

ICAO JOURNAL

NEWS AND DEVELOPMENTS FROM THE INTERNATIONAL CIVIL AVIATION ORGANIZATION - VOL.69 - NO.4



MARKING 70 YEARS of the Chicago Convention



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ICAO Council Information accurate at time of printing

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Australia	Ms. K. Macaulay	Nicaragua	Mrs. E.A. Aráuz Betanco
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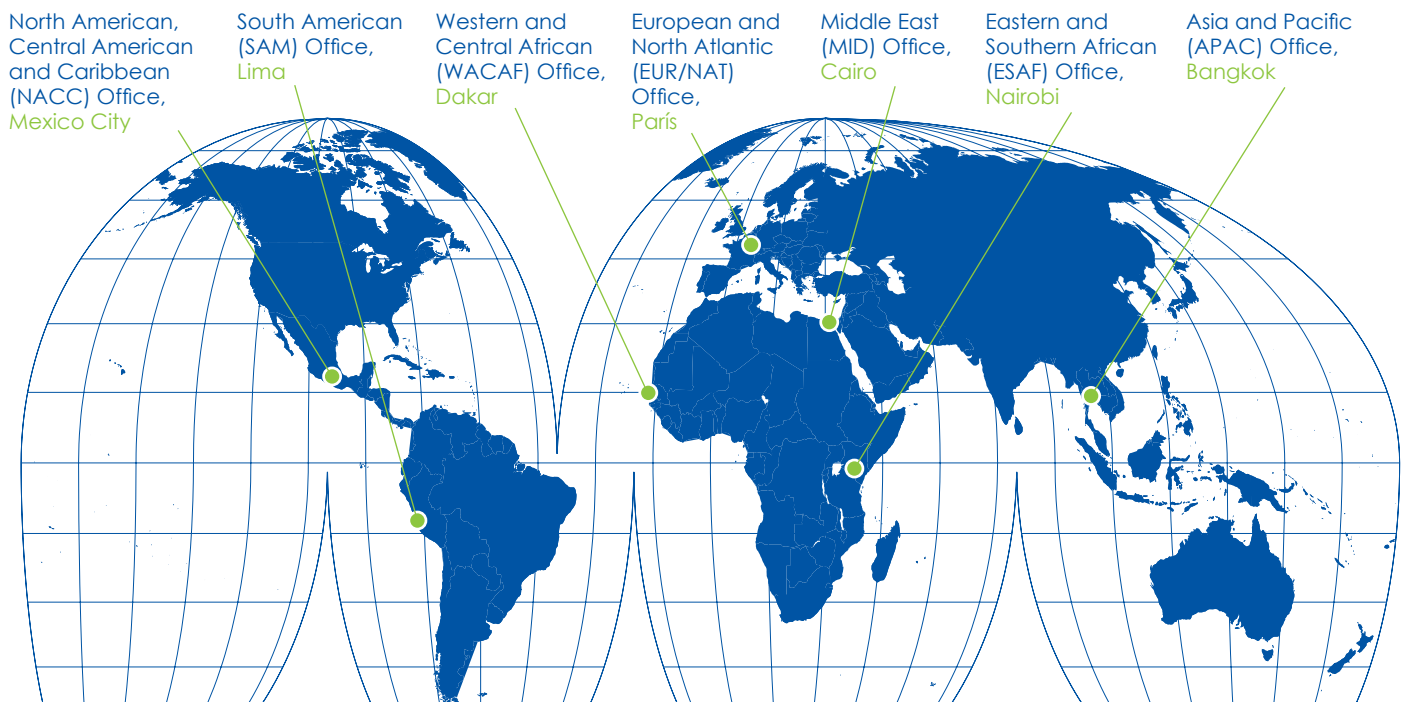
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President: Mr. Farid Zizi

Members of the Air Navigation Commission are nominated by Contracting States and appointed by the Council. They act in their personal expert capacity and not as representatives of their nominations.

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Mr. D.C. Behrens	Mr. D. Fitzpatrick	Mr. C. Hurley	Mr. F. Tai
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ICAO's Global Presence



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NO COUNTRY LEFT BEHIND

when it comes to global aviation standards

Because all ICAO Member States should have access
to the benefits of safe and reliable air transport services




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Olumuyiwa Benard Aliu

PRESIDENT'S MESSAGE TO THE EXTRAORDINARY SESSION OF THE ICAO COUNCIL Chicago 2014

 Ladies and gentlemen, distinguished colleagues, honoured guests, the Resolution we will adopt at this meeting will focus on both the historic and future relevance of the *Convention on International Civil Aviation*, the landmark global agreement which we all know more commonly as the “Chicago Convention.” (Read the Resolution on page 13)

Forged in 1944 over 40 days and nights by the 54 diplomatic representatives who had gathered in this very ballroom on behalf of their States, the Chicago Convention was in many ways a pioneering achievement.

As we’ve heard in some of the remarks today, the Convention’s drafters had met while the Second World War was still being fought on many fronts. It was a period of frightening human conflict and sacrifice, and one whose terrible toll must certainly have motivated aviation’s founding fathers to look to our skies – both for a path to peace, and for a new concept of sovereignty that would henceforth permit international flights to be the ambassadors of that peace.

The Preamble to the Chicago Convention still resonates with the drafters’ shared vision that the future development of international civil aviation could greatly help: “to create and preserve friendship and understanding among the nations and peoples of the world,” and further that it would promote the cooperation which must exist between the world’s nations and peoples for a true and lasting peace to globally endure.

Over the past seven decades, and with the Convention as our guide, ICAO and its Member States have made enormous progress in realizing this vision. Air transport has become an essential enabler of global society, a powerful driver of economic, social, and cultural development, and the safest and most efficient mode of mass transportation ever created.

This progress has largely been the result of the commitment on behalf of all of ICAO’s Member States to work diligently together, through ICAO and with all required stakeholders, to faithfully implement the provisions of the Convention, the global Standards, and their complementary legal instruments adopted by ICAO.

And in addition to setting Standards, ICAO has made further and very significant contributions supporting global peace and security, including through its technical assistance to Member States and the proactive leadership it has provided when unforeseen and tragic events have arisen such as 9/11, devastating earthquakes, disruptive volcanic eruptions, SARS/Ebola and other pandemics, and certainly in the aftermath of recent unprecedented air incidents we have seen over 2014.

The air transport sector is expected to continue to grow exponentially and will double by 2030 to over 6 billion

Air transport has become an essential enabler of global society...

passengers annually. This growth in itself is assurance of the ever-greater contribution of civil aviation to the socio-economic prosperity of our nations.

However, it also comes with attendant challenges to continuous efforts to further improve the safety, security, efficiency, reliability, and sustainability of our air transport system. There are also new emerging issues and challenges such as the safe integration of sub-orbital flights and remotely piloted aircraft systems with the existing civil aviation operational and regulatory framework.

Therefore, as we celebrate today our collective accomplishments, and the historic contributions which have permitted them, we must also be diligent in our collective responsibility to ensure that all our Member States and stakeholders keep pace with sectoral advances, and that all of the Standards set-out in the Annexes to the Chicago Convention are implemented on a harmonized global basis.

This is a great challenge for us, but of course challenges are not new to aviation. What is different today, compared to 70 years ago, is that the world is more interdependent and interconnected than it has ever been. This has created a stronger link of mutual interest among States and the recognition that air transport functions to the great benefit of us all.

I am confident therefore that through continued mutual cooperation and support among our Member States and industry, we have all the tools we need to sustain a dynamic aviation sector for future generations.

As we reflect here today in Chicago on our modern air transport system – the bridges across our skies that it has built for us, and the prosperity and development that we have realized by reaching out to one another across them – let us also more fully appreciate the Convention’s founders, and the courage that they found in 1944 to dream of a better kind of world.

A new and unprecedented scale of global cooperation and trust has been the great legacy of Chicago, and it is only on the basis of these very same values that we will be able to realize, together, our noblest and most enduring potential. ■



Confronting Critical Emerging Safety Issues

ICAO's 2nd High-level Safety Conference will provide DGCAs and strategic decision makers with an opportunity to exchange updates and perspectives on future approaches to managing aviation safety and facilitating increased regional cooperation. It will review critical and emerging safety issues, including the global tracking of aircraft and risks to civil aviation arising from conflict zones.

This event is an essential opportunity for the international civil aviation community to build consensus, obtain commitments and formulate the important recommendations which will guide the effective progress of key aviation safety activities over the near- and longer-term. For programme and registration information please visit: www.icao.int/meetings/hlsc2015




ICAO

SAFETY



SECRETARY GENERAL'S MESSAGE TO THE EXTRAORDINARY SESSION OF THE ICAO COUNCIL Chicago 2014

 We have heard many interesting perspectives on the role of the Chicago Convention, and on the expectation that ICAO must ensure its continued vitality for decades more to come to the benefit of every ICAO Member State. Let me please reassure everyone present here today that this will most certainly be the case.

This celebration of the 70th anniversary of the Chicago Convention has provided us with an excellent opportunity to reflect on just how far we've come as a unified global community, one which provides reliable and affordable air travel to citizens and businesses everywhere in the world.

The last seventy years have certainly witnessed extraordinary growth in our sector, and ICAO too has grown significantly – from just 26 Member States in 1947 to 191 today.

But while this has been a momentous era for the Organization in terms of its scope and influence, reflected clearly by the over 12,000 Standards and Recommended Practices (SARPs) which are now contained in the Convention's Annexes, it hardly compares to the tremendous expansion of the global air transport network which our work and strategic planning so importantly supports.

In 1945, for instance, the air transport industry carried nine million passengers to the limited destinations available to it. As of last year, that number had grown with more than 3.3 billion passengers travelling on scheduled services alone across a now very extensive global network.

This figure represents almost half the world's population being carried by aircraft in 2013, on just over 32 million departures. These are astounding statistics by any estimation, and something we can all be very proud of having contributed to, through ICAO.

But when we stop to consider that today's forecasts are pointing to these numbers doubling – in just 15 years' time – it is also very clear that the world is now expecting a great deal more from us.


Most importantly, it will be expecting us to help ensure that aviation continues to be the safest form of transport. But additionally we will also need to maintain our focus on required operational efficiency improvements, a security and facilitation environment that has evolved dramatically since this first became a concern in the 1960s and 70s, and of course the economic and environmental challenges that are part and parcel of a sector evolving to meet the challenges of new market forces, new scientific understanding, and the associated expectations of our customers.

All of these developments add new and important Chapters to the story of Chicago... as does the dedication of the millions of men and women who, through the years and mostly behind the scenes, have made it possible for billions to fly where they want, when they want, and in full confidence that they will reach their destination safely, reliably, and affordably.

