concerns over the constraints faced by the industry and highlighted that the industry is ready for a structural change.





By opening the discussion, Dr Michael Kerkloh, Board Member of Lufthansa Group identified that the industry has accelerated rapidly, especially in the last 6 months. He expressed his relief regarding the survival of the airports, as well as the small number of airline bankruptcies, during the pandemic and said that many airlines are saved by their governments. He also witnessed a small number of consolidation and surprisingly the initiation of several new airlines, around the world. Moreover, Dr Michael Kerkloh underlined the fact that at present, airlines need to face the challenge of Covid-19 restrictions on their network planning. He added that the industry needs to have a common basis which will provide the same message to all stakeholders, give the ability for information sharing, technological advancements as well as a common platform for everyone. Moreover, he acknowledged the fact that in the future there will be airport terminal constraints, and this is an issue that needs to be taken seriously into consideration.

Abderahmane Berthe, Secretary General of AFRAA presented the significant impact of the Covid-19 pandemic in the African aviation market. He identified several elements as major factors which prevent the industry from recovering faster:

- Travel Restrictions within the region
- Different travel requirements add complexity



- Limited financial aid by the governments
- Low levels of vaccinations among the continent
- Decrease of connectivity

However, he added that he is optimistic for the future of the African aviation market as due to the health crisis the region faced a great surge of cargo operations. This initiated the dialogue between stakeholders, which reflects to a promising future for African aviation. Secretary General of AFRAA identified the health authorities as a great obstacle to the streamlining of air transport operations as they continuously establish restrictions. To avoid this situation, Abderahmane Berthe suggested the establishment of National Committees with the participation of all parties in the decision making process. Finally, he stated the fact that PCR tests are the main weapon for the African aviation market to continue its operations until the vaccination levels finally reached.

The CEO of Aeroportul International Cluj & President of Romanian Airports Association, **Dr David Ciceo**, focused mostly on the Romanian aviation market. He identified that larger Romanian airports suffered greater losses, than the smaller ones, however there was a governmental aid to continue their operations. He added that Romanian airlines, TAROM and Blue Air received also state aid while at the same time the market was characterized by the presence of EVENTS T



FRIDAY 3 SEPTEMBER 2021 / AIR TRANSPORT – A SIMPLE RECOVERY OR FUNDAMENTAL REGENERATION? 2021 SUMMER AVIATION FORUM



a significant number of Low Cost Carriers. During the summer months the major Romanian airports projected promising results, a fact that makes Dr David Ciceo optimistic about the future.



Ismail Polat, *Chief Planning Officer of iGA Istanbul Airport* explained that the Covid-19 pandemic created a challenging environment for an airport of that size. He identified that all newly adaptive techniques, such as digitalization, were essential for the viability of the airport while they offered a great level of flexibility. Moreover, Ismail Polat acknowledged that Istanbul Airport could not manage to establish all the necessary procedures without the cooperation and coordination with other aviation and governmental stakeholders. He also highlighted the concept of a harmonized aviation system which will create opportunities to share information, experiences, solutions, and strategies as this will establish the basis for cooperation among all aviation parties. Finally, he identified all the necessary actions for airports to preserve their high security and safety levels for the future.

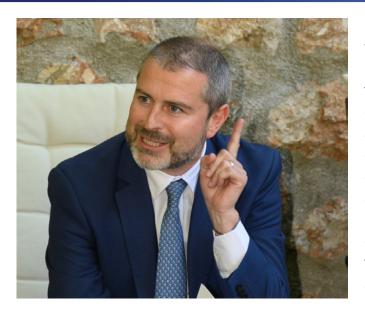


During the second session, **Professor Andreas Papatheodorou**, *President of Hellenic Aviation Society*, coordinated a highly insightful panel which analyzed the relationship between air transport and the tourism industry. Professor Andreas Papatheodorou initiated the discussion by referring to the strong relationship between air travel and tourism. He pointed out that leisure traffic has a faster growth, in comparison with business traffic, while he underlined several trends as staycation, digital nomads as part of the new normality which will disrupt the traditional travel and tourism industry.

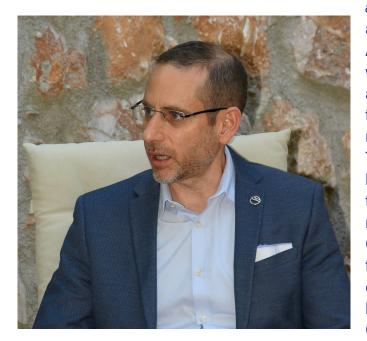
Donal Handley *Chief of Staff Director General's Office of EUROCONTROL* presented a holistic overview of the situation in the European air transport market. He thoroughly discussed the encouraging results of passenger numbers as well as aircraft movements, especially during the summer months. He identified the strong presence of Low Cost Carriers, as well as their huge expansion, after the opening of the markets. He also expressed his belief that leisure and VFR traffic will remain at high levels. Donal Handley admitted that international traffic remains EVENTS T



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in relatively low levels and its recovery will happen gradually in the next years. However, he expressed his concern on the recovery of business travel as a high yield aviation market segment. In terms of cooperation with the different tourism stakeholders, Donal Handley explained that EUROCONTROL works closely with all stakeholders to create the necessary environment for any tourism operation.



Next, **Tassos Raftopoulos**, *Director of Alliances & Aeropolitical Affairs at Aegean Airlines*, pointed out that vaccines are a helpful tool for the recovery of the industry. However, from the airlines' perspective

he believes that in the following year the industry will be able to rebound to 2019 levels. Tassos Raftopoulos also recognized that the need for financial state aid delayed the acceleration of several developments and he highlighted that the entire aviation ecosystem needs to focus its future actions on the investment toward suitability. The Director of Alliances & Aeropolitical Affairs recognized the significance of the collaboration, and cooperation, between tourism stakeholders for the promotion and development of a region. However, he believes that those initiatives demand strong investment as well as to take into consideration the fact that countries like Greece have major seasonality issues which adds a layer of complexity on the development of a tourism strategy. Regarding sustainability, he stressed the fact that Aegean constantly makes an effort to reduce its emissions, by having a young and efficient aircraft fleet, as well as several other actions.

Ioanna Papadopoulou, Director of Communications and Marketing of Athens International Airport talked about the stable recovery of Athens International Airport (AIA) and expressed the fact that people want to travel again. She mentioned that in Greece, a country with a major tourism market, the domestic traffic picked up during the last months as well as major part of international traffic restored as well. The VFR and leisure tourist markets continue to be AIA's strongest segment while at the same time the airport administration tries to adopt to the new normality requirements. Moreover, the Director of Communications and Marketing of AIA highlighted the active role of the airport regarding the creation of synergies towards tourism development. AIA became a major player in the establishment of Greece as a tourism destination when at the same time she referred to the values, such as sustainability, which need to be communicated among the tourism stakeholders. Finally, Ioanna Papadopoulou underlined the importance of sustainably element in AIA's decision making process as well as EVENTS T



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airport's goal for fewer carbon emissions. She also recognized that the mentality for sustainability is strong among the customers, especially younger ones; this enables all stakeholders to adopt even more strategies on that direction.



On the side of the Greek regional airports, **Ilias Maragakis**, *COO of Fraport Greece* identified that several regional airports exceeded expectations: there were more aircraft movements from/to those 14 regional airports as well as attraction of new airlines. The COO of Fraport Greece underlined the fact that there is a strong dynamic in the market and there are two main targets which the Greek market needs to focus. First, is the establishment of health measures and second the collaboration within all tourism stakeholders. In terms of sustainability in the industry, Ilias Maragakis expressed that sustainability needs to be developed firstly, at the destination level. If the mentality exists then the passengers, airlines and airports could easily adopt. Finally, he identified the environmental issues as the key challenge for any stakeholder within the aviation and tourism sector.



Furthermore, a special session was held regarding the Latin American Market and implication of strategies in the region. The round table discussion opened with Jose Ricardo Bothelio, Executive Director & CEO of ALTA, who referred to the fact that Latin American market shares many similarities with other aviation markets. He expressed his feeling that in the beginning of the Covid-19 pandemic, the authorities acted by themselves and made one-sided decisions for the different markets in the region. Thus, Latin American market faced an uneven development which the Executive Director presented through the Mexican market example. He pointed out that the coordination of actions is the key for the recovery and viability of the market. He also added that Latin American carriers need to adopt to the new normality and rebuild their







business models. In contrast with other regions, there is a little financial aid from the governments, thus airlines need to change to survive.

Next, **Jeff Peet**, *Managing Editor of ALA* underlined the fact that the Covid-19 pandemic created a sense of sympathy across the industry and a strong willingness for development by all stakeholders. However, the pandemic added several challenges and procedures which disrupted the Latin American aviation market and created a complex environment. He also pointed out that the existence of a strong and repeating message is the key to regain trust in the industry. There should be a common message among all aviation stakeholders. Finally, he referred to the major advantages of the technologically advanced Latin American airports and technology's assistance for the passenger flow management.

Nikos Sofiadis, Managing Director of Goldair Airline Services, expressed his concerns over the uncertainty of the future of the Covid-19 pandemic and the new challenges which occur for the airline ground handling industry. Moreover, he referred to the large potentials of the Latin American Market as



well as the great opportunities in terms connecting Greece with the region.

The event concluded with Dr Kostas latrou who presented a summary of the main results of the forum. He referred to the encouraging results of the industry; nonetheless, he pointed out that the air transport sector needs harmonized procedures as well as strong collaboration from all stakeholders. Finally, he expressed his optimism for the future of the aviation industry as a whole.







FRIDAY 3 SEPTEMBER 2021 / AIR TRANSPORT – A SIMPLE RECOVERY OR FUNDAMENTAL REGENERATION? 2021 SUMMER AVIATION FORUM





EVENTS T





Host airline



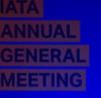
77th AGM and World Air Transport Summit Boston USA / 3–5 October 2021

#IATAAGM





et Film



2¹⁴ AGM and World Air Transport Summi oston, USA 3–5 October 2021



Honorable Charlie Baker

Governor of the Commonwealth of Massachusetts

The 77th AGM took place on 3-5 October 2021 in Boston, hosted by JetBlue, with some 600 participants onsite, including media. Charlie Baker, Governor of the Commonwealth of Massachusetts, welcoming the participants enjoyed their physical presence after 18 months.

TATA



Mr. Salvatore Sciacchitano

President of the Control of The International Aviation Organ

Salvatore Sciacchitano, ICAO Council President

In his keynote remarks, Salvatore Sciacchitano, ICAO Council President, praised the U.S. for relaxing its entry requirements for vaccinated travellers, and encouraged governments around the world to approach air travel entry requirements on the basis of practical and evidence based approaches to manage risk. He confirmed that the Council Aviation Recovery Taskforce (CART), working in close collaboration with the WHO and the aviation industry, has updated its recommendations with regards to the certification issues surrounding COVID19 test results and vaccination certificates. "The real issue is that there are recommendations.... but unfortunately the measures are not implemented in a harmonized way," said Mr. Sciacchitano. ICAO will host a virtual High-level Conference on COVID19 in October 2021 which will be an opportunity to promote and strengthen collective efforts to harmonize - a keyword at the IATA AGM - measures and risk management strategy through the implementation of the recommendations by the ICAO CART.

He said aviation faces a dual challenge recovery and emissions reduction under increasing civil society demands. If these imperatives are achieved there will be sectoral transformation and renewal moving towards sustainSource: IATA

ability and connectivity growth.

"There is far too much complexity in the way borders are re-opening. The potential for a global re-connect could be hijacked by bureaucracies favoring standalone "made-at-home" solutions over approaches that work across borders," said Willie Walsh, IA-TA's Director General. "The most important result that the ICAO HLCC could achieve is bringing commitment from states to reduce the evolving complexity. The second most important achievement would be recognition that we must return to normal and the production of harmonized guidance on how to do so, including the sunsetting of measures."





Willie Walsh, IATA's Director General, presented IATA's foresight on the Air Transport Industry. A sharp aviation industry recovery worldwide in 2022 is expected following the huge financial losses incurred by airlines during the last two years due to Covid-19 pandemic. "We expect 2021 losses to be nearly USD 52 billion-cut dramatically from the USD 138 billion lost in 2020. Losses will further reduce in 2022-to about USD 12 billion. In total, the Covid-19 crisis will cost aviation USD 201 billion in losses before we return to profitability in 2023," Walsh said that governments need to better manage border restrictions as increasing numbers

of people resume confidence in flying. "Travel restrictions bought governments time to respond in the early days of the pandemic. Nearly two years later, that rationale no longer exists... And there is little evidence to support ongoing blanket border restrictions and the economic havoc they create" The industry body head said that there is an urgent need for simplification of the various measures used by governments to manage the risks of Covid-19. "There is far too much complexity in the way borders are re-opening. The potential for a global re-connect could be hijacked by bureaucracies favoring standalone made-at-home solutions

over approaches that work across borders, IATA expects air cargo to recover above the 2019 levels and record strong growth in 2022 with the support of strong global trade. "Cargo volumes, which are already above pre-crisis levels, are expected to increase further on the back of capacity improvements as passenger capacity picks up".