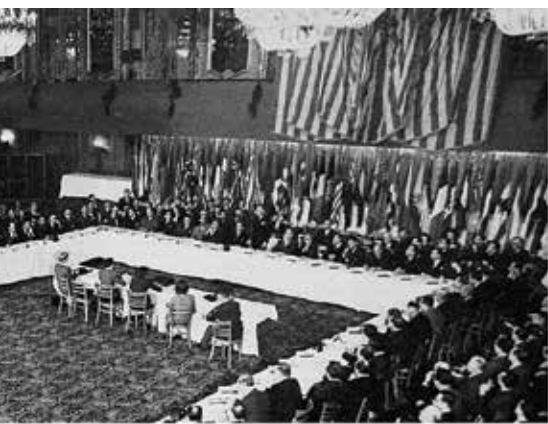
Let me please conclude today by stressing for the Council that civil aviation's international network is one of mankind's greatest legacies of consensus and cooperation, and that ICAO will always be the place where those values are championed – for the benefit of all. ■

CELEBRATING 70

ICAO Montréal and Chicago Events Highlight Profound International Appreciation for the Convention we call ‘Chicago’

 International Civil Aviation Day 2014 marked the 70th Anniversary of the Convention on International Civil Aviation and the establishment of the International Civil Aviation Organization (ICAO) – see the detailed historical account of the Convention’s drafting and of evolution from the Provisional ICAO to ICAO on page 16.

Beginning with celebrations in Montréal, Québec, Canada, and culminating in an Extraordinary Session of the ICAO Council in Chicago, Illinois, US, ICAO’s 70th Anniversary events enjoyed the enthusiastic participation of United Nations Secretary General Ban Ki-moon, Chicago Mayor Rahm Emanuel, U.S. Transportation Secretary Anthony Foxx, U.S. FAA Administrator Michael J. Huerta, Montréal Mayor Denis Coderre, and many other dignitaries and senior officials from ICAO’s 191 Member States who are presented in this special commemorative section of the *ICAO Journal*.



ICAO opens the Extraordinary Session of the ICAO Council held in the very same ballroom in the now Chicago Hilton (formerly the Stevens Hotel) where the Convention on International Civil Aviation (Chicago Convention) was originally drafted and signed 70 years earlier in 1944 (inset).



ICAO's main 70th Anniversary Ceremony in Montréal was presided over by Council President Dr. Olumuyiwa Benard Aliu and Secretary General Raymond Benjamin, and featured the participation of distinguished guests including the Hon Denis Lebel (above, centre vignette), Minister of Infrastructure, Communities, and Intergovernmental Affairs and Minister of the Economic Development Agency of Canada for the Regions of Québec; Mrs. Christine St. Pierre (vignette second from right), Minister of International Relations and la Francophonie, Government of Québec; and the Hon Denis Coderre (vignette far right), Mayor of ICAO's host city of Montréal.



All three dignitaries were presented with ICAO 70th Anniversary Commemorative Coins by President Aliu, as was the 11-year old winner of the ICAO 70th Anniversary Drawing Contest, Miss Erica-Marie Bressi (left, along with her winning entry).





The events on 5 December 2014 began with the first-ever conducting of an ICAO Model Council (above and left), featuring aviation-inclined international youth acting as their States' Representatives to the ICAO Council. The Model Council Session focused on Working Paper submissions relating to skilled personnel retention, training, and other challenges commensurate with staffing and operating a global air transport system twice the size of today's by 2030. All found the event challenging and rewarding.



Other Montréal 70th Anniversary events included an inaugural tour of the ICAO Museum – (above) expected to be opened to visitors in mid-2015 – and the very well-appreciated 70th Anniversary Reception (right and below), organized and presented for ICAO's international guests by the Government of Canada. The reception was later followed by a special concert presented by the Metropolitan Orchestra of Montréal.





ICAO's Chicago leg of its 70th Anniversary events kicked-off with the Organization's Council and senior officials being shown the red carpet treatment by Bombardier Aerospace, which very graciously had offered all a complementary flight to Chicago on one of its aircraft. After a tour of the Bombardier C-Series manufacturing facilities and a lunch hosted by Bombardier CEO Pierre Beaudoin (top right, second from left), the passengers boarded their flight and were later well-received at Chicago O'Hare due to the very helpful coordination by ICAO's Chicago hosts from the U.S. Federal Aviation Administration (FAA) and State Department.



In the evening on that same day, ICAO's guests were generously hosted to a reception by the U.S. FAA and welcomed personally by its Administrator, Michael J. Huerta (above). Many honoured guests were on hand for the evening event, including sponsor representatives and industry leaders.



ICAO Council President Dr. Olumuyiwa Benard Aliu (far bottom of page, centre right) and ICAO Secretary General Raymond Benjamin (centre left) were joined by Chicago Mayor Rahm Emanuel (far left) and United Nations Secretary General Ban Ki-moon (second from left) and U.S. Transportation Secretary Anthony Foxx (second from right) and U.S. FAA Administrator Michael J. Huerta (far right) as they jointly open the Extraordinary Session of the ICAO Council in Chicago. ICAO also unveiled a special commemorative plaque at the meeting (left, centre), which will now permanently reside in the Grand Tradition Room of the Chicago Hilton. When the Extraordinary Council Session had concluded, guests were treated to a lunch reception and then invited to join a DePaul Symposium convened to discuss the Chicago Convention's Past, Present, and Future. The day's events also featured a meeting with the Delegation of the African Union led by Dr. Elham M.A. Ibrahim, African Union Commissioner for Infrastructure and Energy (below with President Aliu).




The Council of the International Civil Aviation Organization (ICAO) adopted a special Resolution commemorating the continued relevance of the Chicago Convention and the role of ICAO in supporting the global availability of air transport benefits for all world citizens and businesses.

RESOLUTION ADOPTED BY THE EXTRAORDINARY SESSION OF THE COUNCIL

On 8 December 2014

On the Occasion of the Seventieth Anniversary
Of the Signing of the Chicago Convention

 *Whereas* 7 December 2014 marks the Seventieth Anniversary of the signing in Chicago of the *Convention on International Civil Aviation*, also known as the Chicago Convention;

Convinced that the fundamental aims and objectives of the Chicago Convention remain as relevant today as when they were conceived in 1944;

Recognizing that the safe and orderly growth of civil aviation that has been achieved over the past seventy years has delivered many positive socioeconomic benefits to humanity;

Determined to ensure that international civil aviation will continue to contribute to the promotion of global peace and security, social integration among the peoples of the world, economic prosperity of nations, and sustainable development for future generations; and

Considering that there remains a strong and ongoing need for the international community to continue forging consensus-based progress in international civil aviation and to build on the foundations that were laid in Chicago seventy years ago;

The Council of the International Civil Aviation Organization (ICAO), on the occasion of this 70th Anniversary of the signing of the Chicago Convention:

1. *Pays tribute* to the leadership, vision and cooperative spirit of the signatories of the Chicago Convention, who came together seventy years ago to create and preserve friendship and

understanding among the nations and peoples of the world in the development of international civil aviation;

2. *Emphasizes* the essential role that ICAO plays as a global forum for cooperation among its Member States and the civil aviation community, and as a standard-setting body for the safe and orderly development of international civil aviation;

3. *Reiterates* the need for ICAO, as a specialized agency in relationship with the United Nations, to continue to take a leadership role in the development of principles, standards, agreements and arrangements for global civil aviation, thereby contributing to peace and prosperity in the world;

4. *Encourages* all Member States of ICAO to continue to promote the ideals and principles of the *Convention on International Civil Aviation* and compliance with its provisions;

5. *Acknowledges* the critical need for continued ICAO efforts aimed at identifying the challenges posed by increases in global air transport demand and capacity, as well as the opportunities offered by new and emerging technologies, and to address those challenges and take advantage of those opportunities in order to achieve the safe, secure and sustainable growth of the international civil aviation system; and


6. *Invites* all stakeholders, including Member States and relevant organizations of the global civil aviation community, to continue sharing and promoting best practices and working together through ICAO in support of a worldwide air transport system, which serves and benefits all nations and peoples of the world. ■



REMARKS BY UNITED NATIONS SECRETARY-GENERAL BAN KI-MOON

ICAO 70th Anniversary

Chicago, Illinois • 8 December 2014

 Dr. Olumuyiwa Benard Aliu, President of the Council of ICAO; Mr. Raymond Benjamin, Secretary-General of ICAO; Ladies and gentlemen...

What a historic event. Thank you very much for the honour of participating.

Today we look back on 70 years of success – and we look ahead to new global challenges. In 1944, this hotel was still elegant – but a night in the best room cost only nine dollars. Seven decades ago, in this Hall, there were representatives of 52 countries drafting the Convention. Today, ICAO has 191 Member States.

The Convention was born before the United Nations – but as Dr. Aliu pointed out in his remarks – it anticipated the creation of a global organization for peace. And now, ICAO helps the United Nations address some of the most pressing issues on our global agenda.

Today I will speak about three areas where our cooperation is strong: health, security and the environment.

First: Health.

When Ebola broke out, ICAO answered fear with facts. As part of the global Travel and Transport Force, ICAO is coordinating the international response to Ebola's impact on travel, trade and tourism.

ICAO stood firmly with the World Health Organization against general bans on travel and trade that block efforts to rush in medical responders and supplies. And ICAO advocated measures to make sure that suspected cases are managed safely in ways that stop Ebola from spreading.

Second: Security.

In July, when the Boeing 777 carrying 298 people went down in eastern Ukraine, the UN Security Council called for a full, thorough and independent investigation. Experts from ICAO helped to

The Convention was born before the United Nations – but as Dr. Aliu pointed out in his remarks – it anticipated the creation of a global organization for peace. And now, ICAO helps the United Nations address some of the most pressing issues on our global agenda.

produce the preliminary findings – and they are continuing to support investigation for the final report.

Meanwhile, ICAO mobilized partners to set up a task force to reduce the risks of civilian planes flying over conflict areas. I commend this important initiative and am encouraged the task force results will now be assessed by a wider range of States at ICAO's High-level Safety Conference next February.

ICAO supports broader United Nations security objectives in other ways. It has worked with the UN Security Council's Counter-Terrorism Committee on a Traveller Identification Programme. At the UN's request, ICAO adopted a Convention on marking plastic explosives so they can be detected.

Third: The climate challenge.

We meet on the eve of a critical year for the global effort to combat climate change. In September, I hosted a major summit to galvanize bold commitments and action on the ground. It was a great success – thanks in part to ICAO.

Through ICAO, governments and the aviation industry committed to a two percent annual fuel efficiency improvement and carbon neutral growth from 2020. They have concrete plans to reach this ambitious target by supporting the development of sustainable alternative fuels, deploying new technologies for aircraft, and improving efficiency. They are also helping to develop a global carbon dioxide standard for new aircraft.

I applaud this as a large-scale effort that builds on ICAO's other climate initiatives – from creating smartphone apps to calculate the carbon footprint of flights to providing reports on emissions to the UN Framework Convention on Climate Change.

After I leave Chicago tomorrow, I will travel to Lima, Peru for the 20th Conference of the Parties to that Convention. There, we hope to lay the groundwork for a new universal climate agreement to be adopted in Paris next year.

Ladies and gentlemen, In 1944, the world was bloodied and battered from the Second World War.

In 2014, we are facing new threats that never could have been imagined when ICAO was founded.

Then, as now, we know that we can only overcome these threats through a collective, international response. I count on you to continue carrying on the work of our predecessors who seventy years ago in this Hall launched a global flight path for peaceful aviation.

And I call on you to expand their vision as we navigate a new journey to a safe and sustainable future.


Thank you. ■



REMARKS BY U.S. TRANSPORTATION SECRETARY ANTHONY FOXX

ICAO 70th Anniversary

Chicago, Illinois - 8 December 2014

 Good morning, everyone. President Aliu – thank you so much for the introduction.

I want to say how honored we are to be joined by UN Secretary General Ban Ki-moon.

I also want to thank Mayor [Rahm] Emmanuel for welcoming us to this great city. It's truly an honor to join the International Civil Aviation Organization, and all the delegates and dignitaries, on this historic day for international aviation.

When the ICAO first came together in this room, the vast majority of people in our world had never experienced air travel. There were only so many places you could fly to – and getting to them was kind of like moving from Point A to Point Z. You also, for the most part, had to be rich and famous to be onboard.

But let me add, 2014 marked yet another milestone in the history of aviation.

Because it was on the first day of this year, 100 years ago, that a young American pilot flew an aircraft – it was made out of wood – between two cities in our state of Florida.

The flight was only 23 minutes. And that's only marginally faster than it takes to drive between these cities now.

But there was a mayor onboard who had paid at an auction to be a passenger... which is why this flight went down in the history books as the world's first commercial flight.

So, consider that on January 1st, in 1914, there was exactly one commercial flight, carrying as many passengers.

Then fast forward to the first day of this year – when there were 100,000 commercial flights around the world... and some eight million people onboard.

This is jobs. This is economic growth. This is world trade.

And I think, if you're a certain age – I'll be honest with you: when the ICAO came together, I was still almost 30 years from being born – it's easy to take for granted what you've helped to build: which is a global community that's more connected, more open, and more developed than previous generations would have ever imagined.

It's changed our way of life – but it's also changed people, by expanding their views of the world.

Today, in less than one day, an American can board an aircraft, maybe touch down in Paris, and continue on to West Africa to serve in the Peace Corps.

In less than one day, someone can leave home in another country and come to the United States to study, or to work, or to visit.

I remember back in 1991. I was in college. And I enrolled in a study abroad program, and flew to South Africa.

The country was still transitioning out of apartheid. It was only the year prior when Nelson Mandela had been released from prison.

By seeing that country, I was able to learn more about my own. And it made me realize the opportunities I had - opportunities I couldn't have even imagined up until then. And it inspired me to work even harder in school.


Without that experience, I might not be standing here today.

So I want to thank all of you on behalf of the U.S. Department of Transportation, but also personally, for this partnership we have. And I want to say that we look forward to continuing to work together to make our global aviation system even safer and more efficient.

Thanks, again, everybody. ■



REMARKS BY U.S. FEDERAL AVIATION ADMINISTRATION (FAA) ADMINISTRATOR MICHAEL J. HUERTA ICAO 70th Anniversary Chicago, Illinois • 8 December 2014

 Mr. President, Mr. Secretary General, ICAO Council Representatives and all distinguished guests, welcome to Chicago. It is an honor to host you in our country for this magnificent celebration of ICAO's 70th Anniversary.

Seventy years ago, delegates from 52 nations met in the ballroom of this hotel to ensure that the growing aviation industry would be used for peace and to benefit all nations. The resulting Convention set forth the principles for the safe, efficient, and sustainable growth of civil aviation. The forethought and ingenuity of the men and women who met at this hotel 70 years ago set the stage for aviation's exponential growth. And the principles they bestowed still guide and direct us today.

As we celebrate this milestone, let us take pride in how far aviation has developed over the decades.

During the first years of ICAO's existence, commercial aviation was still in its infancy. In the 1940s, the vast majority of the world's citizens had never travelled by air, and routes were limited. Fares were exorbitantly high, but would gradually become more affordable to many more travellers.

Since that time, aviation has changed beyond the wildest imagination of its pioneers. Its exponential growth has been nothing short of amazing. Millions of people now fly safely to vast and far reaches of the world. Billions of dollars of goods are shipped daily on aircraft. Aviation supports economies big and small by the trillions of dollars, and the aviation industry provides jobs to millions. Most importantly, we can say with great satisfaction that it is the safest form of travel.

And consider all the vast improvements since ICAO began its work to ensure a safe and efficient global aviation system. Safety rates have dramatically improved. Air traffic operations are becoming

“All of these major steps forward could not have happened without ICAO's leadership.”

more and more efficient, and system modernization is taking hold. Aircraft are certified to incredibly safe levels. We are integrating new entrants into the global airspace and addressing environmental concerns.

All of these major steps forward could not have happened without ICAO's leadership. Through this organization, and with the efforts and technical expertise of Member States and industry, we have worked together to set global aviation standards and guidelines. These standards have created a sound foundation for a safe, harmonized, and environmentally responsible aviation system.

We can all be proud, as participants in this most vital of international bodies, that our efforts have paid off tremendously.

While we as Member States at times have differing points of view and interests, this forum allows us to reach a global consensus and harmonize our approaches in the best possible way to enhance global aviation. It remains a remarkable body and shows the world how true collaboration works.

Congratulations once again on this historic occasion, and thank you all for joining us here in Chicago where it all began. ■



SUPPORTING GLOBAL AVIATION'S

Performance-based Navigation (PBN) has clearly demonstrated the benefits of evolving from sensor-based to performance-based operations in terms of safety, optimized airspace, reduced fuel burn and emissions (noise and greenhouse gas), more efficient routes, and the ability to maintain reliable all-weather operations – even at the most challenging airports.

After completion of a very successful roll-out of free PBN information and training sessions, ICAO is pleased to offer a suite of PBN products and services that covers the full range of near- and medium-term implementation needs of States and aviation stakeholders. ICAO considers these PBN product and service offerings essential as air traffic gets set to double in frequency by 2030.

ICAO'S 2015 PBN PRODUCTS AND SERVICES

PBN ASSESSMENTS (PBN-START)

A two-week intensive collaboration that analyzes and evaluates the environmental, economic and airspace capacity issues affecting local/regional strategic PBN planning and implementation. PBN-Start culminates in the delivery to customers of an achievable strategic plan aligned with local/regional PBN goals.

PBN TRAINING (ON-LINE AND CLASSROOM)

PBN represents a paradigm shift with respect to everything from airspace and procedure design to airline and airport operations. In light of the steep learning curve associated with its benefits, ICAO will be offering a list of courses covering everything from PBN overview to operational approvals.

PBN INFORMATION RESOURCES

Broken down into distinct groupings for executives, regulators, ANSP airspace and procedure designers, aircraft operators and manufacturers, these resources are provided as publication and guidance 'bundles' tailored to each area's specific needs.

PBN WORKSHOPS AND SYMPOSIUMS

Local PBN events such as workshops or symposiums offer a unique opportunity to bring divergent planning, design and operational stakeholders together to share experiences and best practices and ensure that your State drives PBN implementation on a coordinated basis.

PBN IMPLEMENTATION ASSISTANCE

Implementation needs will vary from State to State and ICAO recognizes this. It also recognizes that this assistance is the most important aspect of realizing your PBN planning and ultimately its wide-ranging benefits. Accordingly ICAO will provide a full set of tools based on the master PBN Implementation Plan and tailored to the specific needs of your State or Region.

PBN FUNDING COORDINATION

ICAO will be pleased to help coordinate funding assistance for State PBN needs with applicable international bodies such as the World bank, committed industry partners and financial institutions.

NO. 1 AIR NAVIGATION PRIORITY

Since ICAO first began raising PBN awareness, we've learned a lot about what States and stakeholders need in terms of PBN assistance. We've therefore structured these new PBN products and services into six specific categories as shown above, so that **No Country is Left Behind** where PBN benefits are concerned. The list and more detailed information can also be found on the ICAO PBN website, and requests

by States for PBN products or services can be sent directly to the PBN Inbox at: PBN@icao.int



ICAO


CAPACITY & EFFICIENCY



H. Ch. E. van Ede van der Pals presents Dr. Albert Roper with the insignia of the Commander of the Order of Orange-Nassau. Seated is M. L. de Brouckere, Belgian Minister of State and president of the first interim Assembly of the Provisional International Civil Aviation Organization (PICA0).

70 YEARS OF AIR TRANSPORT PROGRESS SUPPORTING GLOBAL PEACE & PROSPERITY

Reflections on the Chicago Convention

 The Convention on International Civil Aviation, drafted and signed in 1944, was established to promote cooperation and “create and preserve friendship and understanding among the nations and peoples of the world.”

Known more commonly today as the *Chicago Convention*, this landmark agreement established the core principles permitting international transport by air and led to the creation of the specialized agency which has overseen it ever since – the International Civil Aviation Organization (ICAO).

The rapid growth of international air transport between the two World Wars clearly demonstrated the possibilities of civilian air transport. It was evident, as the Second World War began to come to its conclusion, that rules to be observed by all nations and enforced by common consent would be essential if international civil airlines were to be developed on a safe and economically viable basis.

The result was the calling together of world powers to Chicago, Illinois, U.S. in November-December 1944 at the first International Civil Aviation Conference. This meeting formalized the content and original signatories to the *Convention on International Civil Aviation* (Chicago Convention) and also established the *Provisional International Civil Aviation Organization*, or PICAQ, to carry out the basic responsibilities arising from the agreement.

PICAQ was an advisory body consisting of an Interim Council and an Interim Assembly. From June 1945, the Interim Council met continuously in Montréal, Canada; the Council consisted of representatives from 21 Member States. The first Interim Assembly of PICAQ, the precursor to ICAO’s triennial Assemblies in the modern era, was held in Montréal in June 1946.

On 4 April 1947, sufficient ratifications to the *Chicago Convention* having been received, the provisional aspects of the PICAQ were no longer relevant and the body officially became known as ICAO.

A STRONG FOUNDATION

Few people, even among aerospace experts, are aware that ICAO had a precursor. The International Commission for Air Navigation (ICAN) was created by the *Paris Convention* on 13 October 1919 as part of a vast post-World War I international reorganization.

France had in 1905 formed the very first aviation-related federation of any kind: the *Fédération Aéronautique Internationale* was established as a non-governmental and non-profit organization to promote aeronautical and astronautical activities worldwide, particularly in the field of air sports, as well as to encourage related skills, proficiencies, and safety measures.

There is general acceptance, however, that 1919 was the year when the international air transport industry was born, even despite the fact that the first scheduled air service had

New challenges such as the dawn of the commercial space era and the increasing use of remotely piloted aircraft point to a continued and dynamic role for ICAO and the Chicago Convention.

operated across Tampa Bay, Florida, U.S. during the first four months of 1914.

1919 also marked the year when the precursor to the current International Air Transport Association (IATA), representing world scheduled airlines, was established by representatives of five air transport companies from Denmark, Germany, Great Britain, Norway, and Sweden meeting at The Hague, Netherlands, to sign an agreement to form the International Air *Traffic* Association.