The airline body also expects North American airlines to return to profitability in 2022, ahead of other regions whereas airlines from Asia Pacific may take a little while to return to profitability as these carriers have been impacted by strict government regulations with travel restrictions





Robin Hayes, JetBlue's CEO and head of the IATA Board of Governors

remaining very tight, vaccination rollout is diverse and slower compared to Europe and North America, especially in emerging countries in Asia-Pacific. He then warned the industry that planned increases in charges by airports and air navigation service providers (ANSPs) will stall recovery in air travel and damage international connectivity: "cost reductionnot charges increases-must be top of the agenda for every airport and ANSP. It is for their customer airlines." and he added "This must stop if the industry is to have a fair opportunity at recovery. Infrastructure shareholders, governmental or private, have benefited from stable returns

pre-crisis. They must now play their part in the recovery. It is unacceptable behavior to benefit from your customers during good times and stick it to them in bad times". As airlines have amassed a huge debt burden of over \$650 billion, any defaults could result in airline failures and the loss of tens of thousands of jobs.

He concluded by saying that the pandemic reminded the world what a world with limited aviation is like. "Disconnecting the planet is intolerable for people, businesses, and governments. Reconnecting the world and transitioning to sustainable energy sources are big challenges" Only if all pull

together-with the support of our partners in government and across the value chain-the industry will be resilient yet again. "Our industry is rising—from the destruction of COVID-19 and to the challenges of sustainability. We will fly high again!"

Robin Hayes, JetBlue's CEO and head of the IATA Board of Governors confirmed that the industry is on the way to recovery. He compared governments' reactions to 9/11 threats and to Covid-19 threats lamenting the fact that many countries keep their borders closed despite vaccines and widespread vaccination causing detrimental impact for the indus-





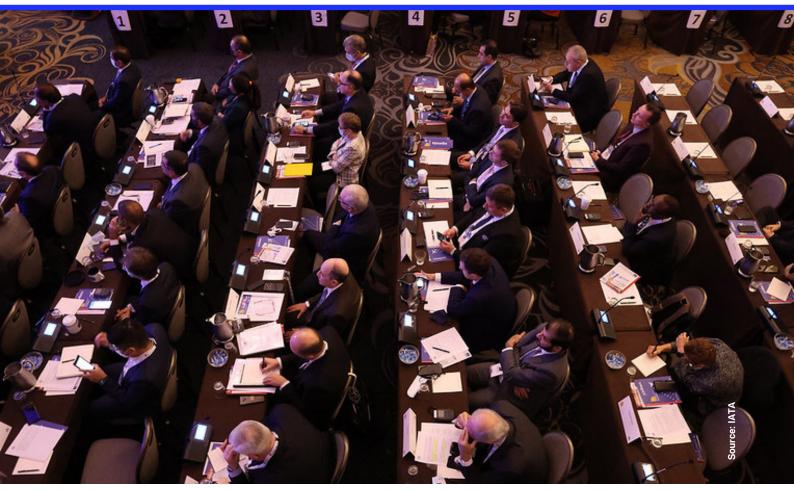
try. He called the governments to admit that the world "will have to live with Covid-19 for years to come" and to work with the industry to manage with reality just as it was done with security measures and terrorism threats. Luckily, governments just as the Biden Administration are removing their border restrictions implementing orderly passenger procedure facilitation. He continued by saying that governments need to guarantee the free movement of transport workers thereby threatening global supply chains. He called passengers also to "do their part" by following crew directions and wearing masks and following health requirements.

He went on to present the issues the Board of Directors has addressed over the last year. On Covid-19 the board has been supportive of all IATA efforts since the beginning of the pandemic. The Board has expressed its appreciation for the financial support some governments have provided to the industry and IATA for its advocacy in this matter. But unfortunately governments' support diminished when the Delta variant continued to hurt the industry. The Board has asked IATA to remain focused to the effort to remove border restrictions. He pointed out that today 7 of the 33 markets are open or have minimal restrictions and some

will very soon open to vaccinated passengers. The Board supports IATA's effort to work with government and the industry on the roadmaps to open borders based on international standards and risk based approach. Within this framework, the Board supports IATA's travel pass as a digital alternative to the unsustainable manual verification of passenger documentation. He thanked on behalf of the Board IATA for its strong leadership over the crisis and its effort to promote the industry during this Covid-19 crisis and asked IATA to continue the efforts as the industry enters the endemic phase of the disease.

On the other major topic, that of





sustainability, he stressed the commitment of the industry to the target of zero emissions by 2050 but pointed out the challenges and costs associated with meeting that target. There are many issues that need to be considered before endorsing a resolution that commits the industry to this target including the substantial cost and the imperative for full support from the governments and all other industry stakeholders, particularly for producers of sustainable aviation fuels, aircraft and engine manufacturers, airports and air navigation service providers. The Board focused not on t the result needed to be achieved but on how to get every partner to play its part and get results. The Board accepts two indisputable truths: first, this commitment is the right thing to do for the industry and humanity; second, failure by the industry to achieve this target will mean that other will set the targets for the industry and leave the industry without a credible voice in the discussion. Some governments are pushing for more aggressive carbon reduction targets and others willing to restrain the industry's growth through excessive and nonproductive taxes.

Climate change will be at the top of the agenda of the next ICAO General Assembly in September 2022. The industry needs a clear commitment on how to address its carbon footprint. The Board called the IATA AGM to adopt the Board's resolution as a first step to ensure the industry's license to operate in the coming decades.

He continued to say that among the other important topics covered over the last year was the alternative settlement system envisaged in China that could fragment the market and result in high settlement cost for all participating carriers. The board has also discussed the need for the industry to do a better job promoting diversity, equity and inclusion in the workplace so as





not to lose all available talent and skills. 25by2025 initiative for aviation is supported by the Board so as to improve female representation in the industry and increase the number of women in senior positions by a minimum representation of 25% by 2025. The diversity & inclusion awards will show the progress and continue to remind the industry to be better in this area.

John Heimlich, Vice President and Chief Economist for Airlines for America spoke on Economic Recovery & Outlook" and predicted that the global economic environment will be generally supportive of the airline industry's recovery once borders begin to reopen, Citing research from Wells Fargo, Heimlich said that global GDP should rise 4.4% next year, while the US, UK, and Eurozone will see even stronger performance at 4.5%, 5.5%, and 4.5%, respectively but the absence of higher value international and corporate travel is slowing the recovery. Corporate travel in the US remains 60% below 2019 levels. he noted. He cited data showing that in 2019, the top 10% US-Europe Passengers accounted for approximately 40% of U.S.-Europe passenger revenue, while the top 20% accounted for 56%.

The good news is that since the Labor Day holiday, US ticket sales for international travel have

risen. Additionally, IATA show a 50% surge in Europe to US bookings since the US government announced it would lift the 212f travel restrictions which prevented those without the right to permanently reside in the US from entering the US if they had been in the UK, Ireland, all Schengen countries and some non-European destinations.

In her keynote address, Rachel Kyte, Dean of the Fletcher School, Tufts University, invited airlines to "turn this crisis into an opportunity - to make this industry part of the growing coalition of actors across all sectors of society and the economy committed to a net zero future." Being the for-





Rachel Kyte, Dean of the Fletcher School, Tufts University

mer special representative of the UN Secretary-General and Chief Executive Officer of Sustainable Energy for All, was clear that investment is being divested from fossil fuels and that questions are being asked about companies' commitments to net zero and their entire approach to sustainability.

She stressed that the cost of inaction would be higher than the cost of inaction and that it would be better for businesses to be masters of their own destiny.

She called on the industry to accelerate the use of sustainable aviation fuels. She also argued that the voluntary carbon market could play a role in reaching the Paris target – but only if they were high in integrity and transparency.

She called for governments to gear recovery plans and adopt policy frameworks that will drive the uptake of SAF. She challenged the industry to put as much force into arguing for those policies as it does into lobbying for other policies that advantage the industry, like landing slots.

She concluded by urging that "the past is not a predictor of the future," and that "the responsibilities of leadership are heavy." She called for courageous leadership to support the global effort to combat climate change, so that aviation could continue to be at the core of the global economy.

The panel on "How Can Aviation Stakeholders Rise to the Challenge of Climate Change?" the participant aviation stakeholders agreed on the need to come together behind the industry's aggressive carbon reduction target, but it was made clear that the way forward is still being mapped, based on the high-level panel discussion bringing together airlines, OEMs, SAF providers and governments. Annie Petsonk, Principal Deputy Assistant Secretary for Aviation and International Affairs, US Department of Transportation, outlined how govern-

EVENTS 🕅

77th IATA Annual General Meeting (AGM) and World Air Transport Summit



The panel on "How Can Aviation Stakeholders Rise to the Challenge of Climate Change?"

ments can play a supportive role. She cited the SAF Grand Challenge announced by the Biden Administration, to incentivize the production of at least 11 billion liters of SAF by 2030.

Dr. Jennifer Holmgren, *CEO LanzaTech* cited the importance of interim targets, such as a 2030 goal on SAF - possibly around 10% - to set the pathway towards the industry's target of net-zero carbon by 2050.

Stanley Deal, *CEO Boeing Commercial Airplanes*, complemented the Biden Administration on their approach to incentivizing SAF.

Pieter Elbers, *CEO KLM*, mentioned that despite political changes, the societal shift in focus on climate means that sustainability and climate will remain top priorities for airline customers. KLM has seen a rise in customer awareness – both passenger and cargo – with more of them engaged with offset purchases and SAF commitments. Even the employees of the industry – such as young engineers at Boeingare asking specifically about the sustainability objectives before accepting jobs.

The Airline CEO Insight Debate Panel moderated by Richard Quest focused on border closures, financial support measures, the timing of the recovery and the future of business travel. The participants declined to criticize governments for their initial actions in closing borders and restricting air travel. "Governments were groping in the dark" said United Airlines CEO Scott Kirby. Aer Lingus CEO Lynn Embleton concurred that governments "were finding their way thru [the pandemic]." However she also called it "a shame" that air travel was vilified during the pandemic

as contributing to the spread of COVID.

Turning to government financial support, Lufthansa CEO Carsten Spohr pointed out that "our aviation was supported, which showed the importance of our industry." Emirates CEO Sir Tim Clark was more blunt: "If it had not been for state intervention ... most airlines in this room would be bankrupt today." Kirby noted that aviation was a "huge part of the humanitarian response" to COVID-19; which would not have been possible without government support of the industry. Turning to the recovery, CEOs were bullish. Citing the success of vaccine programs, Clark said that probably by the end of next year and certainly in 2023, "this thing will be history." IndiGo CEO Rono Dutta agreed. Everyone agreed business travel will return to pre-crisis levels. Kirby predict-



ed business travel will come back "100%." Looking at the full room, Kirby asked, "How many people would rather be here in person than on Zoom?"

On the second day the first panel on "How Can Aviation Reliably **Reconnect People & Econo**mies in Covid Times" the panelists stressed that although passengers confident in the health safety measures in place for air travel, but are confused around Covid-19 travel requirements and restrictions. When asked "How can aviation reliably reconnect people and economies while managing the risks of Covid-19?" David Rockland, CEO of Rockland Dutton, cited that passenger survey data show that people feel safer now than they did they did at the beginning of the crisis, but that there is a lot of frustration over the paperwork.

Harry Theoharis, Parliamentary Spokesperson, Hellenic Parliament, explained how different government departments came together in Greece to ensure coordination and clarity.

JetBlue President and COO Joanna Geraghty said the biggest challenge was that the scientific advice was often changing.

Dr. Issac Bogoch of the University of Toronto's Dept. of Medicine explained that it was important to be honest as scientists don't have all the answers and uncertainty was inevitable. It was also stressed that global vaccine equity is essential.and global standards to harmonize vaccine recognition should be set by WHO without delay. Passengers will adapt to restrictions provided rules are consistent. Simplifying procedures and providing clear explanations of the rules are the key to giving passengers confidence and restarting travel.

The panel on "Partnerships to Promote a Sustainable Recovery" agreed that working together across the aviation value chain to support the industry's recovery from the pandemicis the only way to achieve a win-win situation. Or as Deborah Flint. President and CEO, Greater Toronto Airports Authority, put it: "The common enemy is Covid-19". All panelists called governments to assume a more active and constructive role. This was not necessarily a call for direct financial support, but for governments to consider their role as shareholders in aviation infrastructure or drafting legislation, at a time when the entire value chain is suffering from financial weakness.

With regard to governments needing to collaborate, **Aengus Kelley**, *CEO* and *Executive Director of AerCap*, commented that the "re-opening of North Atlantic Market in November must be a success – as this will be an example, others will follow". Along similar lines, **Peter Ingram**, *CEO*, *Hawaiian Airlines*, said that ever-changing travel regulations had delayed the recovery of passenger traffic, but that the airline had however managed to work with their home airport to reduce costs when traffic was at its lowest.

The third panel on "What is Next for Air Cargo After its Heroic Performance in the Covid-19 Crisis?" all panelists stressed the role of air cargo as a lifeline for society and for aviation during the Covid-19 crisis. Global supply chains remained connected and critical medical supplies and vaccines were delivered. And air cargo activity provided vital revenues to combination carriers at a time when the passenger business collapsed. Participants also agreed that indicators for future cargo growth were strong, such as inventory levels and manufacturing output, but capacity challenges remain.

All agreed that the pandemic accelerated the rise of e-commerce and pharma shipping and with it the digitalization of the supply chain and greater awareness of sustainability. New levels of cooperation between stakeholders across the supply chain were forged. To ensure the momentum created from the crisis the panel urged all actors across the cargo ecosystem to continue to work together with intensity fast forward the digitization of the industry. There were also calls to fully utilize the data being gathered throughout the air cargo process to improve efficiency and to continue working to make aviation sustainable.