Up until that year, and for many years afterwards, much of the world’s commercial air transport activity was focused upon the carriage of airmail. These early, pioneering days for civil aviation were immortalized by the passionate pilot Antoine de Saint-Exupéry in his novel *Vol de Nuit*, which captured the world’s imagination.

From 1919 through 1944, a number of additional and important civil aviation developments took place which helped to create a strong foundation for the Chicago Convention.



Agreement signing at the conclusion of the Chicago Conference. Front row, left to right: Kia-Ngau, China; Lord Swinton, United Kingdom; Adolf A. Berle Jr., Assistant Secretary of State, US; H.J. Symington, Canada; and Max Hymans, France.

In 1925, for instance, the *First International Conference of Private Air Law* was convened in Paris to examine airline legal obligations and to undertake the immense work of codifying private air law. The final protocol of this Conference called for the creation of a special committee of experts, the *Comité International Technique d'Experts Juridiques Aériens*, or CITEJA.

In 1926, an Ibero-American Convention was developed under the leadership of Spain, with Portugal and the States of Latin America. That same year, the United States and United Kingdom each passed regulations relating to governance of air commerce in their territories.

In 1929, the *Convention for the Unification of Certain Rules Relating to International Carriage by Air* was signed at Warsaw,

Poland. It entered into force in early 1933. The *Warsaw Convention* established the conditions of international air transport with respect to the documents used for such transportation and of the liability of the air carrier (at that time about \$10,000 for each passenger and about \$20 per kilogram of checked baggage or goods). *Read more about the 85th Anniversary of the Warsaw Convention on page 26 of this edition of ICAO Journal.*

Also in 1933, the *Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface* was signed in Rome, Italy. This agreement was later amended by the *Brussels Protocol* of 1938 to permit some basic defenses for insurers. And the first *International Sanitary Convention for Aerial Navigation* was signed at The Hague to protect communities against diseases

MONTRÉAL: CIVIL AVIATION CENTRAL

The establishment in 1947 of Montréal as the permanent seat of ICAO is not the only factor that propelled the city to its current status as one of the world's most important aviation centres, but it was by far the most critical.

At a plenary session in Montréal that gathered 400 delegates on 21 May 1946, the city was recognized officially as the permanent seat of ICAO. Less than a year later, on 4 April 1947, PICAO officially became ICAO – and Montréal its base, as per the Chicago Convention.

The first session of the ICAO Assembly was held later in 1947, and the second in Geneva in 1948. For some time afterwards, sessions were held in various countries, but since 1973, when an extraordinary session of the full Assembly was held in New York, all sessions have been held in Montréal. The city has hosted about 30 Assemblies.

ICAO's central role in setting policy, norms, and standards for the aviation world has attracted a cluster of related organizations like a magnet. The plethora of related aerospace agencies and companies that ICAO helped pull into its orbit in Montréal is impressive.

IATA, the International Air Transport Association, the airline lobby founded at a conference in Havana in 1945, moved to Montréal immediately, citing ICAO's founding in 1944. H.J. Symington, president of TransCanada Air Lines, fore-runner to Air Canada, was named president of IATA in 1945.

It must also be recognized that, prior to IATA's founding, many commercial aviation developments had already been progressed through the airline association's precursor, the International Air Traffic Association.

IFALPA, the International Federation of Air Line Pilots' Associations, relocated here on 1 January 2013, after being based

in London since its founding in 1948. Executives of the umbrella pilots' group cited ICAO and IATA as the reason.

In 2010, Airports Council International (ACI) moved to Montréal from its long-time headquarters in Geneva because of ICAO. ACI does a great deal of business with ICAO on airport management, security, safety, and the environment.

The International Federation of Air Traffic Controllers' Associations (IFATCA) is still registered in Switzerland, its historic base, but moved its permanent seat to Montréal because of ICAO.

Over the decades, companies like Bombardier, CAE, Pratt & Whitney Canada, and Bell Helicopter Textron Canada have developed their business here, in turn spawning their own satellites of smaller suppliers. As a result, aerospace products are Quebec's leading export, generating more than Cdn \$11 billion in annual revenues.

These four so-called "order givers" are surrounded by 220 smaller firms, employing in excess of 40,000 people in the region – or roughly half of the Canadian aviation industry. Only Toulouse, France, seat of Airbus, and Seattle, Washington, US, until recently the headquarters of Boeing, boast a higher concentration of aerospace employees.

ICAO alone provides the greater Montréal region with economic spinoffs in the area of Cdn \$120 million a year, according to a study produced in 2012 by the SECOR management consulting firm.

Today there are just over 500 employees at ICAO's Montréal Headquarters, in addition to another 170 or so in its Regional Offices.



Max Hymans, Chairman of the French Delegation, broadcasting to France on the proceedings of the Chicago Convention.



Provisional International Civil Aviation Organization (PICAO), Montréal, 1945.



Stevens Hotel, site of the Chicago Convention, 1944.

liable to be imported by aircraft, as well as protecting flying personnel against diseases due to flying.

The 1930s in general saw cooperation amongst world airlines advance rapidly under IATA, with many new technical standards and commercial air transport regulations developed. This included the technical standardization of cockpits, fire prevention, marine airports, and ice accumulation, as well as standards governing revenue accounting and traffic management.

While this accelerating civilian air transport development was interrupted by the Second World War from 1940-1945, the advances made during this period were instrumental to the realization of the eventual global framework.

GLOBAL CONFLICT SOWED SEEDS OF MODERN PROSPERITY & PEACE

The extraordinary advances in aircraft technology during the Second World War, as well as the recognition that they would soon spawn a much more pervasive international air transport industry than the world had yet seen, prompted States both large and small to hammer out, in the midst of that global conflict, a new treaty specifying and governing the international aspects of the burgeoning civil aviation network.

Rules to be observed by all nations and enforced by common consent would be essential if international civil airlines were to be developed on a safe and economically viable basis.

The Chicago Convention, signed three years to the day after Pearl Harbor, set out as its prime objective the development of international civil aviation "... in a safe and orderly manner," such that international air transport services would be established on the basis of equality of opportunity and operated soundly and economically.

As ICAO celebrates its seven decades of existence, that remains its primary task, purpose, and focus; the least one can say is that the challenges to that safe and orderly development have evolved constantly and show no signs of abating. In the 70 years since the Organization's inception, aviation has become a linchpin of human activity and socio-economic development.

Civil aviation has also increased prosperity and interconnectedness, shrinking vast distances around the world to a matter of hours.

During this march to the modern air transport era, the Convention's Annexes have evolved to include close to 12,000 international standards and recommended practices (SARPs), all of which have been agreed by consensus through ICAO.

These agreements in turn, alongside the tremendous technological progress achieved in the intervening decades, have enabled the realization today of what must be recognized as one of mankind's greatest cooperative achievements and a critical driver of global socio-economic prosperity – the modern international air transport network.

But as an essential human endeavour involving sovereign territory and national ambition, the range of external factors and forces which can and do impact the evolution of global air transport – be they political, technological, economic, or environmental – are virtually endless.

It is no small task for ICAO, with 191 Member States, to keep up with those forces. Perhaps no other industry is so regularly buffeted by so many factors, many of them outside the sector's control, including hijackings, accidents, bombings, disease outbreaks, volcanic eruptions, armed conflicts, etc.

And despite the fact that it's statistical safety levels are unparalleled when realistically compared with other modes of transport, an air transport accident – even though it may represent a one-in-several-hundred-million occurrence depending on its specific circumstances – is seen as unacceptable both to the public and aviation safety specialists. Certainly no other area of human activity is held to even remotely similar standards of safety perfection.

BUILDING ON SUCCESS TO ENSURE A SUSTAINABLE AIR TRANSPORT FUTURE

Air travel is scheduled to double worldwide in the next 15 years, from three billion passengers annually to six billion, and from about 30 million flights to 60 million a year. Much of this growth will be concentrated in developing regions like Asia and Latin America.

THE ICAO COUNCIL PRESIDENTS

The ICAO Council is comprised of 36 Member States elected by the triennial Assembly for a three-year term. As one of the two governing bodies of ICAO, the Council gives continuing direction to the work of ICAO, including adopting international Standards and Recommended Practices (SARPs) and incorporating these as Annexes to the Chicago Convention. The Council may investigate any situation which presents avoidable obstacles to the development of international air navigation and it may take necessary steps to maintain the safety and regularity of international air transport.

In its 70-year history, the Council has had five Presidents from five States: Argentina, Lebanon, Mexico, Nigeria, and the United States.

EDWARD PEARSON WARNER – UNITED STATES – 1947-1957



Dr. Warner was a member of the United States delegation to the Chicago Conference, active in its economic and technical issues, serving as Rapporteur of the Technical Committee. At the time he was Vice-Chairman of the U.S. Civil Aeronautics Board (CAB). On 15 August 1945, he was elected President of the Council of the Provisional International Civil Aviation

Organization (PICAQ), and subsequently President of ICAO. A graduate of Harvard University in mathematics and the Massachusetts Institute of Technology in mechanical engineering, Dr. Warner served as Chief Physicist of the National Advisory Committee for Aeronautics (NACA) in charge of aerodynamic research at Langley Field, Virginia. He later consulted with the U.S. Air Mail service on selection of equipment, was a Director of Colonial Airlines, served as Assistant Secretary of the Navy for Aeronautics, and was Editor of *Aviation* magazine.

WALTER BINAGHI – ARGENTINA – 1957-1976



Walter Binaghi was a member of the Argentine Delegation to the First Assembly of ICAO in 1947, became a member of the Air Navigation Commission (ANC), and was elected Chairman of the ANC in 1949 and annually until he assumed the position of President of the Council in April 1957. Prior to his 29-year service with ICAO, Binaghi had two careers –

as a professor of Physics and Mathematics and as an engineer in Argentina's Directorate of Infrastructure, Ministry of Aeronautics. He was a civil engineering graduate of the University of Buenos Aires, School of Engineering.

ASSAD KOTAITE – LEBANON – 1976-2006



A lawyer by training (French University of Beirut, University of Paris, Academy of International Law at The Hague), Dr. Kotaite was Chief of Legal Services, International Agreements and External Relations in the Lebanese Directorate of Civil Aviation in 1953 when he became a member of the Legal Committee of ICAO. He was the Representative of Lebanon on the ICAO Council from 1956-62 and 1965-70. From 1957-59, he was a member of the United Nations Transport and Communications Commission, and chaired the Ninth Session of the Commission. Prior to being elected ICAO President, Dr. Kotaite was Secretary General of ICAO from 1970-76. After 30 years as President, he retired in 2006, having served the international civil aviation community for 53 years.

ROBERT KOBEH GONZÁLEZ – MEXICO – 2006-2013



Beginning in 1966, Roberto Kobeh González served in Mexico's Directorate General of Civil Aeronautics. As Deputy Director General in the areas of Administration and Air Transport, he helped negotiate bilateral agreements with various countries. From 1978 to 1997, he was Director General of the Air Navigation

Services of Mexico (SENEAM). He has also been professor of aeronautical electronics at the National Polytechnic Institute of Mexico. Kobeh González became his State's representative on the ICAO Council in 1998, and served as First Vice-President of the Council, Chairman of the Finance Committee, and as a Member of the Air Transport Committee prior to his election as President in 2006.