EVENTS TO STATISTICS TO

JUN 2021: Air Passenger Market Analysis

Chart 1 – Air passenger volumes

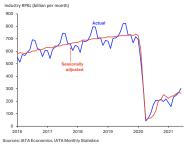


Chart 2 – Domestic RPK growth versus the same month in 2019, registration basis

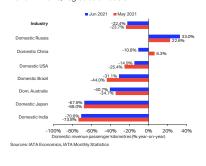


Chart 3 – Stringency of government international air travel measures by region

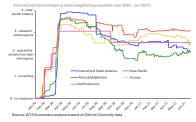


Chart 4 – International RPK growth versus the same month in 2019 (airline region of registration basis)

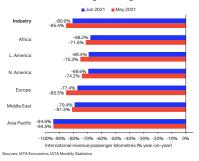


Chart 7: COVID cases

Chart 8: Trends in passenger bookings (dom. vs. int'l)



Chart 5 – Passenger load factors by region

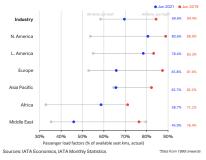
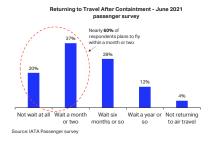


Chart 6: Survey data for air travel confidence



Air passenger market detail - June 2021

To aid understanding, the table includes both % comparisons with pre-crisis 2019 months and 2020 months June 2021 (% ch vs the same month in 2019) World June 2021 (% year-on-year) PDK share PDK ASK PLF (%-pt)2 PLF (le ASK PLF (%-pt)² PLF (level)³ TOTAL MARKE -60.1% -51.6% -14.8 192.5% 145.6% 11.1% 69.6% 1.9% -66.6% -59.5% -12.4% 58.7% 1206.8% 632.09 25.89 58.7% Africa 1.1% Asia Pacific 38.6% -65.6% -56.9% -16.6% 65.7% 46.29 43.8% 65.7% Europe 23 796 -69.2% -59 1% -21.6% 65.8% 387 7% 291.9% 12.9% 65.8% Latin Americ 5.7% -50.2% -47.1% -4.8% 78.4% 449.7% 381.3% 9.8% 78.4% Middle East 7.4% -77.7% -62.9% -30.5% 45.9% 377.2% 267.7% 10.5% 45.9% North Amer 22.7% -29.6% -8.3% 80.6% 351.2% 80.6% -36.2% 200.8% 26.9% 55.2% 55.2% International 45.7% -80.9% -71.0% -28.5% 470.5% 327.0% 13.9% Africa 1.6% -68.2% -60.0% -14.5% 56.5% 1283.4% 605.9% 27.7% 56.5% Asia Pacific -86.7% 11.0% -94.6% -48.3% 33.1% 59.9% 100.3% -8.4% 33.1% Europe 18.5% -77.4% -67.3% -27.1% 60.7% 584.5% 434.9% 13.3% 60.7% Latin America 2.2% -69.4% -64.6% 72.7% 802.89 714.0% 72.7% -11.3% 7.1% Middle East 7.0% -79.4% -65.3% -31.1% 45.3% 405.9% 269.8% 12.2% 45.3% 27.4% North Americ 5.5% -69.6% -57.3% 62.6% 937.09 483.1% 62.6% -25.3% **78.8%** 65.0% Domestic 54.3% -22.4% -15.5% -6.9% 78.8% 140.2% 93.3% 15.4% Dom. Australia 0.7% -40.7% -28.5% -13.3% 65.0% 825.2% 713.09 7.9% 1.6% 19.9% Domestic Brazil⁴ -31.1% -30.4% -0.9% 80.9% 355.5% 319.7% 6.4% 80.9% -10.8% -0.8% 6.7% -8.6% 76.2% 40.5% 76.2% Dom. China P.R. 28.2% Domestic India⁴ 2.1% -70.8% -59.1% -25.8% 63.8% 71.4% 61.3% 3.7% 63.8% 1.5% -67.6% -45.1% -29.2% 42.0% 28.9% 48.6% 42.0% 6.4% Domestic Japan Dom Russian Fed 4 3.4% 33.0% 39,4% -4.0% 81.3% 216.2% 119.1% 25.0% 81.3% Domestic US⁴ -14.9% -11.2% 312.2% 29.8% 85.9% -3.8% 85.9% 169.1% 16.6% % of industry RPKs in 2020 ²Change in load factor vs. the same month in 2019 ³Load factor leve

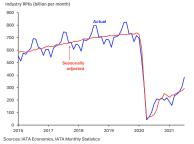
⁴Note: the seven domestic passenger markets for which broken-down data are available account for approximately 46% of global total RPKs and 84% of total domestic RPKs

Note: The total industry and regional growth rates are based on a constant sample of airlines combining reported data and estimates for missing observations. Airline traffic is allocated according to the region in which the carrier is registrated; it should not be considered as regional traffic.



JUL 2021: Air Passenger Market Analysis

Chart 1 – Global air passenger volumes (RPKs)



Domestic recovery remains uneven

Chart 2 – Domestic RPK growth versus the same month in 2019, registration basis

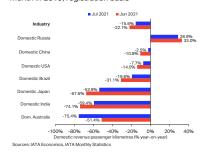


Chart 3 – International RPK growth versus the same month in 2019 (airline region of registration basis)

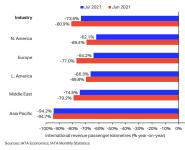


Chart 4: International RPKs by route (segment based)

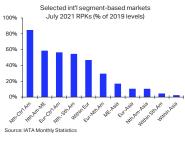
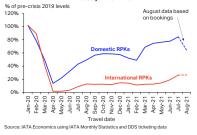


Chart 7: Trends in passenger bookings (dom. vs. int'l) Industry-wide RPKs



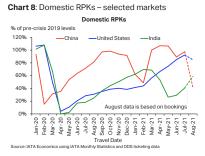


Chart 5: COVID-19 cases

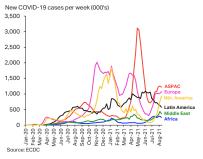
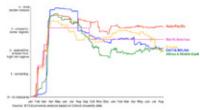


Chart 6 – Stringency of government international air travel measures by region



Air passenger market detail - July 2021

To aid understanding, the table includes both % comparisons with pre-crisis 2019 months and 2020 months.

	World	July 2021 (% ch vs the	e same month	in 2019)	July 2021 (% year-on-year)			
	share ¹	RPK	ASK	PLF (%-pt) ²	PLF (level) ³	RPK	ASK	PLF (%-pt)2	PLF (level)
OTAL MARKET	100.0%	-53.1%	-45.2%	-12.4%	73.1%	123.9%	80.0%	14.3%	73.1%
Asia Pacific	38.6%	-62.7%	-54.1%	-15.4%	67.5%	33.1%	30.9%	1.1%	67.5%
Europe	23.7%	-56.5%	-46.5%	-16.5%	72.5%	121.2%	92.6%	9.4%	72.59
Latin America	5.7%	-44.5%	-40.5%	-5.8%	79.3%	318.3%	249.5%	13.0%	79.39
Middle East	7.4%	-73.2%	-57.5%	-30.0%	51.3%	227.7%	153.6%	11.6%	51.39
North America	22.7%	-28.5%	-24.7%	-4.5%	84.1%	254.8%	101.3%	36.4%	84.19
International	45.8%	-73.6%	-63.8%	-23.1%	62.1%	197.6%	133.8%	13.3%	62.19
Asia Pacific	10.9%	-94.2%	-86.0%	-48.2%	34.3%	47.6%	65.5%	-4.1%	34.39
Europe	18.6%	-64.2%	-53.8%	-19.9%	69.0%	157.3%	115.6%	11.2%	69.09
Latin America	2.2%	-66.3%	-60.5%	-12.6%	72.9%	572.3%	424.1%	16.1%	72.99
Middle East	7.0%	-74.5%	-59.5%	-30.1%	51.3%	240.1%	154.3%	12.9%	51.39
North America	5.4%	-62.1%	-52.0%	-18.6%	69.3%	528.1%	222.7%	33.7%	69.39
Domestic	54.2%	-15.6%	-10.7%	-4.8%	81.4%	96.1%	53.5%	17.7%	81.49
Dom. Australia ⁴	0.7%	-75.4%	-61.0%	-30.8%	52.4%	124.2%	150.0%	-6.0%	52.49
Domestic Brazil ⁴	1.6%	-19.6%	-18.0%	-1.7%	83.1%	261.1%	227.0%	7.8%	83.19
Dom. China P.R. ⁴	19.9%	-2.5%	6.2%	-7.0%	77.9%	36.2%	30.1%	3.5%	77.99
Domestic India ⁴	2.1%	-59.4%	-47.1%	-20.1%	66.5%	123.0%	96.1%	8.0%	66.59
Domestic Japan ⁴	1.4%	-53.9%	-36.1%	-20.0%	51.8%	29.6%	10.9%	7.5%	51.89
Dom. Russian Fed. ⁴	3.4%	28.9%	34.8%	-4.0%	88.2%	56.8%	35.9%	11.8%	88.29
Domestic US ⁴	16.6%	-7.7%	-7.1%	-0.6%	88.7%	225.2%	82.3%	39.0%	88.79

¹% of industry RPKs in 2020 ²Change in load factor vs. the same month in 2019 ³Load factor level

⁴Note: the saven domestic passenger markets for which broken-down data are available account for approximately 46% of global total RPKs and 84% of total domestic RPKs Note: The total industry and regional growth rates are based on a constant sample of airlines combining reported data and estimates for missing observations. Airline traffic is allocated according to the regional growth rates are based on a constant sample of airlines combining reported data and estimates for missing observations. Airline traffic is allocated according to the regional growth rates are based on a constant sample of airlines combining reported data and estimates for missing observations. Airline traffic is allocated according to the regional growth rates are based on a constant sample of airlines combined as regional traffic.



AUG 2021: Air Passenger Market Analysis

Chart 1 – Global air passenger volumes (RPKs)

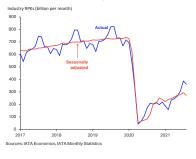


Chart 2 – Domestic RPK growth versus the same month in 2019, region of registration basis

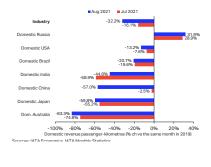


Chart 3: COVID-19 cases per week

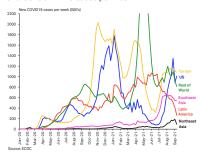


Chart 4 – International RPK growth versus the same month in 2019 (airline region of registration basis)

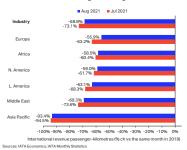


Chart 7: Share of people vaccinated by region

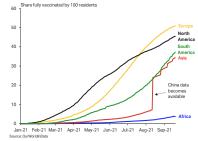


Chart 8: Trends in passenger bookings (dom. vs. int'l)

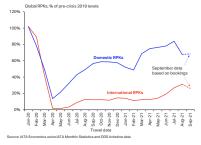


Chart 5 – Stringency of government international air travel measures by region

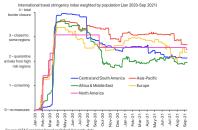
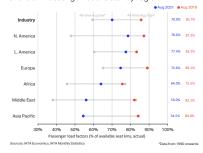


Chart 6 – Passenger load factor by region



Air passenger market detail - August 2021

	World	August 2021	(% ch vs t	he same mon	th in 2019)	August 2021 (% year-on-year)				
	share 1	RPK	ASK	PLF (%-pt) ²	PLF (level) ³	RPK	ASK	PLF (%-pt) ²	PLF (level)	
TOTAL MARKET	100.0%	-56.0%	-46.2%	-15.6%	70.0%	72.9%	46.9%	10.5%	70.0%	
Africa	1.9%	-58.0%	-50.4%	-11.5%	64.0%	205.2%	117.7%	18.4%	64.09	
Asia Pacific	38.6%	-78.3%	-66.5%	-29.6%	54.5%	-29.9%	-15.3%	-11.3%	54.59	
Europe	23.7%	-48.7%	-38.7%	-14.4%	74.6%	80.0%	57.2%	9.5%	74.69	
Latin America	5.7%	-42.0%	-37.7%	-5.8%	77.4%	215.1%	178.2%	9.1%	77.49	
Middle East	7.4%	-68.0%	-53.1%	-26.0%	56.0%	228.7%	123.1%	18.0%	56.09	
North America	22.7%	-30.3%	-22.7%	-8.6%	78.6%	209.4%	88.5%	30.7%	78.69	
International	45.8%	-68.8%	-59.0%	-20.4%	65.3%	145.8%	91.7%	14.4%	65.3%	
Africa	1.6%	-58.5%	-50.1%	-12.7%	63.0%	220.9%	117.5%	20.3%	63.09	
Asia Pacific	11.0%	-93.4%	-85.7%	-44.9%	37.9%	56.2%	51.3%	1.2%	37.99	
Europe	18.6%	-55.9%	-45.0%	-17.7%	71.5%	102.0%	68.5%	11.9%	71.59	
Latin America	2.2%	-63.1%	-57.3%	-11.4%	72.6%	461.2%	331.2%	16.8%	72.69	
Middle East	7.0%	-69.3%	-55.0%	-26.2%	56.2%	253.0%	126.8%	20.1%	56.29	
North America	5.4%	-59.0%	-48.5%	-18.0%	70.3%	397.3%	178.9%	30.9%	70.39	
Domestic	54.2%	-32.2%	-22.2%	-11.0%	74.7%	37.8%	19.4%	10.0%	74.79	
Dom. Australia ⁴	0.7%	-83.3%	-75.1%	-27.1%	54.9%	56.8%	56.6%	0.1%	54.99	
Domestic Brazil ⁴	1.6%	-20.7%	-18.2%	-2.6%	79.9%	140.5%	129.1%	3.8%	79.99	
Dom. China P.R.4	19.9%	-57.0%	-36.8%	-28.1%	59.5%	-47.1%	-33.1%	-15.8%	59.59	
Domestic India ⁴	2.1%	-44.8%	-34.7%	-13.3%	72.1%	121.5%	102.9%	6.1%	72.19	
Domestic Japan ⁴	1.4%	-59.8%	-29.4%	-34.9%	46.3%	28.8%	-5.1%	12.2%	46.39	
Dom. Russian Fed. ⁴	3.4%	31.9%	32.6%	-0.5%	90.5%	27.0%	21.3%	4.1%	90.59	
Domestic US ⁴	16.6%	-13.2%	-7.1%	-5.7%	80.9%	181.5%	70.8%	31.8%	80.99	

6 of industry RPKs in 2020 "Change in load factor vs same month in 2019 "Load factor level

⁴Note: the seven domestic passenger markets for which broken-down data are available account for approximately 46% of global total RPKs and 84% of total domestic RPKs

Note: The total industry and regional growth rates are based on a constant sample of airlines combining reported data and estimates for missing observations. Airline traffic is allocated according to the region in which the carrier is registrated; it should not be considered as regional traffic.