OLUMUYIWA BENARD ALIU – NIGERIA – 2013-PRESENT



Dr. Aliu's professional civil aviation experience spans 30 years, including areas of safety oversight, economic regulation, and negotiations of bilateral and multilateral agreements. As Chief Airworthiness Surveyor, Director Air Transport Regulation, and Technical Adviser to the Minister of Aviation,

he was active in the formulation of the National Civil Aviation Policy in Nigeria. He also led the development of the African Civil Aviation Policy (AFCAP) under the auspices of the African Union Commission. As Representative of Nigeria on the ICAO Council from 2005, Dr. Aliu led various technical, finance, and steering committees prior to being elected President in 2013. He holds an aeronautical engineering master's degree from the *Kiev Institute of Civil Aviation Engineers*, a PhD, an Aircraft Maintenance Engineer's License, and a Graduate Certificate in Air and Space Law.

In addition to this traditional air transport growth, new challenges such as the dawn of the commercial space era and the increasing use of remotely piloted aircraft (RPA) point to a continued and dynamic role for ICAO and the Chicago Convention in the years and decades ahead, one which could likely see it playing a more important role than ever in ensuring the managed evolution of a safe and efficient airspace serving both atmospheric and outer space-bound traffic.

And if the years ahead are anything like the last few decades in terms of technological innovation, breakthroughs such as the Airbus E-Fan's electrical propulsion or upcoming around-the-world solar flights by the Solar Impulse team point to tremendous transformations occurring that could dramatically alter

how and where 21st century travellers and decision-makers will expect to be flown.

ICAO's current Global Plans in Safety and Air Navigation Capacity and Efficiency are already taking future technologies into significant account, but the foundation they and any other global air transport strategies rest upon will always be the Chicago Convention and its Annexes.

As a landmark global agreement fostering peace and prosperity the world over, the Chicago Convention and the system it has nurtured for the past seven decades remain among mankind's greatest examples of what determined cooperation and hard-fought consensus can realize in terms of practical and sustainable progress for every global citizen. ■

THE ICAO SECRETARIES GENERAL

The Secretary General of ICAO is head of the Secretariat and chief executive officer of the Organization, providing leadership to a specialized international staff working in the field of international civil aviation. There have been 11 SGs from 10 nations, two from France (three if you count the current Secretary General, Raymond Benjamin, who was born in Egypt but is a French citizen), one each from Algeria, Brazil, Canada, Egypt, India, Lebanon, The Netherlands, Sweden, and Switzerland.

ALBERT ROPER – FRANCE – PICAO 1944-47, ICAO 1947-51



Dr. Roper was among the first to defend the principles of world cooperation in civil aviation as the only Secretary General of the International Commission for Air Navigation (ICAN) from its formation in 1922 to its disbanding in 1947 when ICAO became a permanent organization. He was invited to assist the Provisional International Civil Aviation Organization (PICAO), which led to election as Secretary General of PICAO and then ICAO's first SG.

CARL LJUNGBERG – SWEDEN – 1952-59



Active in international aeronautical activities from 1939, Carl Ljungberg was Director General and President of the Royal Board of Civil Aviation in Sweden from 1945-52. He was Chairman of the Technical Commission of PICAO in 1946, and Chairman of the Economic Commission of the Fourth Assembly of ICAO in 1950. He was a member of both the Swedish Institute of Aeronautical Research and the Council of Meteorology and Hydrography.

RONALD MACALISTER MACDONNELL – CANADA – 1959-64



A career diplomat, Ronald Macdonnell served Canada in Czechoslovakia, Egypt, France, Indonesia, Lebanon, and Sri Lanka, and in leadership roles with the Department of External Affairs. He attended the Conference on International Civil Aviation in Chicago in 1944 and assisted in the establishment of PICAO. He headed the Canadian Delegation to the Tenth Session of the ICAO Assembly in Caracas, Venezuela, in 1956.

BERNARDUS TIELEMAN TWIGT – THE NETHERLANDS – 1964-70



Dr. Twigt served in the Ministry of Economics of The Netherlands until 1949, when he joined ICAO as Deputy Chief, Administration and Finance. From 1956, he subsequently became Director of Administration of the UN Relief and Works Agency, Chief Administrative Officer (CAO) of the UN Congo Operation, and CAO of the UN Emergency Force in Gaza, returning to ICAO as Secretary General in 1964.

ASSAD KOTAITE – LEBANON – 1970-76



Dr. Kotaite is the only person to serve ICAO both as Secretary General and President of the Council (1976-2006). Trained in law, he led various ICAO committees, including Chairman of the Air Transport Committee, Vice-Chairman of the Finance Committee, Chairman of the Working Group on ICAO Financial Regulations, member of the Legal Committee, member of the ICAO Standing Group on Implementation, and Second VP of the ICAO Council.



Conference on International Civil Aviation, Chicago, 1944

YVES LAMBERT – FRANCE – 1976-88

Yves Lambert held civil aviation roles in Algeria, including Director of the Organization for Aeronautical Management and Safety (OGSA), and with the French Air Navigation Technical Services and French

Minister of Transport before becoming the Representative of France on the ICAO Council from 1973 to 1976. He Chaired the Finance Committee and Committee on Joint Support of Air Navigation Services.

SHIVINDER SINGH SIDHU – INDIA – 1988-91

Dr. Sidhu held several senior posts in the government, representing India at numerous bilateral and inter-governmental negotiations. He was also chief of the Indian delegation to multiple international conferences, and was elected President of

the Twenty-sixth Session of the ICAO Assembly in 1986. While Director of India's Civil Aviation Administration, Dr. Sidhu also served as Chairman of Air India and Indian Airlines.

PHILIPPE H.P. ROCHAT – SWITZERLAND – 1991-97

Trained in law but with strong interest in aviation infrastructure, Dr. Rochat was a journalist with Swiss Radio-TV prior to joining the Federal Office for Civil Aviation. He was later Administrative and Commercial Director of Geneva Airport from 1977-85. As

the Representative of Switzerland on the ICAO Council from 1986-89, Dr. Rochat was Vice-Chairman of the Joint Support Committee and Chairman of the Finance Committee.

RENATO CLÁUDIO COSTA PEREIRA – BRAZIL – 1997-2003

Renato Cláudio Costa Pereira was the President of CERNAL, the Brazilian agency for international air navigation affairs, bilateral agreements, matters related to air services and airspace safety, and relations with ICAO. He was President of the Latin American Civil Aviation

Commission (LACAC), 1992-96, instrumental in transforming the organization into a Pan-American body. Costa Pereira led the Brazilian delegations at the ICAO Assembly in 1992 and 1995.

TAÏEB CHÉRIF – ALGERIA – 2003-09

Dr. Chérif served various roles in the Ministry of Transport in Algeria, including Deputy Director for Air Navigation and Deputy Director of Transport and Aerial Activities. He was also Director of Algiers International Airport. From 1998-2003, as Representative of Algeria on the

ICAO Council, Dr. Chérif was Deputy Chairman, then Chairman of the Air Transport Committee and a Member of the Finance Committee.

RAYMOND BENJAMIN – FRANCE – 2009-PRESENT

Trained in public law and international relations, Raymond Benjamin became involved with the Civil Aviation Administration of France and subsequently the European Civil Aviation Conference (ECAC). From 1989-94, he was Chief, Aviation Security Branch, of ICAO, and from

1994-2007 Executive Secretary of the ECAC, developing policy advice and strategic options on safety, security, and environmental issues. Prior to becoming ICAO Secretary General in 2009, Benjamin was Special Adviser to the Joint Aviation Authorities Training Organization and the European Aviation Security Training Institute. Born in Alexandria, Egypt, he holds French citizenship.



Emerging space activities and civil aviation: challenges and opportunities

There are very few visions of the future that don't show us traveling through space like we do today through the air. While commercial aviation is celebrating its 100th year, in another 100 more we may likely be doing the same for civil space transport. The dream has always been to reach the stars and aviation is a good stepping stone to start from. And just as with civil aviation, the

success or failure of the civil space sector may well rest on the ability of governments, regulators and industry to act cooperatively as we reach towards this vast and inspiring new area of human endeavour.

For programme and registration details on this landmark ICAO/UNOOSA symposium, please be sure to visit the ICAO website at: www.icao.int/space-2015



ICAO

SAFETY

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Remotely piloted or piloted: sharing one aviation system

ICAO's RPAS Symposium will provide a unique opportunity for States, international organizations and stakeholders to identify how existing aviation rules need to evolve to meet the challenges inherent in welcoming the RPAS community and to examining the alignment between ongoing RPAS development and supporting regulatory provisions. The symposium will also showcase the opportunities created by

the integration of RPAS into the global civil aviation system, and an industry exhibit will showcase the breadth of existing technologies and the thriving research and development activities currently underscoring this new sector of the aviation industry. For programme and registration information please be sure to visit the ICAO website at:

www.icao.int/meetings/rpas



ICAO

CAPACITY AND EFFICIENCY

AIR LAW MARKS 85 YEARS OF WARSAW CONVENTION



ABOUT DR. MAŁGORZATA POLKOWSKA

Director of the President's Office, Civil Aviation Authority of the Republic of Poland, Dr. Małgorzata Polkowska is her nation's Permanent Representative on the ICAO Council.

✈ In a “year of anniversaries,” including commemoration of 70 years of the International Civil Aviation Organization (ICAO) and 100 years of commercial passenger flight, a special celebratory event was held in October in Poland: the International Air Law Conference – 85th Anniversary of the Warsaw Convention.

Zbigniew Klepacki, Undersecretary of State in Poland's Ministry of Infrastructure and Development, noted that the 2014 conference was held in the exact place – The Royal Castle – where fourscore and five years earlier deliberations were conducted for the “Convention for the Unification of Certain Rules Relating to International Carriage by Air,” otherwise referred to as the Warsaw Convention.

The Warsaw Convention came into force on 13 February 1933 and has been signed by 152 States.

“The Warsaw Convention represents the first comprehensive legal framework governing aviation at the international level, playing an essential role in supporting the development of the sector and establishing a set of principles, most of which are still effective and constitute the basis of modern aviation law,” remarked Laura Pierallini, professor of Commercial Law and Air Law at the LUISS University of Rome, Italy.

The air law conference was organized by *Urząd Lotnictwa Cywilnego*, the Polish Civil Aviation Authority (CAA), and the Polish Airports. Conference partners included PZU, Boeing, and LOT Polish Airlines (which celebrated its own 85th Anniversary earlier in the year).

At the invitation of Piotr Ołowski, President of the CAA, and Michał Kaczmarzyk, General Director of Polish Airports, the conference brought together aviation authorities from around the world. Moderators and speakers included prominent international experts and representatives of aviation law universities, law firms, and the European Commission.

The main topics of the conference covered issues on liability of air carriers, manufacturers, lessors of aircraft, and aircraft parts in the Warsaw regime, as well as the responsibilities of air navigation service providers and airports. The speakers also outlined the changes in the liability in aviation and the aviation insurance market.