CAO MAR 2021: Air Transport Monthly Monitor

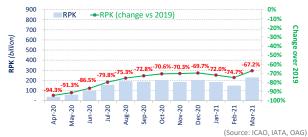
World Results and Analyses. Total scheduled services (Domestic and international)

http://www.icao.int/sustainability/Pages/.	Air-Traffic-Monitor.aspx		Air Transport Bureau E-mail: ecd@icao.int
GLOBAL KEY FIGURES	MAR 2021 (versus MAR 2019)		OUTLOOK* - APR 2021 (versus APR 2019)
	RPK ▼ -67.2% ASK ▼ -56.8% FTK ▲ +4.4%	LF : 62.3% ▼ -19.7 pt	ASK ▼ -54.4% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

World passenger traffic fell by -67.2% in March 2021 (compared to 2019), +7.5 percentage points up from the decline in the previous month. After two consecutive months of deterioration, passenger traffic picked up, driven by the rebound in domestic demand, particularly in China where lockdowns and travel restrictions have eased. The pace of recovery diverged across regions. Whereas Africa and Latin America/Caribbean slowed down, the other regions showed improvements, especially in Asia/Pacific and North America.



International Passengers vs. Tourist Arrivals

International passenger numbers fell by -87.1% in March 2021 (compared to 2019), +1.2 percentage points up from the decline in the previous month. International travel measures remained strict across all regions amid the emergence of new variants. Asia/Pacific was the slowest recovering region at merely 5% of 2019 traffic levels. The international tourist arrivals also remained stagnant and followed a similar trend as

international passenger traffic.



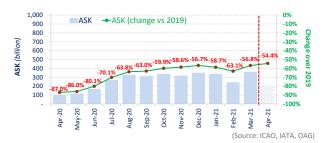
FREIGHT TRAFFIC

Freight Tonne-Kilometres - FTK

World freight traffic reported a growth of +4.4% in March 2021 (compared to 2019), -4.6 percentage points lower than the growth in the previous month. Albeit with a softened growth rate, air cargo demand remained strong, supported by the gradual rebound in global economic activity and increase in export. All regions, except for the Middle East and North America, showed a moderation in freight traffic expansion, with noticeable slowdown in Africa and Asia/Pacific. Nevertheless, Africa still grew rose double-digitally and topped the growth chart, followed by North America. Asia/Pacific and Latin America/Caribbean were the only regions posting contractions from 2019 levels, with the latter recording the weakest performance. CAPACITY

Available Seat-Kilometres - ASK

Capacity worldwide fell by -56.8% in March 2021 (compared to 2019), +6.3 percentage points up from the decline in the previous month (-63.1%). With progress in vaccine rollout, capacity is expected to increase in April 2021 to -54.4% down from the 2019 level.



Load Factor - LF

The passenger Load Factor reached 62.3% in March 2021, +6.9 percentage points higher than the previous month. Asia/Pacific and North America were the main contributors to the load factor improvements.

As air travel demand fell faster than capacity, the March LF was -19.7 percentage points lower than the rate in the same period of 2019.





ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight Tonne-Kilometres; IF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date.





ECONOMIC DEVELOPMENT MAR 2021: Air Transport Monthly Monitor

vs.2019

 -52.0%

 -0.2%

n a

TOP 15 AIRPORTS (Ranked by aircraft departures, passengers and volume of freight) MAR 2021: -19.6%, -31.0%, and +14.1% (vs. 2019) in terms of aircraft departures, passengers and freight for the Top 15

Airports (ranking by number of departures)	Departures	vs. 2019
Atlanta GA, US (ATL)	29,273	·25.0%
Dallas/Fort Worth TX, US (DFW)	26,852	4 -8.1%
Charlotte NC, US (CLT)	21,665	🕹 -12.5%
Denver CO, US (DEN)	21,024	🕹 -15.3%
Chicago IL, US (ORD)	20,413	46.5%
Guangzhou, CN (CAN)	19,889	4 -3.6%
Shanghai, CN (PVG)	17,813	🕹 -17.3%
Los Angeles CA, US (LAX)	17,399	40.7%
Phoenix AZ, US (PHX)	17,182	🕹 -15.3%
Chengdu, CN (CTU)	16,241	5.3%
Shenzhen, CN (SZX)	15,884	2.7%
New Delhi, IN (DEL)	15,454	🕹 -18.0%
Miami FL, US (MIA)	15,423	🕹 -18.5%
Beijing, CN (PEK)	15,338	-37.8%
Long Beach CA, US (LGB)	14,877	14.3%

Airports Passengers* (ranking by number of passengers) Guangzhou, CN (CAN) 2,535,629 🖖 -18.0% Atlanta GA, US (ATL) 2,309,590 Chengdu, CN (CTU) 2,280,367 2,253,152 2,059,731 1,959,727 -26.2% 2.059,731 Dallas/Fort Worth TX, US (DFW) Shenzhen, CN (SZX) Denver CO, US (DEN) Chongqing, CN (CKG) Beijing, CN (PEK) 1 819 343 1,819,343 n.a 1,754,016 -57.1% 1,747,122 -7.2% 1,741,696 -45.3% 1,706,335 -37.7% Shanghai, CN (SHA) Shanghai, CN (PVG) New Delhi, IN (DEL) 1,613,374 1,567,558 1,564,126 -34.5% Charlotte NC, US (CLT) Hangzhou, CN (HGH) Orlando FL, US (MCO) Phoenix AZ, US (PHX) 1,501,339 🞍 -33.6%

Airports (ranking by tonnes of freight)	Freight**	v	s. 2019
Memphis TN, US (MEM)	397,589	Ť	3.2%
Hong Kong SAR, CN (HKG)	394,000	Ψ	-6.7%
Shanghai, CN (PVG)	377,119	Ť	22.2%
Anchorage AK, US (ANC)	304,891	Ť	26.1%
Incheon, KR (ICN)	282,428	Ť	17.9%
Taipei, CN (TPE)	247,769	Ť	32.2%
Louisville KY, US (SDF)	241,465	Ť	18.5%
Tokyo, JP (NRT)	234,129	Ť	26.0%
Chicago IL, US (ORD)	234,043	Ť	53.4%
Doha, QA (DOH)	232,193	Ť	21.4%
Los Angeles CA, US (LAX)	230,439	Ť	28.8%
Miami FL, US (MIA)	211,027	Ť	20.1%
Dubai, AE (DXB)	207,104	Ψ	-11.2%
Frankfurt, DE (FRA)	200,751	Ť	5.2%
Paris, FR (CDG)	165,540	Ψ	-5.6%

Note: Total scheduled and non-scheduled services

In terms of aircraft departures, the Top 15 airports reported a combined fall of -19.6%, compared to 2019. A few airports posted positive growth, particularly Long Beach which increased double-digitally. Two Chinese airports, Chengdu and Shenzhen also rose +5.3% and +2.7%, respectively. Atlanta retained the 1st position with a decline of -25.0%.

In terms of **passengers**, the Top 15 airports posted a total fall of -31.0%, compared to 2019. Passenger traffic remained below 2019 levels for all Top 15 airports. Nevertheless, some Chinese airports showed faster recovery with Chengdu posting the smallest contraction at -0.2%. Guangzhou regained the 1st position with -18.0% decline followed by Atlanta, albeit with a larger fall at -52.0%

MAR 21

(Source: ACI)

MAR 21

In terms of freight, the Top 15 airports reported an increase of +14.1%, compared to 2019. All Top 15 ticked up, except for Hong Kong (-6.7%), Dubai (-11.2%) and Paris (-5.6%). With a modest growth of +3.2%, Memphis overtook Hong Kong and became 1st. Chicago continued to record the largest increase at +53.4%



MAR 2021: -57.9% (vs. 2019) in terms of RPK for the Top 15

In terms of RPK, the Top 15 airline groups accounted for 55.2% of the world's total RPK in March 2021 and declined by -57.9% compared to 2019. This decline was 9.3 percentage points smaller than the fall in world's average RPK.

For the first time since April 2020, a positive growth from the pre-COVID-19 levels emerged among Top 15 airlines. Airlines in countries with large domestic markets continued to lead the growth chart.

Following two consecutive months of deterioration, the Chinese airlines rebounded sharply. China Southern surpassed American and ranked 1st. China Eastern, Air China and Hainan Airlines improved to 3rd, 4th, and 8th, respectively. All Chinese airlines recorded faster recovery compared to other airlines in the Top 15, with Spring Airlines being the only airline exceeding 2019 levels.

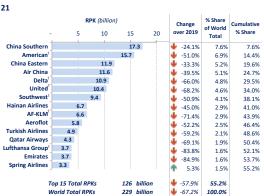
All US airlines posted improvements supported by rapid vaccination progress. American ranked 2nd, outpacing other US airlines in the Top 15. Delta and United moved down to 5th and 6th, while Southwest maintained the 7th position.

Airlines in Europe continued to show slower recovery. Lufthansa and KLM posted the second and third largest contraction and remained at over 70% and 80% below 2019 levels, respectively. Aeroflot and Turkish Airlines showed slightly better performance at 50-60% down from 2019

Two airlines in the Middle East, Qatar and Emirates ranked 12th and 14th, respectively, while the latter posted the largest decline from 2019.



ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight Tonne-Kilometres; LF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date. ACRONYMS





(Source: ICAO, airlines' websites)

except for Africa and Latin America/Caribbean, saw smaller declines in capacity compared to the previous month.

The most noticeable increase was recorded in Asia/Pacific, owing to the rebound of China domestic demand. Capacity offered in Europe continued to be far below 2019 levels.





ECONOMIC DEVELOPMENT APR 2021: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services (Domestic and international)

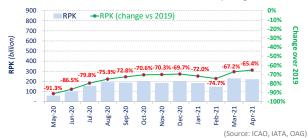
http://www.icao.int/sustainability/Pages/A	ir-Traffic-Monitor.aspx	Air Transport Bureau E-mail: ecd@icao.int
GLOBAL KEY FIGURES	APR 2021 (versus APR 2019)	OUTLOOK* - MAY 2021 (versus MAY 2019)
	RPK ▼ -65.4% ASK ▼ -54.5% FTK ▲ +12.0% LF : 63.3% ▼-19.5 pt	ASK ▼ -52.1% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

ICAO

World passenger traffic fell by -65.4% in April 2021 (compared to 2019), +1.8 percentage points up from the decline in the previous month. Recovery in air travel continued alongside the decline in new COVID-19 cases at the global level. Nevertheless, wide disparities exist between regions as a result of the varying pandemic situation and travel restrictions, particularly the emergence of new variants in certain parts of the world. Domestic travel remained the driving force for recovery with both domestic traffic of China and Russia Federation surpassing the 2019 levels.



International Passengers vs. Tourist Arrivals

International passenger numbers fell by -86.8% in April 2021 (compared to 2019), +0.3 percentage point up from the decline in the previous month. International travel remained unchanged with strict border restrictions due to the concern of surging new variants. Asia/Pacific and Europe were the slowest recovering regions.

The international tourist arrivals also remained stagnant and followed a similar trend as international passenger traffic.



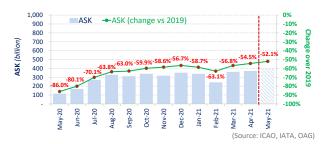
FREIGHT TRAFFIC

Freight Tonne-Kilometres - FTK

World freight traffic reported a growth of +12.0% in April 2021 (compared to 2019), +7.6 percentage points higher than the growth in the previous month. After one month of moderation, freight traffic rose sharply with double-digit growth. Several factors have been contributing to the strong air cargo demand such as the strengthening in global economic activity, trade, and rise in consumer spending including e-commerce. All regions showed improvements in freight traffic, except for Latin America/Caribbean which was the only region remained below 2019 levels and further deteriorated in April. Africa and North America continued to lead the growth chart, expanding at over +30% and +20%, respectively. CAPACITY

Available Seat-Kilometres - ASK

Capacity worldwide fell by -54.5% in April 2021 (compared to 2019), +2.3 percentage points up from the decline in the previous month (-56.8%). With the ongoing improvements, capacity is expected to increase in May 2021 to -52.1% down from the 2019 level.