The conference was moderated by Dr. Małgorzata Polkowska, the Permanent Representative of the Republic of Poland on the ICAO Council.

LIABILITY, RESPONSIBILITY, ACCOUNTABILITY

The first of four panels – devoted to the issues and challenges for the global system of Warsaw Convention on the liability of carriers – was moderated by Dr. Pablo Mendes de Leon, Director of the Institute of International Law and Space at Leiden University in The Netherlands. Presentations were made by Casati-Ollier Maylis, Clyde and Company; Prof Laura Pierallini, Studio Legale Pierallini; Mrs. Sonja Radosevic, Peljhan, Prelesnik & Partners; Noura Rouissi, European Commission; and Sebastian Mikosz, President of LOT Polish Airlines.

The second panel on the responsibility of manufacturers and lessors of aircraft, engines, and aircraft parts was moderated by Prof Paul Stephen Dempsey, Tomlinson Professor of Global Governance in Air & Space Law and Director of the Institute of Air & Space Law at McGill University in Canada. Panelists were Dr. Nikolai Ehlers, Ehlers & Partner; Edyta Michalak, MMLLegal; Alexander Uros Kosenina, GE Capital Aviation Services; and Prof Stanislaw Sotysiński, SK&S.

The third panel addressed issues of liability of providers of air navigation services and airports. Prof Francis Schubert, Skyguide, served as moderator. Among speakers were Prof Ludwig Weber, McGill University; Maciej Rodak, Polish Air Navigation Services Agency; and Peter Tannhauser, EUROCONTROL.

The fourth panel was devoted to the development of accountability issues in aviation and aviation insurance issues. The panel was moderated by Ulla Norrhall, Munich Re. Speakers were Prof Stephan Hobe, Director of the Institute of Air Law and Space, University of Cologne; Prof Vincent Correia, University Paris Sud/University of Poitiers; Thomas Suska, PZU; and Piotr Molenda, Warta.

The conference was concluded and issues summarized by Prof Paul Stephen Dempsey.

The conference was a great opportunity to exchange experiences on the liability of aviation entities from the perspective of regulators, the academic community, and law firms, and to outline the challenges facing the aviation industry.

EX DELICTO, EX CONTRACTU

Leiden University Prof Pablo Mendes de Leon traced the origins of the Warsaw Convention to a 1923 proposal by the French government for a conference on the liability of air carriers. The first International Conference on Private Air Law in Paris in 1925



Dr. Małgorzata Polkowska, Poland's Permanent Representative to the ICAO Council, shows Secretary General Raymond Benjamin the exhibition, "Warsaw Convention environment in 1920th," which is being donated to ICAO.

produced a "draft convention relating to the liability of the carrier in international carriage by aircraft," which was followed by a *Comité International Technique d'Experts Juridiques* (Committee of Experts). In 1929, on the initiative of the Polish government, the conference of private air law was organized in Warsaw from 4 to 12 October, 1929.

Documents from 1929 described the States represented and challenges for the delegates:

"Perhaps the location of the Conference and the fact that, as it was stressed by the organizers, it was independent of the League of Nations induced a number of countries... to send their delegations to Warsaw. The Conference was attended by representatives from Austria, Belgium, Brazil, Bulgaria, China, Czechoslovakia, Denmark, Egypt, Estonia, Finland, France, Greece, Spain, The Netherlands, Japan, Yugoslavia, Luxembourg, Latvia, Mexico, Germany, Norway, Poland, Romania, Switzerland, Sweden, Venezuela, Hungary, the United Kingdom and the British dominions (Australia and the Union of South Africa), Italy, and the Soviet Union. The United States sent only unofficial observers.

"The delegates had a difficult task, since the rules on liability in the event of air accidents were different in various countries. Some legal systems were based on the principle of tortious liability (*ex delicto*), while the others on a contract basis (*ex contractu*). Delegates represented both countries with legal systems based on civil law and common law. The idea was to work out a compromise, taking into account the principles of *ex delicto*, *ex contractu*, and to establish an effective legal instrument, whose aim was to rule out conflicting provisions of the internal laws of the states. Finally, on 12 October, 1929, the final protocol of the Convention was prepared and submitted to the delegates for signature."

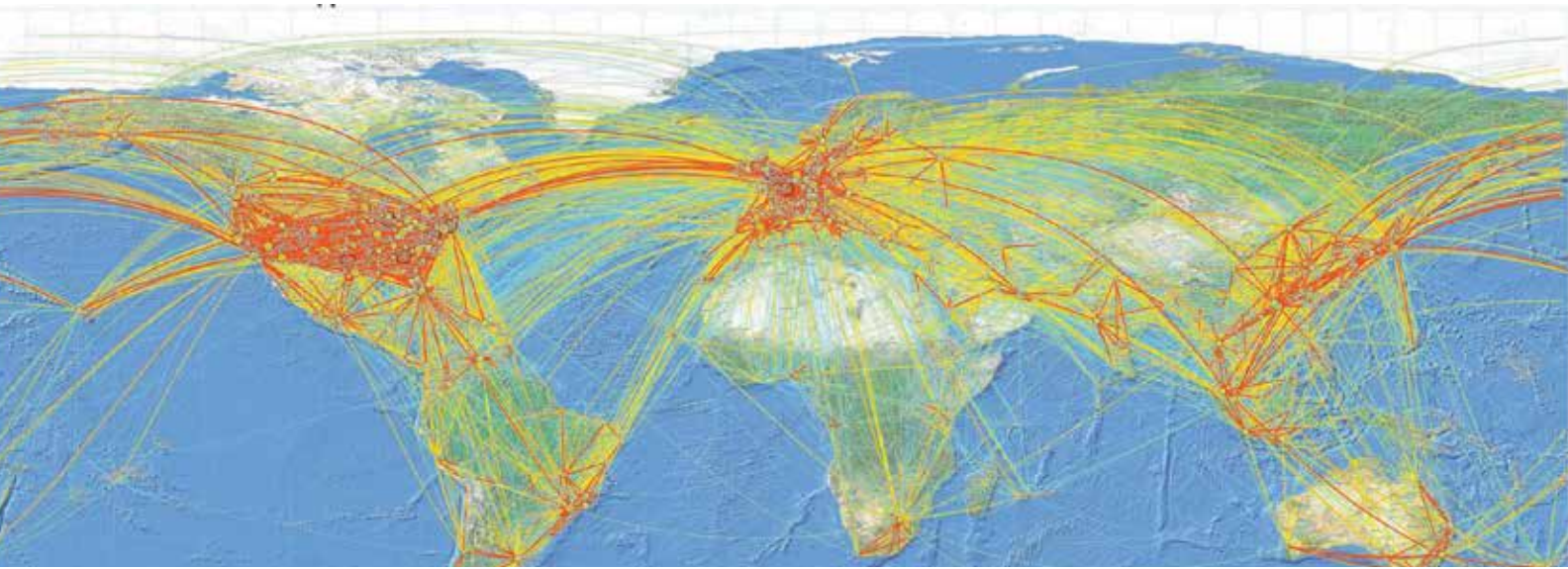
"The Convention for the Unification of Certain Rules Relating to International Carriage by Air" (which came into effect in 1933) became the basis of the "Warsaw System," which is still in use. The main purpose of the Convention was to unify international air transport issues concerning transport documents and liability of the air carrier. ■

WARSAW CONVENTION EXHIBITION PRESENTED TO ICAO


The International Air Law Conference – 85th Anniversary of the Warsaw Convention was accompanied by an exhibition, "Warsaw Convention environment in 1920th," which is being donated to ICAO.

The exhibition was prepared with the help of the National Archive of the Ministry of Foreign Affairs in Warsaw, Poland. The exhibition presented the original documents and photos from the period, dating to when the Warsaw Convention was signed.

A ceremony of donation of the exhibition was held November 12, Polish National Day, with the Secretary General of ICAO, Raymond Benjamin, in the Polish Chamber of Commerce in Montréal.



GRAHAM: CONSIDER THE BIGGER PICTURE IN ASBU IMPLEMENTATION STRATEGY

 At the 38th Assembly of the International Civil Aviation Organization (ICAO), States agreed to the 2013-2028 *Global Air Navigation Plan (GANP)*. This introduced the concept of **Aviation System Block Upgrades (ASBUs)**.

The ASBU initiative will advance **Air Traffic Management (ATM) interoperability, harmonization, and modernization** through a menu of modules organized in four blocks with set timeframes. The improvements will result in an ATM system that enhances the vital elements of **safety, efficiency, capacity, security, and environmental stewardship**.

Nancy Graham, Director, ICAO Air Navigation Bureau, was interviewed by Graham Newton, Editor of *Airspace*, the journal of the Civil Air Navigation Services Organisation (CANSO). This article is adapted from the interview and published by permission of CANSO.

“A year on, the ASBU programme is going very well,” Graham says. “The specific priorities and timings give real meaning to the initiative.”

Block 0 developments have already seen significant uptake. Graham reports that States have been supportive and there are a number of

ongoing initiatives to ensure each Air Navigation Service Provider (ANSP) develops the building blocks for future technologies.

Going forward, for example, a cornerstone of ASBUs will be system-wide information management (SWIM). Although this technology is available today, it still needs further refinement. Nevertheless, it could prove central to everything that ASBUs

“... we will have alignment at the global, regional, and local level. The system is working.”

– Nancy Graham, Director,
ICAO Air Navigation Bureau



Nancy Graham, Director, ICAO Air Navigation Bureau.

are trying to achieve. "There was a debate about whether SWIM should be mandated," informs Graham. "Everyone sees its importance."

ICAO's Standards and Recommended Practices (SARPs) are also playing their part in early ASBU deployment, ensuring that all States are operating within an acceptable framework.

PBN A TOP PRIORITY

The key to ASBU success is real-world benefits for airspace providers and users. In this respect, performance-based navigation (PBN) has been earmarked as a top priority. PBN has already been the subject of a flight procedures project in Asia for a few years, and a similar project was launched this year in Africa.

Nevertheless, much work remains to be done. According to the ICAO *Capacity and Efficiency Air Navigation Report (2014)*, PBN implementation continues to be a concern, and "as of the end of 2013, only 102 countries out of 191 ICAO member States have committed to PBN by publishing a State PBN Implementation Plan."

Too many States have failed to achieve the PBN implementation targets: some 53% of all States meet the 2010 targets for PBN approaches while just 30% meet the 2014 target. The more advanced States may be making excellent progress – two years ahead of schedule, 19% of States already meet the 2016 target – but there is a danger that many could forever be in catch-up mode.

Despite this, Graham insists the efforts to date are "priming the pump for future development. She points out: "Work is being

carried out in cooperation with industry partners such as CANSO, Airports Council International (ACI), and the International Air Transport Association (IATA), as well as with individual players such as airports and regulators."

"Every single planning and implementation group has adopted the ASBU strategy with specific priorities and timelines," she stresses. "That means we will have alignment at the global, regional, and local level. The system is working."