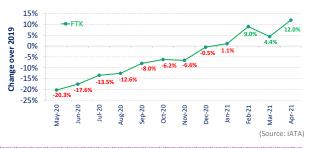


Load Factor - LF

The passenger Load Factor reached 63.3% in April 2021, +1.0 percentage point higher than the previous month. Domestic load factor picked up notably and reached above 70%.

As air travel demand fell faster than capacity, the April LF was -19.5 percentage points lower than the rate in the same period of 2019.





ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight Tonne-Kilometres; IF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date.





ECONOMIC DEVELOPMENT APR 2021: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services (Domestic and international)

Passengers*

2,459,167

vs.2019

46.7%

2,572,212 🖖 -11.5%

2,364,643 🞍 -21.0%

2,329,002 🛉 4.6% 2,182,807 🞍 -18.0%

2,061,124 🞍 -48.4%

2,055,444 1,994,315 1,994,315

1,889,407 1,863,172 1,768,126 -48.6%

1,669,198 1.33% 1,637,822 4.6% 1,585,007 2.37%

1,537,468 🎍 -57.5%

TOP 15 AIRPORTS (Ranked by aircraft departures, passengers and volume of freight) APR 2021: -15.2%, -27.7%, and +20.7% (vs. 2019) in terms of aircraft departures, passengers and freight for the Top 15

Airports (ranking by number of departures)	Departures	vs. 2019
Atlanta GA, US (ATL)	28,987	🞍 -23.4%
Dallas/Fort Worth TX, US (DFW)	25,945	🕹 -7.0%
Chicago IL, US (ORD)	23,124	·37.9%
Charlotte NC, US (CLT)	22,527	4.5%
Denver CO, US (DEN)	22,233	🞍 -10.0%
Guangzhou, CN (CAN)	19,588	0.5%
Shanghai, CN (PVG)	18,856	🞍 -10.6%
Los Angeles CA, US (LAX)	17,912	·37.0%
Phoenix AZ, US (PHX)	16,442	🕹 -12.5%
Miami FL, US (MIA)	15,962	-7.6%
Beijing, CN (PEK)	15,863	🞍 -31.6%
Chengdu, CN (CTU)	15,819	1 7.7%
Shenzhen, CN (SZX)	15,568	6.9%
Long Beach CA, US (LGB)	15,488	20.7%
Houston TX, US (IAH)	15,109	🕹 -23.0%

CA0

Airports (ranking by number of passengers) Guangzhou, CN (CAN) Atlanta GA, US (ATL) Dallas/Fort Worth TX, US (DFW) Chengdu, CN (CTU) Denver CO, US (DEN) Beijing, CN (PEK) Shenzhen, CN (SZX) Shanghai, CN (PVG) Charlotte NC, US (CLT) Shanghai, CN (SHA) Chicago IL, US (ORD) Hangzhou, CN (HGH) Orlando FL, US (MCO) Phoenix AZ, US (PHX) Los Angeles CA, US (LAX)

In terms of passengers, the Top 15 airports posted a total fall of -27.7%, compared to 2019. Same as departures, only US (8) and Chinese (7) airports ranked within Top 15. Guangzhou retained the 1st position with -11.5% decline. Overall, Chinese airports showed smaller contractions with Chengdu and Hangzhou posting positive growth at +4.6% and +2.3%, respectively.

Airports Freight** vs. 2019 (ranking by tonnes of freight 10.0% Memphis TN, US (MEM) 394.102 Hong Kong SAR, CN (HKG) 386,000 👚 0.3% Shanghai, CN (PVG) 369,348 🛖 28.0% Anchorage AK, US (ANC) 296,747 🛉 34.7% 274,906 **1** 25.2% 240,047 **1** 16.3% Incheon, KR (ICN) Louisville KY, US (SDF) 233,926 **1** 37.3% 229,189 **1** 61.0% Taipei, CN (TPE) Chicago IL, US (ORD) 223,015 🛉 22.5% Miami FL, US (MIA) 222,339 26.3% Doha, OA (DOH) Los Angeles CA, US (LAX) 218,740 🛉 33.8% 217,540 ***** 26.4% 198,251 ***** -1.4% 194,942 ***** 16.3% Tokyo, JP (NRT) Dubai, AF (DXB) Frankfurt, DE (FRA) Paris, FR (CDG) 173,118 🛉 12.1%

(Source: ACI)

APR 21

In terms of freight, the Top 15 airports reported an increase of +20.7%, compared to 2019. All Top 15 rose robustly, except for Dubai (-1.4%). Memphis remained 1st with a growth of +10.0% followed by Hong Kong (+0.3%). For the third consecutive month, Chicago recorded the strongest increase at +61.0%.

Note: Total scheduled and non-scheduled services

In terms of **aircraft departures**, the Top 15 airports reported a combined fall of -15.2%, compared to 2019. The Top 15 list consists of ten US and five Chinese airports. **Atlanta** remained **1st** with a decline of -23.4%. Long **Beach** continued to increase doubledigitally, followed by **Chengdu** (+7.7%) and **Shenzhen** (+6.9%), respectively.

TOP 15 AIRLINE GROUPS (Ranked by RPK) APR 2021: -54.9% (vs. 2019) in terms of RPK for the Top 15

In terms of RPK, the Top 15 airline groups accounted for 60.9% of the world's total RPK in April 2021 and declined by -54.9% compared to 2019. This decline was 10.5 percentage points smaller than the fall in world's average RPK.

While global passenger traffic improved, the recovery pace remained uneven among regions. Airlines in countries with large domestic markets continued to lead the growth chart.

All Chinese airlines recorded faster recovery compared to other airlines in the Top 15. China Southern maintained the 1st position with RPKs at -17.7% below 2019 levels. Air China overtook China Eastern became 3rd, and Hainan Airlines kept the same position. Spring Airlines continued to be the only airline posting positive growth and expanded strongly at +11.3%.

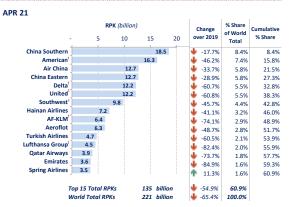
US airlines demonstrated solid improvements. **American** and **Southwest** showed relatively faster recovery than other US airlines in the Top 15. **American** ranked **2nd** and recovered to over half of the 2019 RPK levels. **Delta**, **United** and **Southwest** stayed at the same positions as in March.

Recovery of airlines in Europe has been weak. Lufthansa and KLM continued to post the second and third largest contraction from 2019 levels. Aeroflot and Turkish Airlines showed slightly better performance at -48.7% and -60.5%, respectively.

Airlines in the Middle East also experienced slow recovery with Emirates posting the largest contraction from 2019 levels, at -84.9%.



ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight Tonne-Kilometres; LF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date.



(Source: ICAO, airlines' websites)

<u>Note</u>: Total scheduled and non-scheduled services

Worldwide capacity contracted by -54.5% in April 2021, compared to 2019. All regions saw slight improvements in capacity compared to the previous month, except for Africa and Latin America/Caribbean which experienced larger declines.

Capacity offered in North America and Asia/Pacific showed the smallest decline from 2019 levels, while Europe continued to record the slowest capacity recovery.





ECONOMIC DEVELOPMENT MAY 2021: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services (Domestic and international)

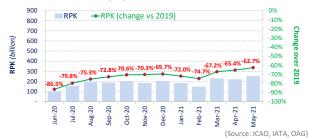
http://www.icao.int/sustainability/Pages/Ai	r-Traffic-Monitor.aspx	Air Transport Bureau E-mail: ecd@icao.int
GLOBAL KEY FIGURES	MAY 2021 (varsus MAY 2019)	OUTLOOK* - JUN 2021 (versus JUN 2019)
	RPK ▼ -62.7% ASK ▼ -53.7% FTK ▲ +9.4% LF : 65.8% ▼-15.7 pt	ASK ▼ -51.4% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

ICAO

World passenger traffic fell by -62.70% in May 2021 (compared to 2019), +2.7 percentage points up from the decline in the previous month. Air travel demand has been recovering moderately as the total number of new COVID-19 cases stabilized. Nevertheless, the growing spread of Delta variant has hit many countries and raises major concerns in relaxing travel restrictions. Domestic air travel demand remained the driving force for travel recovery. Both domestic traffic of China and Russian Federation has recovered to pre-pandemic levels.



International Passengers vs. Tourist Arrivals

International passenger numbers fell by -84.5% in May 2021 (compared to 2019), +2.3 percentage points up from the decline in the previous month. International travel is much more affected by new virus variants and travel restrictions. Asia/Pacific was the slowest recovering region, followed by Europe and the Middle East.

The international tourist arrivals also remained stagnant and followed a similar trend as international passenger traffic.



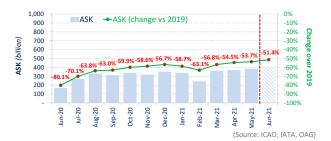
FREIGHT TRAFFIC

Freight Tonne-Kilometres - FTK

World freight traffic reported a growth of +9.4% in May 2021 (compared to 2019), -2.6 percentage points lower than the growth in the previous month. Despite the fluctuation in growth pace from month to month, the performance of air cargo remained strong overall and the global economic recovery together with the roaring e-commerce activities continued to be supportive. All regions recorded slight moderation in air cargo growth, except for Latin America/Caribbean which saw significant rebound, however, remained as the only region showing contraction from the pre-pandemic levels. North America contributed the most to the positive global traffic growth and expanded remarkably at over +20%. CAPACITY

Available Seat-Kilometres - ASK

Capacity worldwide fell by -53.7% in May 2021 (compared to 2019), +0.8 percentage point up from the decline in the previous month (-54.5%). With the modest improvements in travel demand, capacity is expected to increase in June 2021 to -51.4% down from the 2019 level.



Load Factor - LF

The passenger Load Factor reached 65.8% in May 2021, +2.5 percentage points higher than the previous month. Improvement in domestic load factor is more noticeable and returned to over 75%.

As the recovery of capacity was faster than travel demand recovery, the May LF was -15.7 percentage points lower than the rate in the same period of 2019.





ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight Tonne-Kilometres; IF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date.





ECONOMIC DEVELOPMENT MAY 2021: Air Transport Monthly Monitor

vs.2019

3,424,181 🖖 -30.8%

2,724,383 🞍 -16.9%

2,609,315 4 -12.1% 2,533,050 4 -16.1%

2,408,304 👚 5.0%

2,190,844 🞍 -42.7%

2,113,944 🞍 -48.6% 2,058,211 🎍 -7.2%

2,027,046 **•** -46.8% 2,013,883 **•** -38.6% 1,954,349 **•** -10.0%

1,887,348 1,834,422 1,773,709 -10.2%

1,760,560 🞍 -23.5%

Passengers*

TOP 15 AIRPORTS (Ranked by aircraft departures, passengers and volume of freight) MAY 2021: -16.3%, -24.9%, and +13.9% (vs. 2019) in terms of aircraft departures, passengers and freight for the Top 15

Airports Departures vs. 2019 (ranking by number of departures) Atlanta GA, US (ATL) 30 584 Dallas/Fort Worth TX, US (DFW) 28,327 27,222 🎍 24,023 🎍 Chicago IL, US (ORD) -31.8% -10.4% Denver CO, US (DEN) 23,910 🦊 Charlotte NC, US (CLT) -2.8% 20,922 ***** 1.8% 20,624 **·** -29.2% Guangzhou, CN (CAN) Los Angeles CA, US (LAX) 18,406 4 -16.0% Shanghai, CN (PVG) Phoenix AZ, US (PHX) 17,446 -4.5% 16.651 Las Vegas NV, US (LAS) -20.9% 16,527 16,096 ↑ 4.5‰ 16,021 ↓ -20.6% ~ 980 ↓ -16.8% 34.9% Miami FL, US (MIA) 16,527 Chengdu, CN (CTU) Houston TX, US (IAH) Seattle WA, US (SEA) Beijing, CN (PEK)

Note: Total scheduled and non-scheduled services In terms of aircraft departures, the Top 15 airports

respectively.

lead the growth chart.

reported a combined fall of -16.3%, compared to

2019. The Top 15 list consists of eleven (11) US and

four (4) Chinese airports. Atlanta remained 1st with a

decline of -22.4%. Chengdu and Guangzhou were the

only two airports posting increases, +4.5% and +1.8%

TOP 15 AIRLINE GROUPS (Ranked by RPK)

MAY 2021: -50.0% (vs. 2019) in terms of RPK for the Top 15

first time, JetBlue also ranked within Top15 at 13th.

In terms of RPK, the Top 15 airline groups accounted for 58.0% of the world's total RPK in

May 2021 and declined by -50.0% compared to 2019. This decline was 12.7 percentage points

smaller than the fall in world's average RPK. Airlines with large domestic markets continued to

US airlines have been recovering steadily. American regained the 1st position with a decline of

-40.2%, compared to 2019. Both Delta and United improved two positions to 3rd and 4th,

while remained at over 50% below the 2019 RPK levels. Southwest stayed at 7th, and for the

Chinese airlines demonstrated relatively faster recovery, nevertheless with a light slowdown in

pace, China Southern ranked 2nd with RPKs at -20.3% below 2019 levels, China Eastern and

Recovery of airlines in Europe remained the weakest. Lufthansa and AF-KLM recorded the largest contractions from 2019 levels. Aeroflot and Turkish Airlines showed relatively better

Qatar, the only Top15 airline from the Middle East region, improved slightly but ranked 1

continued to be the only airline posting positive growth and grew solidly at +8.0%.