ASSISTING IMPLEMENTATION

But there is a more intangible quality to the ASBU system that Graham is keen to promote. Although ASBUs are primarily technology-based, this alone doesn't ensure safe and efficient airspace operations. There is also the organization of airspace to consider, as well as many other factors that affect implementation.

"So the challenge now is to look at this from the point of view of the implementer," says Graham. "What do they need, from regulations to training, to adopt the requisite technologies?"

In other words, clear and harmonized operational improvements are needed, not just a shiny new piece of equipment or bells-and-whistles software. And the many implementation challenges need to be properly addressed.

ICAO has developed implementation kits (i-kits) that help the regulator, the service providers, and the airlines put the disparate elements together. Graham likens the i-kit to a flat-pack from a furniture store. "We are not just interested in the people making the shelves," she says. "We are interested in the guy putting the shelves together at the end. And that is a massive change in our planning and support approach."

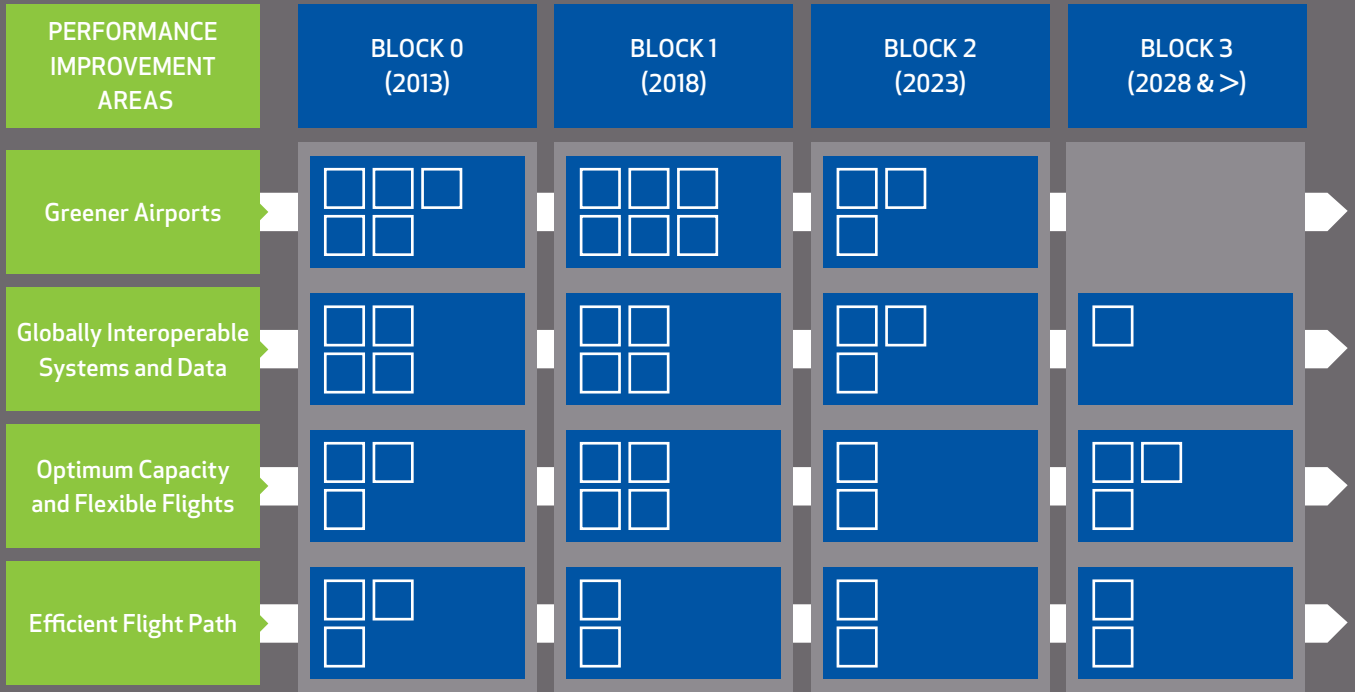
ICAO is not leaving the delivery of ASBUs there either. Another vital strand is that no State will be left behind, reiterated on many occasions by the President of the ICAO Council, Dr. Olumuyiwa Benard Aliu.

This is easier said than done. Although funding is always a challenge, ensuring all States are on board is not primarily about money. Rather, it is about having the expertise to make the right decisions and follow them through. ICAO, together with its industry partners, has set up "go-teams" which travel out to the States in need of assistance to help them understand and develop their requirements. Dialogue with all relevant stakeholders is essential and part of the go-team process.

This enables an ANSP to view its ASBU implementation strategy in the context of its region and its main city-pairs. In short, it begins to breed harmonization above and beyond compatible ASBU modules.

In addition to this support, the GANP is reviewed every ICAO Assembly and the ASBU modules are a constant work in progress,

HOW ASBU WORK



ASBU blocks are structured in 5-year segments that began in 2013 and continue until 2028. The modules provide the flexibility for technology to be implemented based on the varying needs, readiness-levels, and associated business cases of the State.

Not all States or regions will implement all modules, nor will modules be implemented at the same time or in a particular order.

The flexible implementation method of ASBU module elements will allow States and stakeholders to achieve global harmonization, increased capacity, and environmental efficiency in a consistent manner, independent of when and where specific performance improvements are introduced.

There are four blocks with a varying number of modules in each block. Block 0, for example, has 18 modules that are fully developed and ready for implementation.

updated according to State feedback. Cases in point include remote control towers and satellite-based automatic dependent surveillance - broadcast (ADS-B), each of which needs to be allocated a role within the overall framework.

IATA has been asked for the airline top 15 implementation priorities, which will then be coordinated with CANSO and ACI, so that ASBU progress reflects the needs of the main airspace users and service providers as well. This will factor into the next update to the ICAO GANP being produced for 2016.

ICAO will host a Block Upgrade Demonstration Showcase and Symposium in May 2015 to demonstrate the end-to-end capability of selective technology and the operational improvements this can provide. This will help States and all relevant stakeholders better understand the level of support they would need to fast track implementation of the Block 0 and 1 modules, and identify

areas where enhanced coordination and organization in the implementation of ASBU modules would be needed.

Graham insists, "We are where we want to be," but is asking CANSO for even greater assistance in tackling the implementation challenges.

"CANSO has a huge role to play," Graham notes. "We need to encourage ANSPs to plan on the basis of needed operational capability and not just technology upgrades. And that means promoting a common understanding of what is necessary for not only the service provider but also the entire aviation system. CANSO can help by continuing to be a part of the planning process, and working to establish the above-mentioned priorities. In addition, CANSO can encourage the ATM industry to organize itself to promote aviation capabilities, of which technologies are a component." ■

PERFORMANCE-BASED ASBU METHODOLOGY ADDRESSES EVOLVING DEMAND



ABOUT DR. NARJESS ABDENNEBI

She is Chief, Economic Analysis and Policy Section, for ICAO. She has served in leadership roles for an airline, an aircraft manufacturer, a tourism agency, and an international standards organization - the whole of the value chain in air transport connectivity.

✈ Air traffic is growing worldwide, in spite of the recession that has affected the global economy during the past several years. According to ICAO projections, scheduled passenger traffic around the world is expected to more than double by 2030, from 3 billion in 2013 to 6 billion annually. To address this evolution of demand, the number of flights should increase from 32 million currently to more than 60 million in 2030.

The challenge for the aviation community is to accommodate the demand for air travel, keeping or improving the current levels of safety while decreasing the impact on the environment.

In order to achieve future flight capacity goals, new technologies, procedures, and methods must be developed and implemented. The dissimilar level of adoption of new technologies and procedures by different States and stakeholders is an issue that cannot be addressed with a static approach. The solution lies at the heart of ICAO's core mission and values. Only by bringing together the States and stakeholders from every corner of the aviation community can a viable solution to twenty-first century air navigation be determined.

The air navigation system is increasingly being discussed in terms of performance, i.e. a Performance-Based Approach (PBA) when planning, implementing, operating, and monitoring. The notion of a PBA emanated from industry best practices that have emerged over many years. The PBA is strongly focused on results, collaborative decision-making, and reliance on facts and data for decision-making.

In order to adopt a PBA approach, ICAO gathered feedback from around the world during various events, such as the 12th Air Navigation Conference (AN-Conf/12), to define the Aviation System Block Upgrade (ASBU) methodology, now reflected in the Global Air Navigation Plan (GANP) and one of ICAO's 10 Key Air Navigation Policy Principles.

Within the framework of ICAO's 2014-2016 Strategic Objectives, the ASBU methodology will allow all States and stakeholders to realize global-harmonization

ASBU: a global systems engineering approach that allows all Member States to advance their air navigation capacities based on their specific operational requirements.

while increasing capacity, improving efficiency, enhancing security and facilitation, and minimizing the adverse environmental effects of civil aviation activities – all in a safe and economically viable way.

The Aviation System Block Upgrades represent a global systems engineering approach that allows all Member States to advance their air navigation capacities based on their specific operational requirements.

ASBUs are organized around four main Performance Improvement Areas (PIAs):

1. Airport Operations
2. Globally Interoperable Systems and Data (example, system-wide information management, or SWIM)
3. Optimum Capacity and Flexible Flights (Global Collaborative Air Traffic Management)
4. Efficient Flight Paths (Trajectory-Based Operations)

FROM GAP ANALYSIS TO BUSINESS CASE

As in any Performance-Based Approach, the decision to implement a Module should be based on a gap analysis between the current performance (baseline) and needs (scenario). If the gap analysis indicates a lack of performance in an area, the Modules expected to improve that area and which are applicable to the operating environment (according to its complexity, constraints, and available resources) should be identified and a Business Case performed.

Guided by the GANP, the regional and national planning processes should be aligned and used to identify those Modules which best provide solutions to the operational needs identified. Therefore, deployments on a global, regional and sub-regional basis, and ultimately at the State level, should be considered as an integral part of the planning processes through the Planning and Implementation Regional Groups (PIRGs). In these PIRGs, the regional priorities (set up

THE FIRST ASBU MULTI-DISCIPLINARY WORKING GROUP

Historical evidence shows the air transport industry has doubled every 15 years and current forecasts indicate this trend to continue. The Aviation System Block Upgrade (ASBU) concept is the technical roadmap for the aviation industry to facilitate the projected growth and ensure that ground and air infrastructure and equipment can accommodate the increase in aircraft and passenger traffic.

The development of the GANP and the implementation of the ASBU Modules was a key discussion point of the Twelfth Air Navigation Conference (ANConf/12) held in November 2012. The ANConf/12 recommended ICAO to refer the relevant conclusions from the Conference regarding economic, financial, and social aspects of ASBUs to the Sixth Worldwide Air Transport Conference (ATConf/6). The goal is to develop solutions that will support a safe and sustainable air navigation system.

The Sixth Worldwide Air Transport Conference (ATConf/6), held in March 2013, recommended to establish a working group to consider the economic and operational challenges associated with the air navigation services upgrades in particular, and with financing the air transport system in general. The working group will consider the challenges associated with the establishment of operational and economic incentives, such as service priority:

- To allow early benefits of new technologies and procedures, as described in the ASBU Modules,
- To support operational improvements,
- Maximizing safety, capacity, and overall system efficiency,
- Taking into account the specific needs expressed at the Twelfth Air Navigation Conference (ANConf/12).