Air China moved 1 position and 3 positions down to 5th and 6th, respectively. Spring Airlines

Airports (ranking by number of passengers) Atlanta GA, US (ATL) Dallas/Fort Worth TX, US (DFW) Guangzhou, CN (CAN) Denver CO, US (DEN) Chengdu, CN (CTU) Chicago IL, US (ORD) Beijing, CN (PEK) Charlotte NC, US (CLT) Los Angeles CA, US (LAX) Shanghai, CN (PVG) Shenzhen, CN (SZX) Orlando FL, US (MCO) Shanghai, CN (SHA) Phoenix AZ, US (PHX) Las Vegas NV, US (LAS)

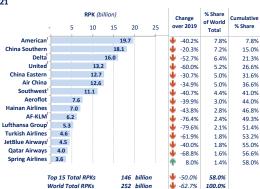
In terms of passengers, the Top 15 airports posted a total fall of -24.9%, compared to 2019. Only US (9) and Chinese (6) airports ranked within Top 15. Atlanta and Dallas/Fort Worth took over Guangzhou and became 1st and 2nd, albeit with -30.8% and -16.9% decline, respectively Chengdu was the only airport posting increase at +5.0%. On the contrary, Beijing recorded the largest fall at -48.6%

MAY 21

surpassed Memphis at +0.1%, and regained the 1st. For the fourth consecutive month, Chicago recorded the strongest increase at +42.4% % Share of World Total RPK (billion) Change over 2019 Cumulativ % Share 25 5 10 15 20 American¹ 19.7 ψ -40.29 7.8 18.1 -20.3% 7.2% 15.0% -52.7% -60.0% -30.7% 6.4% 5.2% 5.0% Delta 16.0 21.3% United 13.2 26.6% China Eastern 12.7 31.6% 5.0% 4.4% 3.0% Air China 12.6 -34.9% 36.6% Southwest 11.1 -40.7% -39.9% 41.0% Aeroflot 7.6 7.0 -43.8% 2.8% 46.8% AF-KLM 6.2 5.3

In terms of freight, the Top 15 airports reported an increase of +13.9%, compared to 2019. Dubai

continued to be the only airport posting decline (-3.7%). With an increase of +1.6%. Hong Kong



CAPACITY BY REGION (ICAO Statistical Regions)

position down to 14th with -68.8%.

performance at -39.9% and -61.9%, respectively.



* Embarked Passengers ** Loaded and Unloaded Freight inTonnes 1. ICAO estimates

ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight Tonne-Kilometres; LF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date. ACRONYMS

MAY 21

vs. 2019

1.6% ተ

0.1%

1.5% 226,487 **1** 32.4% 219,492 **1** 15.7%

Freight**

402.000

379,670 🕋

230,236 🛉

362,471 👚 20.9% 302,574 **1** 27.8% 277,298 **1** 25.6%

216,228 🛉 18.3%

213,039 🛖 42.4%

209,437 10.1%

205,340 🛉 25.2% 197,022 12.7% 186,971 4 -3.7%

166,139 🛉

Airports

(ranking by tonnes of freight

Hong Kong SAR, CN (HKG)

Memphis TN, US (MEM)

Anchorage AK, US (ANC)

Louisville KY, US (SDF)

Los Angeles CA, US (LAX)

Shanghai, CN (PVG)

Incheon, KR (ICN)

Doha, QA (DOH)

Taipei, CN (TPE)

Tokyo, JP (NRT)

Dubai, AE (DXB)

Chicago IL, US (ORD)

Miami FL, US (MIA)

Frankfurt, DF (FRA)

Guangzhou, CN (CAN)

(Source: ACI)

6.0%

Note: Total scheduled and non-scheduled services Worldwide capacity contracted

(Source: ICAO, airlines' websites)

by -53.7% in May 2021, compared to 2019. All regions saw improvements in capacity compared to the previous month. except for Asia/Pacific.

Capacity offered in North America showed the fastest recovery to 66% of 2019 levels, followed by Asia/Pacific at close to 50% Europe continued to record the slowest capacity recovery.





ECONOMIC DEVELOPMENT JUN 2021: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services (Domestic and international)

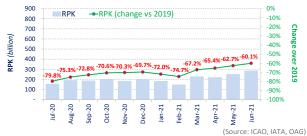
http://www.icao.int/sustainability/Pages/A	ir-Traffic-Monitor.aspx	Air Transport Bureau E-mail: ecd@icao.int
GLOBAL KEY FIGURES	JUN 2021 (versus JUN 2019)	OUTLOOK* - JUL 2021 (versus JUL 2019)
	RPK ▼ -60.1% ASK ▼ -51.6% FTK ▲ +9.9% LF : 69.6% ▼-14.8%	ASK ▼ -46.8% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

ICAO

World passenger traffic fell by -60.1% in June 2021 (compared to 2019), +2.6 percentage points up from the decline in the previous month. Although the traditional demand driver – economic activity – has been showing upward trend, air travel continued to be largely affected by the rising COVID-19 cases and strict travel restrictions amid the spread of new variants. Overall, for the first half of 2021, passenger traffic remained at more than -60% below the 2019 levels, with the Middle East and Europe recording the weakest performance.



International Passengers vs. Tourist Arrivals

International passenger numbers fell by -78.2% in June 2021 (compared to 2019), +6.3 percentage points up from the decline in the previous month. Cross-border travel restrictions continued to weigh heavily on international travel demand. As a result, international traffic for the first half of 2021 was far below 2019 levels.

The international tourist arrivals also remained stagnant and followed a similar trend as international passenger traffic.



FREIGHT TRAFFIC

Freight Tonne-Kilometres - FTK

World freight traffic reported a growth of +9.9% in June 2021 (compared to 2019), +0.5 percentage point higher than the growth in the previous month. Air cargo sustained its strong growth supported by the continued increase in trade and manufacturing. Demand for air cargo is likely to further grow underpinned by the global economic recovery. Performance was mixed across regions. All regions, except for Latin America/Caribbean, have returned to pre-pandemic traffic levels. While Africa, North America and the Middle East have shown double-digit growth, Asia/Pacific and Europe grew modestly. Overall, for the first half of 2021, air cargo was +8.0% above the 2019 levels. CAPACITY

Available Seat-Kilometres - ASK

Capacity worldwide fell by -51.6% in June 2021 (compared to 2019), +2.1 percentage points up from the decline in the previous month (-53.7%). As air travel continues to recover, capacity is expected to increase in July 2021 to -46.8% down from the 2019 levels.

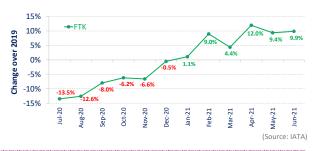


Load Factor - LF

The passenger Load Factor reached 69.6% in June 2021, +3.8 percentage points higher than the previous month. Domestic load factor continued to show solid performance and returned to a little less than 80%.

As the recovery of capacity was faster than travel demand recovery, the June LF remained significantly below 2019 levels at -14.8 percentage points lower.





ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight Tonne-Kilometres; IF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date.





ECONOMIC DEVELOPMENT JUN 2021: Air Transport Monthly Monitor

vs.2019

TOP 15 AIRPORTS (Ranked by aircraft departures, passengers and volume of freight) JUN 2021: -10.6%, -23.5%, and +16.0% (vs. 2019) in terms of aircraft departures, passengers and freight for the Top 15

Airports Departures vs. 2019 (ranking by number of departures) 31,472 🞍 -21.9% 30,953 🎍 -20.9% Chicago IL, US (ORD) Atlanta GA, US (ATL) 29,595 🎍 26,409 🎍 Dallas/Fort Worth TX, US (DFW) -3.6% Denver CO, US (DEN) -4.9% 23,228 Charlotte NC, US (CLT) -3.6% Los Angeles CA, US (LAX) 23,009 **4** -22.2% 17,450 **4** -12.1% Houston TX_US (IAH) 17,377 🎍 -13.6% Seattle WA, US (SEA) 17,331 **J** Las Vegas NV, US (LAS) -12.6% Phoenix A7, US (PHX) -0.4% 16,952 Shanghai, CN (PVG) -20.4% Miami FL, US (MIA) 16,406 🖖 -1.2% Anchorage AK, US (ANC) Long Beach CA, US (LGB) 16.403 1.2% 15,367 11.7% Salt Lake City UT, US (SLC) 15,111 1.3%

Note: Total scheduled and non-scheduled services In terms of aircraft departures, the Top 15 airports

reported a combined fall of -10.6%, compared to 2019.

The Top 15 list consists mostly of US airports with only

Atlanta and became 1st with a decline of -21.9%. Three

TOP 15 AIRLINE GROUPS (Ranked by RPK)

In terms of RPK, the Top 15 airline groups accounted for 60.5% of the world's total RPK in

June 2021 and declined by -46.5% compared to 2019. This decline was 13.6 percentage points smaller than the fall in world's average RPK. Airlines with large domestic markets continued to

US airlines improved significantly and reclaimed the top positions. American maintained at 1st

with a decline of -23.8% compared to 2019. Delta and United improved 1 position to 2nd and

3rd, albeit recovering at a slower pace than other US airlines in the Top 15. For the first time of

Due to the tightened travel restrictions, Chinese domestic travel demand fell drastically,

reversing the positive recovery trend. As a result, rankings of all Chinese airlines dropped.

Airlines in Europe started to pick up modestly as international restrictions remained strict

recorded the largest contractions among the Top 15. Aeroflot and Turkish Airlines showed

No airlines from the other regions, i.e. Africa, the Middle East and Latin America/Caribbean,

China Southern, China Eastern and Air China ranked down to 5th, 6th and 8th, respectively.

despite the rapid vaccine rollouts. The three major airline groups, AF-KLM, Lufthansa and IAG

the year, Southwest ranked 4th, 3 positions up from the previous month.

JUN 2021: -46.5% (vs. 2019) in terms of RPK for the Top 15

one Chinese airport (Shanghai). Chicago overtook

airports, Long Beach, Salt Lake City and Anchorage

posted increases compared to 2019.

lead the growth chart.

ICAO

Airports Passengers* (ranking by number of passengers) Atlanta GA, US (ATL) 3,727,163 🖖 -25.0% Dallas/Fort Worth TX, US (DFW) 3,174,904 🞍 -7.2% 2,857,674 🎍 -10.5% Denver CO, US (DEN) 2,674,431 🦆 -32.3% 2,443,847 🗳 -39.2% Chicago IL, US (ORD) Los Angeles CA, US (LAX) 2,094,746 2,093,605 1,910,929 -10.7% Chengdu, CN (CTU) Charlotte NC, US (CLT) Orlando FL, US (MCO) 1,905,746 1,903,679 1,819,490 1,007,746 1,007, Las Vegas NV, US (LAS) Seattle WA, US (SEA) Phoenix AZ, US (PHX) 1,775,344 1,750,691 1,726,563 -7.6% 1,726,563 Shanghai, CN (PVG) Miami FL, US (MIA) Xi'An, CN (XIY) Beijing, CN (PEK) 1,646,400 🞍 -59.3%

In terms of **passengers**, the Top 15 airports posted a total fall of -23.5%, compared to 2019. The list was dominated exclusively by US (11) and Chinese (4) airports. Atlanta remained at 1st with -25.0% decline, followed by Dallas/Fort Worth. Two Chinese airports Beijing and Shanghai, recorded the largest fall at -59.3% and -45.2%, respectively.

JUN 21

retained the 1st position followed by Memphis.

Airports

(ranking by tonnes of freight

Hong Kong SAR, CN (HKG)

Memphis TN, US (MEM)

Anchorage AK, US (ANC)

Louisville KY, US (SDF)

Los Angeles CA, US (LAX)

Shanghai, CN (PVG)

Incheon, KR (ICN)

Taipei, CN (TPE)

Doha, QA (DOH)

Tokyo, JP (NRT)

Chicago IL, US (ORD)

Miami FL, US (MIA)

Frankfurt, DE (FRA)

Dubai, AF (DXB)

Paris, FR (CDG)

(-3.1%). With an increase of +4.5%. Hong Kong With a robust +33.5%, Chicago recorded the strongest increase for the fifth time in a row

In terms of freight, the Top 15 airports reported

an increase of +16.0%, compared to 2019. Dubai

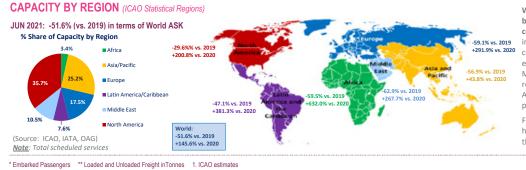
continued to be the only airport posting decline

% Share of World Total RPK (billion) Change over 2019 Cumulativ % Share 10 15 20 25 5 30 American¹ 27.0 + -23.89 Delta 21.4 -41.7% 7.5% 16.9% -46.1% -14.7% -42.1% 6.9% 5.8% 4.6% United 19.8 23.8% 16.5 29.5% China Southern 13.2 34.1% 3.8% 3.5% 3.3% China Eastern 10.9 -40.1% 37.9% Aeroflot 9.9 -32.0% -50.6% 41.4% Air China 9.3 AF-KLM Lufthansa Group 8.5 -67.6% 3.0% 47.6% -72.3% -47.4% 2.6% 2.4% 7.6 50.3% 52.6% Turkish Airlines 6.8 Jetblue Airways Hainan Airlines 6.6 -11.4% 2.3% 54.9% -56.3% -80.1% 1.9% 1.8% 56.8% 58.7% 5.4 IAG 5.3 Alaska Airlines 5.2 -37.2% 1.8% 60.5% Top 15 Total RPKs 173 billion 60.5% 287 hillion

Total RPK

ranked in the Top 15

better performance owing to their domestic demand



ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight Tonne-Kilometres; LF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date. ACRONYMS

(Source: ICAO, airlines' websites) Note: Total scheduled and non-scheduled services

100.0%

Worldwide capacity contracted by -51.6% in June 2021, compared to 2019. All regions saw improvements in capacity compared to the previous month. except for Asia/Pacific and the Middle East. The fastest capacity recovery was recorded in North America, whereas the slowest pace was in the Middle East. For the first half of 2021 capacity

has recovered to -56.4% below the 2019 levels.

JUN 21 vs. 2019

4 5% ተ

7.9%

9.4% 221,534 n 27.9% 216,236 n 30.1%

3.8%

(Source: ACI)

Freight**

396,000

374,904 👚

241,749 🛉

165,400 🛉

359,739 👚 23.0%

307,678 **1** 29.2% 271,513 **1** 23.2%

214,908 🛉 24.0%

209,170 🛖 20.2% 209,170 20.2% 202,605 33.5% 187,311 10.9% 186,346 3.1% 183,204 10.9%





ICAO JUL 2021: Air Transport Monthly Monitor

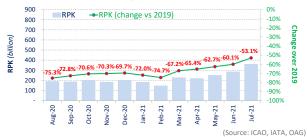
World Results and Analyses. Total scheduled services (Domestic and international)

http://www.icao.int/sustainability/Pages//	\ir-Traffic-Monitor.aspx	Air Transport Bureau E-mail: ecd@icao.int
GLOBAL KEY FIGURES	JUL 2021 (versus JUL 2019)	OUTLOOK* - AUG 2021 (versus AUG 2019)
	RPK ▼ -53.1% ASK ▼ -45.2% FTK ▲ 8.6% LF : 69.6% ▼ -12.6%	ASK ▼ -45.3% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

World passenger traffic fell by -53.1% in July 2021 (compared to 2019), +7.0 percentage points up from the decline in the previous month. The rebound of air travel was attributed to a combination of factors such as the traditional peak northern hemisphere summer travel, pent-up holiday travel demand and progress in vaccine rollout globally. Nevertheless, the rapid spread of new variant poses risks to reversing the recovery trend. Domestic traffic continued to lead the recovery chart, with key domestic markets returning to above or close to pre-pandemic levels.



International Passengers vs. Tourist Arrivals

International passenger numbers fell by -67.8% in July 2021 (compared to 2019), +10.4 percentage points up from the decline in the previous month. International traffic rebounded across almost all key regions, particularly in Europe owing to the reopening of intra Europe travel.

The international tourist arrivals also rebounded and followed a similar trend as international passenger traffic.



FREIGHT TRAFFIC

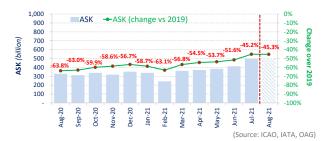
Freight Tonne-Kilometres - FTK

World freight traffic reported a growth of +8.6% in July 2021 (compared to 2019), -1.3 percentage points lower than the growth in the previous month. Despite a slight slowdown, the growth trend of air cargo remained strong broadly. The current state of supply chains and demand for businesses to restock inventories remains highly supportive to air cargo. Regional performance continued to vary from each other. North America and the Middle East posted the strongest growth double-digitally; Growth in Europe was solid although relatively moderate. For Asia/Pacific, the growth momentum started to show a sign of softening, while Latin America/Caribbean continued to be the only region posting negative growth.

CAPACITY

Available Seat-Kilometres - ASK

Capacity worldwide fell by -45.2% in July 2021 (compared to 2019), +6.4 percentage points up from the decline in the previous month (-51.6%). Amidst the growing spread of the new virus variant, capacity is expected to maintain a similar level in August 2021 at -45.3% down from the 2019 levels.

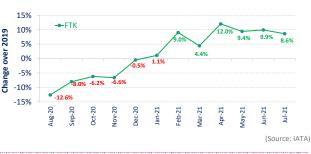


Load Factor - LF

The passenger Load Factor reached 73.1% in July 2021, +3.5 percentage points higher than the previous month. Domestic load factor returned to the level of over 80%, outperforming the international load factor.

As the recovery of capacity was faster than travel demand recovery, the July LF remained significantly below 2019 levels at -12.6 percentage points lower.





ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight Tonne-Kilometres; IF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date.





ECONOMIC DEVELOPMENT JUL 2021: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services (Domestic and international)

TOP 15 AIRPORTS (Ranked by aircraft departures, passengers and volume of freight) JUL 2021: -10.0%, -20.3%, and +15.2% (vs. 2019) in terms of aircraft departures, passengers and freight for the Top 15

Airports Departures vs. 2019 (ranking by number of departures) 35,552 🞍 -13.3% 32,166 🞍 -20.2% Chicago IL, US (ORD) Atlanta GA, US (ATL) Atlanta GA, US (ATL) 31,045 🎍 28,498 🎍 Dallas/Fort Worth TX, US (DFW) -4.5% Denver CO, US (DEN) -3.2% Chicago IL, US (ORD) 24,844 Los Angeles CA, US (LAX) -19.9% 23,840 **J** Charlotte NC, US (CLT) -2.9% Houston TX, US (IAH) -6 7% 18,571 ***** 18,426 **•** Istanbul, TR (IST) Phoenix AZ, US (PHX) 5.0% Seattle WA, US (SEA) -13.8% Anchorage AK, US (ANC) 17.466 3.0% Las Vegas NV, US (LAS) 17,398 -13.8% Xi'an, CN (XIY) Chengdu, CN (CTU) 17,165 n 0.1% 16,894 **J** -24.5% Miami FL, US (MIA) Shanghai, CN (PVG) Miami FL, US (MIA) Santa Ana CA, US (SNA) 15,999 👚 16.3% Guangzhou, CN (CAN) 15,827 🞍 -24.3%

ICAO

Airports Passengers* vs.2019 (ranking by number of passengers) -21.0% 4 034 486 Dallas/Fort Worth TX, US (DFW)
 -4.0%

 -5.4%
 3,433,398 Denver CO, US (DEN) 3,184,075 2,982,601 🖖 -26.9% **-34.3**% Los Angeles CA, US (LAX) 2,780,870 Charlotte NC, US (CLT) ψ 2,194,465 -0.8% 2,140,882 🞍 -18.9% 2,087,941 🎍 -34.7% Seattle WA, US (SEA) 2,077,266 **•** -8.2% 2,074,375 **•** -7.6% 1,948,458 **•** -9.3% Las Vegas NV, US (LAS) Orlando FL, US (MCO) 1,940,692 1,905,336 1,891,973 -3.4% Houston TX, US (IAH) Beijing, CN (PEK) 1,862,059 🞍 -57.6%

In terms of passengers, the Top 15 airports posted a total

the list is dominated by US and Chinese airports. Istanbul,

JUL 21

fall of -20.3%, compared to 2019. Similar to departures,

for the first time of the year also ranked within Top 15

Atlanta remained at 1st with a decline of -21.0%

contraction was recorded by Beijing at -57.6%

followed by Dallas/Fort Worth (-4.0%). The largest

Airports vs. 2019 Freight** (ranking by tonnes of freight Hong Kong SAR, CN (HKG) 416,000 6.1% Ť Memphis TN, US (MEM) 373,989 🕋 7.8% Shanghai, CN (PVG) 353,029 🛖 16.6%
 321,109
 22.2%

 280,660
 25.9%

 243,982
 35.6%
 Anchorage AK, US (ANC) Incheon, KR (ICN) Taipei, CN (TPE) Louisville KY, US (SDF) 237.890 2.0% 222,290 🛉 25.6% Tokyo, JP (NRT) 217,827 🛉 33.1% Los Angeles CA, US (LAX) 213,431 🛖 16.0% Doha, OA (DOH) 202,499 1 45.0% Chicago IL, US (ORD) 200,325 1 23.3% 194,059 4 -10.8% 188,703 11.8% 163,600 4 -3.9% Miami FL, US (MIA) Dubai, AF (DXB) Frankfurt, DE (FRA) Singapore, SG (SIN)

<u>Note</u>: Total scheduled and non-scheduled services

In terms of aircraft departures, the Top 15 airports reported a combined fall of -10.0%, compared to 2019. The Top 15 list consists mostly of US airports with two Chinese airports (Shanghai and Guangzhou). Chicago remained 1st with a decline of -13.3%. A few airports posted increases compared to 2019, with Santa Ana posting a double-digit growth of +16.3%.

TOP 15 AIRLINE GROUPS (Ranked by RPK) JUL 2021: -40.1% (vs. 2019) in terms of RPK for the Top 15

In terms of RPK, the Top 15 airline groups accounted for 73.5% of the world's total RPK in July 2021 and declined by -40.1% compared to 2019. This decline was 20.0 percentage points smaller than the fall in world's average RPK. Airlines with large domestic markets continued to lead the growth chart.

US airlines retained the Top 4 positions, and continued to improve, owing to the traditional northern hemisphere summer peak travel and also the busy July 4 long holiday weekend. American maintained 1st with a decline of -19.5% compared to 2019. Delta, United and Southwest kept at 2nd, 3rd and 4th, respectively.

After the substantial deterioration in June, Chinese domestic travel demand regained the growth momentum as travel restrictions were eased gradually. All Chinese airlines in the Top 15 showed smaller fall. China Southern, China Eastern maintained the position of 5th and 6th, while Air China improved 1 position to 7th.

Airlines in Europe demonstrated stronger recovery compared to the previous month, supported by the pick up of intra-European travel. Nevertheless, the three major airline groups, AF-KLM, Lufthansa and IAG recorded the largest contractions among the Top 15. Aeroflot and Turkish Airlines showed better performance owing to their domestic demand.

Qatar Airways returned to the Top 15 and ranked 14th, albeit posting a large decline of -56.5%



ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight Tonne-Kilometres; LF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-to-tate.

(Source: ACI)

JUL 21

In terms of **freight**, the Top 15 airports reported an increase of **+15.2%**, compared to 2019. **Dubai** and **Singapore** were the only airports posting decline, at **-10.8%** and **-3.9%**, respectively. With an increase of **+6.1%**, **Hong Kong** retained the **1st** position. For the sixth consecutive month, **Chicago** recorded the strongest increase at **+45.0%**.

% Share of World Total RPK (billion) Change over 2019 Cumulativ % Share 10 15 20 25 30 35 5 American¹ 28.8 Ψ -19.59 10.0% 10.0% Delta 23.8 -37.7% 8.3% 18.4% -37.1% -9.0% -32.2% 8.3% 6.3% United 23.7 26.6% 18.0 32.9% China Southern 17.6 6.1% 39.0% -37.9% -41.9% -57.8% 12.2 4.3% 4.1% China Eastern 43.3% Air China 11.9 AF-KLM 11.8 4.1% 51.5% nsa Group 11.8 -59.9% 4.1% 55.6% -29.3% -31.1% 4.0% 3.5% 59.7% 63.1% Aeroflot 11.6 Turkish Airlines 9.9 IAG 8.1 -70.9% 2.8% 66.0% Jetblue Airways -9.8% -56.5% 2.5% 2.5% 68.5% 71.0% 7.3 **Qatar Airways** 7.2 Hainan Airlines 7.1 -48.1% 2.5% 73.5%

211 billion

287 hillion

Top 15 Total RPKs

Total RPK

(Source: ICAO, airlines' websites)

73.5%

100.0%

Note: Total scheduled and non-scheduled services

Worldwide capacity contracted by -45.2% in July 2021, compared to 2019. In line with the rising travel demand, seat capacity trended higher in all regions. The most significant increase was recorded by Europe as travel rebounded within Europe, both domestically and internationally. The Middle East also showed increase benefiting from the slowly improving international travel demand.





The Impact of COVID-19 on the Airport Business and the Path to Recovery

Unprecedented impact in 2020, cautious optimism for 2021

July 14, 2021

Table 1: The impact of the COVID-19 crisis on quarterly passenger traffic by region (2020–2021, rounded in million passengers)

Sector 1			2020					2021		
Region	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL
		Projected b	aseline (pre	-COVID-19)		-	Projected b	aseline (pre	-COVID-19)	t::
Africa	55	58	68	62	243	60	62	74	67	263
Asia-Pacific	862	859	894	895	3,509	901	898	933	934	3,665
Europe	493	661	776	563	2,493	506	677	795	577	2,556
Latin America-Caribbean	178	169	182	181	710	185	176	189	188	738
Middle East	105	105	117	104	431	110	111	123	109	453
North America	476	542	552	518	2,088	490	558	569	533	2,150
World	2,169	2,394	2,590	2,322	9,474	2,252	2,483	2,682	2,408	9,825
		Ectimate	ed under CC	VID_19##			Ectimat	ed under CC	WID-19**	
Africa	46	1.5	11	20	79	20	24	33	37	114
Asia-Pacific	628	174	351	410	1,563	324	374	581	713	1,991
Europe	380	25	212	119	736	91	161	346	269	868
Latin America-Caribbean	153	10	37	76	275	81	88	107	122	398
Middle East	86	3.9	17	28	136	27	37	59	61	184
North America	386	59	156	182	784	191	309	370	400	1.270
World	1,679	274	784	835	3,572	734	992	1,496	1,602	4,824
						-				
		Estir	nated traffic	CONTRACTOR OF	î		Estir	mated traffic	CARGE AND	
Africa	-9	-56	-57	-42	-164	-40	-38	-41	-30	-149
Asia-Pacific	-234	-685	-543	-485	-1,947	-577	-524	-352	-221	-1,674
Europe	-114	-636	-564	-444	-1,757	-415	-516	-449	-308	-1,688
Latin America-Caribbean	-25	-159	-145	-105	-435	-104	-89	-81	-66	-340
Middle East	-18	-101	-100	-76	-295	-83	-74	-64	-48	-269
North America	-90	-482	-396	-335	-1,304	-299	-249	-199	-133	-880
World	-490	-2,120	-1,806	-1,486	-5,902	-1,518	-1,491	-1,187	-806	-5,001
	Estimated traffic loss (%)					Estimated traffic loss (%)				
Africa	-17.0%	-97,4%	-83,9%	-67.2%	-67,6%	-66,1%	-61.7%	-55.3%	-45.2%	-56.7%
Asia-Pacific	-27.2%	-79.7%	-60.7%	-54.2%	-55.5%	-64.0%	-58.4%	-37.8%	-23.7%	-45.7%
Europe	-23.0%	-96.2%	-72.7%	-78.9%	-70.5%	-82.0%	-76.2%	-56.5%	-53.3%	-66.0%
Latin America-Caribbean	-14.2%	-94.2%	-79.8%	-57.9%	-61.2%	-56.5%	-50.4%	-43.1%	-34.9%	-46.1%
Middle East	-17.6%	-96.3%	-85.2%	-73.0%	-68.5%	-75.6%	-66.8%	-51.9%	-43.8%	-59.4%
North America	-18.8%	-89.0%	-71.8%	-64.8%	-62.4%	-61.0%	-44.7%	-35.0%	-25.0%	-40.9%
World	-22.6%	-88.6%	-69.7%	-64.0%	-62.3%	-67.4%	-60.0%	-44.2%	-33,5%	-50.9%

Table 2: The impact of the COVID-19 crisis on quarterly passenger traffic by region (2020–2021, rounded in million passengers, percentage of change compared to 2019)

			2019			
Africa	52	55	64	58	229	
Asia-Pacific	837	824	859	855	3,375	
Europe	476	649	752	550	2,428	
Latin America-Caribbean	172	164	175	175	686	
Middle East	97	100	111	99	407	
North America	461	527	534	503	2,025	
World	2,095	2,318	2,497	2,239	9,149	
		Estimate	ed under CC	VID-19**		
			2020			
Africa	46	1.5	11	20	79	88.
Ania Desifia	870	174	264	410	1.582	75

	Esumated under Covid-15					Compared to 2013 (76)					
			2020					2020			
Africa	46	1.5	11	20	79	88.5%	2.7%	17.1%	35.1%	34.5%	
Asia-Pacific	628	174	351	410	1,563	75.0%	21.2%	40.9%	47.9%	46.3%	
Europe	380	25	212	119	736	79.7%	3.8%	28.2%	21.7%	30.3%	
Latin America-Caribbean	153	10	37	76	275	88.8%	6.0%	21.0%	43.6%	40.2%	
Middle East	86	3.9	17	28	136	88.8%	3.9%	15.6%	28.5%	33.3%	
North America	386	59	156	182	784	83.9%	11.3%	29.1%	36.2%	38.7%	
World	1,679	274	784	835	3,572	80.1%	11.8%	31.4%	37.3%	39.0%	
	2021					2021					
	2021					2021					
Africa	20	24	33	37	114	39.0%	43.8%	51.3%	63.2%	49.7%	
Asia-Pacific	324	374	581	713	1,991	38.7%	45.4%	67.6%	83.3%	59.0%	
Europe	91	161	346	269	868	19.1%	24.8%	46.0%	49.0%	35.7%	
Latin America-Caribbean	81	88	107	122	398	46.8%	53.4%	61.3%	70.1%	58.0%	
Middle East	27	37	59	61	184	27.7%	37.0%	52.9%	62.3%	45.3%	
North America	191	309	370	400	1,270	41.5%	58.6%	69.2%	79.5%	62.7%	
World	734	992	1,496	1,602	4.824	35.0%	42.8%	59.9%	71.6%	52.7%	

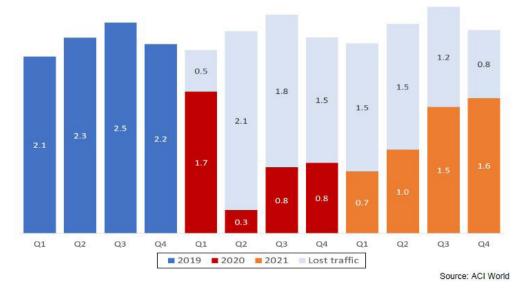




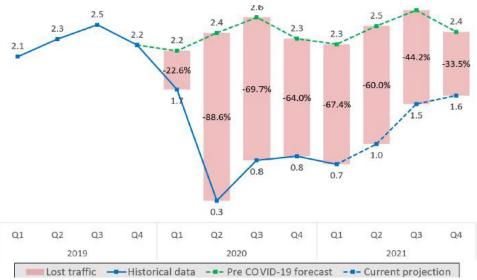
The Impact of COVID-19 on the Airport Business and the Path to Recovery

Unprecedented impact in 2020, cautious optimism for 2021 July 14, 2021

Chart 1: Projected global quarterly passenger losses due to the COVID-19 crisis (2019/2020/2021, in billion passengers)











The Impact of COVID-19 on the Airport Business and the Path to Recovery

Unprecedented impact in 2020, cautious optimism for 2021 July 14, 2021

2020 Q3 2021 Q3 Region 01 02 Q4 TOTAL Q1 02 Q4 TOTAL jected b eline (OVID-19 ne (p OVID-1 ected t Africa 897 1,105 3,938 969 1,009 4,250 935 1,000 1,193 1,080 Asia-Pacific 14.501 14,458 15.044 15.058 59.060 15,157 15,114 15,699 15,714 61.684 14,697 19,687 23,132 16,767 74,283 14,690 23,099 74,208 Europe Latin America-Caribbean 19,665 16,754 2 906 2 765 2 972 2 953 11 596 3 0 2 0 2 883 3 086 3 071 12 060 Middle East 3,707 3,731 4,145 3,677 15,260 4,341 16,041 3,902 3,926 3,872 North America 8.063 9,173 9.351 8.767 35.355 8.304 7.218 7.358 6.898 29.777 World 55,749 49,815 198,020 44,772 199,492 46,041 54,775 47,389 50,749 48,222 Esti nder (D-19* Esti under D-19** 328 6,894 1,275 26,297 328 5,454 534 592 11,992 Africa 745 24 386 1.840 Asia-Pacific 10,563 2,933 5,907 6,292 9,770 33,508 2,644 Europe Latin America-Caribbean 11.313 740 6,326 3.546 21,925 4.682 10,048 7.820 25,194 1,243 4,499 1,755 6,499 2,494 160 601 1,430 2,000 Middle East 3,055 139 614 994 4,802 953 1,304 2,086 2,176 6,519 6.545 2.015 2,359 11.689 2.472 5,177 North America 769 3,995 4.784 16,427 World 34,716 70,488 4,766 15,641 15,365 13,165 18,090 28,976 29,756 89,987 d reve Es ed rev 055 Africa -152 -911 -928 -672 -2,663 -640 -623 -659 -488 -2,410 Asia-Pacific -3,938 -11,525 -9,136 -8,165 -32,763 -9,703 -8,821 -5,930 -3,722 -28,177 Europe Lat<mark>in America-Caribbean</mark> -3 384 -18 947 -16 806 -13 221 -52 358 -12 047 -14 983 -13 051 -8 934 -49 014 -1,705 -412 -2,371 -1,710 -7,097 -1,453 -1,331 -1,072 -5,560 -2,605 Middle East North Americ -3,531 -2,949 -5,832 -2,622 -2,254 -1,696 -1,721 -652 -3 592 -2,683 -10,458 -9 522 -1,518 6,408 -23,665 -13,350 -8,404 World -10,055 -45,983 -40,108 -32,858 -129,004 -32,876 -31,725 -25,798 -17,633 108,033 Estin ss (%) Estin 55 (%) i reven d rever -17.0% Africa -97.4% -83.9% -67.2% -67.6% -66.1% -61.7% -55.3% -45.2% -56.7% Asia-Pacific -27.2% -79.7% -60.7% -54.2% -55.5% -64.0% -58.4% -37.8% -23.7% -45.7% Europe -23.0% -96.2% -72.7% -78.9% -70.5% -82.0% -76.2% -56.5% -53.3% -66.0% Latin America-Caribbe -14.2% -94.2% -79.8% -57.9% -61.2% -56.5% -50.4% -43.1% -34.9% -46.1% -17.6% -59.4% Middle East -96.3% -85.2% -73.0% -68.5% -75.6% -66.8% -51.9% -43.8% North Americ -18.8% -91.6% -78.4% -73.1% -66.9% -70.2% -44.7% -35.0% -25.0% -44.8% World -22.5% -90.6% -71.9% -68.1% -64.7% -71.4% -63.7% -47.1% -37.2% -54.6%

Table 3: Impact of the COVID-19 crisis on quarterly revenues* by region (2020–2021) (rounded in million USD)

Table 4: Impact of the COVID-19 crisis on quarterly revenues* by region (2020–2021) (rounded in million USD, percentage of change compared to 2019)

			2019							
Africa	843	879	1,038	940	3,700					
Asia-Pacific	13,946	13,904	14,468	14,482	56,800					
Europe	12,129	16,246	19,089	13,836	61,300					
Latin America-Caribbean	2,807	2,671	2,870	2,852	11,200					
Middle East	3,498	3,521	3,912	3,470	14,400					
North America	7,823	8,900	9,072	8,505	34,300					
World	41,045	46,120	50,449	44,086	181,700					
	-	Estimat	ed under CC	VID-19**			Cóm	pared to 201	19 (%)	
			2020					2020		×
Africa	745	24	177	328	1,275	88.3%	2.8%	17.1%	34.9%	34.5%
Asia-Pacific	10,563	2,933	5,907	6,894	26,297	75.7%	21.1%	40.8%	47.6%	46.3%
Europe	11,313	740	6,326	3,546	21,925	93.3%	4.6%	33.1%	25.6%	35.8%
Latin America-Caribbean	2,494	160	601	1,243	4,499	88.9%	6.0%	20.9%	43.6%	40.2%
Middle East	3,055	139	614	994	4,802	87.3%	3.9%	15.7%	28.7%	33.3%
North America	6,545	769	2,015	2,359	11,689	83.7%	8.6%	22.2%	27.7%	34.1%
World	34,716	4,766	15,641	15,365	70,488	84.6%	10.3%	31.0%	34.9%	38.8%
			2021					2021		
Africa	328	386	534	592	1,840	38.9%	44.0%	51.4%	63.0%	49.7%
Asia-Pacific	5,454	6,292	9,770	11,992	33,508	39.1%	45.3%	67.5%	82.8%	59.0%
Europe	2,644	4,682	10,048	7,820	25,194	21.8%	28.8%	52.6%	56.5%	41.1%
Latin America-Caribbean	1,315	1,430	1,755	2,000	6,499	46.8%	53.5%	61.1%	70.1%	58.0%
Middle East	953	1,304	2,086	2,176	6,519	27.2%	37.0%	53.3%	62.7%	45.3%
North America	2,472	3,995	4,784	5,177	16,427	31.6%	44.9%	52.7%	60.9%	47.9%
World	13,165	18,090	28,976	29,756	89,987	32.1%	39.2%	57.4%	67.5%	49.5%

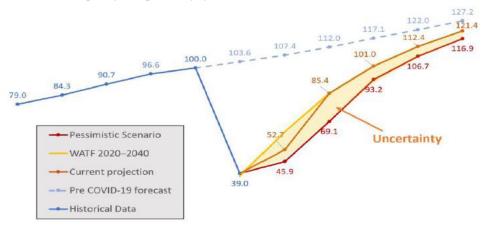




The Impact of COVID-19 on the Airport Business and the Path to Recovery

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Chart 3: Medium-term global passenger traffic projection (indexed, 2019 = 100)



2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 *The projected baseline (pre-COVID-19 forecast) scenario is based on a standard time-series forecast generated using the most upto-date and complete historical data up to December 2019. It also uses an adjusted World Airport Traffic Forecasts (WATF) 2019-2040 and consider the latest insights provided by ACI Regional offices and other inputs. ** Estimated passenger traffic volumes scenarios based on a broad range of inputs provided by ACI Regional offices and industry experts.

Source: ACI World

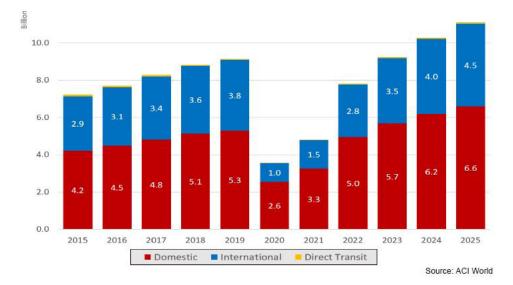


Chart 4: Global passenger traffic by type (in million passengers)