Furthermore, the ATConf/6 concluded that the relevance of the recently updated ICAO Policies and Guidance Material contained in *ICAO's Policies on Charges for Airports and Air Navigation Services* (Doc 9082) and the *Manual on Air Navigation Services Economics* (Doc 9161) should be assessed in the context of the modernization of the air transport system.

The working group will actively assist the ICAO Secretariat in the work required as follow-up to the ATConf/6, reporting on its progress to the Council during the First Quarter of 2015, on these recommendations:

- Develop a benchmark of current best practices for similar approaches in the ASBU implementation and/or other Air Traffic Management (ATM) modernization programmes;
- Consider the definition and applicability of economic and operational incentives as well as mandates. In doing so, consider the aspects of equipment, training, certification, and operational approval, etc.;
- Determine the parameters and definitions of access, equity, and service priority, as well as financial incentives policies;
- Consider how the policies might be applied in practice at a State level or regional level;
- Evaluate to the extent possible the effectiveness of these policies;
- Consider how they could be reflected in existing ICAO Policies and other Guidance Material; and
- Present the economic and financial findings to the Airport Economics Panel and the Air Navigation Services Economics Panel (AEP-ANSEP/5) to determine if and how the existing guidance could be amended to incorporate the findings. (Determining whether such practices are consistent with ICAO's Policy on non-discrimination is necessary.)

by the ICAO Regional Offices regarding the GANP) and the State priorities (local needs) should be presented and the regional online Air Navigation Plans (eANPs) should be developed, reflecting the supporting requirements. The PIRG process will further ensure that all required supporting procedures, regulatory approvals, and training capabilities are set in place.

In order to support this implementation process, ICAO has defined some implementation kits (i-Kits). These i-Kits are the link between the Modules and the Global ATM Concept and will provide the necessary Standards, Guidance Material, and Training to implement the operational improvement within the ASBU Modules.

For some Modules, worldwide applicability will be essential; they may, therefore, eventually become the subject of ICAO Standards with mandated implementation dates. Likewise, some Modules are well suited for regional or sub-regional deployment and the

regional planning processes under the PIRGs are designed to consider what Modules to implement regionally, under what circumstances, and according to agreed timeframes.

For other Modules, implementation should follow common methodologies defined either as Standards or Recommended Practices in order to leave flexibility in the deployment process, but ensure global interoperability at a high level.

This planning requires interaction between stakeholders, including regulators, users of the aviation system, the Air Navigation Service Providers (ANSPs), and aerodrome operators in order to obtain commitments for implementation. In this way, deployment arrangements, including applicability dates, can be agreed and collectively applied by all stakeholders involved.

The ASBU process will help ensure strategic transparency, coordinated progress, and certainty of investment. ■

Following the recommendations from ANConf/12 and ATConf/6, ICAO established a Multi-Disciplinary Working Group (MDWG) to assess the economic challenges associated with the implementation of the ASBUs.

The working group is comprised of experts from 13 States and 12 international organizations and industry partners, more specifically, those involved in ATM modernization programmes in which the notion of incentives is applied. The working group gathered 51 participants.

The first meeting of the multi-disciplinary working group on the economic challenges linked to the implementation of the Aviation System Block Upgrades (MDWG-ASBU) was held at ICAO Headquarters in Montréal, Canada, in February 2014.

The MDWG-ASBU/1 established four ad-hoc working groups:

WG1: Identification of Best Practices supporting the implementation of ASBUs

- Identification of the different types of level of services priority
- Identification of operational policies that are currently used
- Identification of the type of incentive
- Evaluation, to the extent possible, of the effectiveness of the aforementioned
- Identification of the stakeholders impacted by ASBU implementation
- Consider the aspects of equipage, training, certification, and operational approval
- Elaboration of common definitions

WG2: Business Cases and Cost-Benefit Analysis for ASBU implementation

- Develop Guidance Material for business cases and cost-benefit analyses
- Determine aviation data related to ASBU implementation such as traffic, traffic forecasts, equipment databases

WG3: Schemes to Finance ASBU implementation

- Identification of mechanisms to support operational improvements for financing, notably infrastructure and equipment

WG4: ICAO Policies

- Consider how the findings of MDWG-ASBUs are impacting ICAO Policies
- Ascertain the effectiveness of current ICAO Policies
- Assess the need of new Policies

The findings of the multi-disciplinary working group will be presented to the fifth joint meeting of the Airport Economics Panel (AEP) and Air Navigation Services Economics Panel (ANSEP) - AEP/ANSEP/5, to be held 20-21 May 2015 – to determine if and how existing guidance can be amended and to determine whether existing practices are consistent with ICAO's principles on non-discrimination.

By the end of 2014, all the working groups completed their tasks. The final report will be submitted to the MDWG-ASBU/2 in February 2015. It is anticipated that this next MDWG meeting will determine the next steps in progressing the work of the economic challenges associated with ASBU implementation.

BUILDING COOPERATION FOR THE FUTURE OF CIVIL AVIATION

 The spark for the first-ever Global Aviation Cooperation Symposium (GACS), held 30 September - 4 October, 2014 in Montréal, Canada, came during an ICAO Council meeting, explained Iván Galán, Director of ICAO's Technical Cooperation Bureau. "The question at hand was quite specific: 'How can we better support Member States and aviation authorities in their technical needs? How can we help them achieve perfect scores in ICAO audit programmes or support their infrastructure growth and development?'"

The answer was not complicated. "We needed to bring people together: governments and aviation authorities, air navigation service providers, airport service providers, ICAO experts, and industry leaders in an event where we could discuss, where we could compare, and confront ideas and experiences," Galán added.

Dr. Olumuyiwa Benard Aliu, President of the ICAO Council, set the tone of the event for the more than 400 participants with the message: "No country should be left behind. What occurs in one part of the globe can have an impact half a world away, and often with dramatic consequences. Every travelling passenger should feel safe and secure and be provided with reliable and efficient transportation no matter his or her destination."

With the theme, "Building Cooperation for the Future of Civil Aviation: Innovation, Growth, and Technical Cooperation," the ICAO Technical Cooperation Bureau delivered an agenda conducive to sharing best practices, building relationships, and exchanging views on ways and means of cooperating to enhance all parts of the global air transport system.

ICAO Secretary General Raymond Benjamin said the GACS Symposium achieved its main goals:

- To Promote ICAO Standards and Recommended Practices (SARPs) and the role and resources of its Technical Cooperation Programme
- Assist States to identify needs and comprehensive solutions to common deficiencies found in ICAO audits
- Share common aviation challenges and the use of best practices for the future of civil aviation
- Strengthen institutional and cross-industry relationships

"Gains made today as well as improvements to be made tomorrow will require a continued and sustained investment and capacity

building for the future generations to ensure a safe and secure air transport industry," Benjamin emphasized.

ICAO's Technical Cooperation Bureau (TCB) has been providing assistance to governments and implementing civil aviation projects for more than half a century: assistance to more than 120 countries on a yearly basis; projects with an accumulated value in excess of US\$ 32 billion; close to 2,000 experts deployed worldwide.

"Today," Galán noted, "ICAO's role is evolving and we no longer simply set the standards and measure them, we assist countries so they can meet the necessary standards and regulatory requirements. It's good business for the countries, good business for the airlines, good business for the industry."

Following are some of the day-to-day highlights of the Symposium:

DAY ONE

Opening session speakers presented the outcomes of various technical cooperation projects in Argentina, Madagascar, Indonesia, and Kazakhstan which they have implemented with ICAO TCB. Kazakhstan, for example, plans to open 39 new air routes through 2017, and to support this objective they are reconstructing runways at 13 airports and renovating nine airport terminals. According to Beken Seidakhmetov, Chairman of the Ministry of Transport and Communications Committee, Republic of Kazakhstan, ICAO TCB has been supporting the State's aviation officials in gap analysis regarding compliance with ICAO requirements on organizational structure, staff, and procedures, as well as participating in recertification of 228 aircraft and all 60 commercial operators. Kazakhstan has made 80 amendments to its primary aviation legislation, increased the number of state inspectors from 40 to 65.

In the session, "Global Aviation Safety and Technical Assistance," GACS participants gained insight on how they can access their safety score (Effective Implementation - EI) through the iStars system, and the importance of the Universal Safety Oversight Audit Programme Continuous Monitoring Approach (USOAP / CMA) to help States take stock of the areas they need to work on. One State, for example, which had a very low EI score, was able to improve to an EI of over 70%, higher than the world average, within one year of implementing technical assistance.



Top row: Presiding over the Symposium – ICAO Secretary General Raymond Benjamin (left), ICAO President Dr. Olumuyiwa Benard Aliu (centre), and ICAO Technical Cooperation Bureau Director Iván Galán; Dominique Charreyre, Africa Regional Director, The Aeronav Group. Second row: Dr. Rafael Echevarne, Director, Economics and Programme Development, Airports Council International World; Erick Ferrandez, Manager Int'l Technical Cooperation, European Aviation Safety Agency (EASA); Adrian Sayce, Senior Technical Advisory, UK CAA. Third row: Mohamed Khaled, Chief, Engineering Department, ASECNA; Grace Okungu, Chief, Field Personnel Section, ICAO TCB; Marianna Simeone, GACS Moderator, MS Media.

Meshesha Belayneh, Deputy Director, TCB, explained the various initiatives available for assistance to States:

- ICAO Plans of Action – intervention measures for short, medium, and long-term to address Significant Safety Concerns (SSCs) and improve EI.
- ROSTs – Regional Office Safety Teams to provide assistance to States in their efforts to address shortcomings identified by USOAP.
- RASGs – Regional Aviation Safety Group work programmes designed to focus on key safety areas such as establishment of effective safety oversight systems, accident investigation, and priority issues runway safety, loss of control in-flight (LOC-I) and controlled flight into terrain (CFIT).
- PIRGs – Planning and Implementation Regional Groups to develop the relevant Regional Air Navigation plans aligned with the Global Air Navigation Plan (GANP) and Aviation System Block Upgrades (ASBUs).
- COSCAPs (Cooperative Development of Operational Safety and Continuing Airworthiness Programmes) and RSOOs (Regional Safety Oversight Organizations) to institute effective regional programmes through the joint action of States while achieving economies of scale leading to effectiveness and efficiency.
- AFI Plan – a comprehensive regional implementation plan for aviation safety in the Africa-Indian Ocean region, created to assist States to improve their EIs.

The panel on “High Growth in Air Traffic: Opportunities and Challenges” touched on a number of challenges surrounding the ever-increasing traffic demand. While there is no simple solution, all the panelists, as well as many GACS participants who asked questions or made comments, agreed that the one key element required is enhanced and sustained cooperation and communication between the relevant stakeholders. The panel challenged the aviation industry to increase regional cooperation through organizations such as RSOOs, as well as inter-regional cross-pollination to gain even more synergies. Luis Manuel Aguirre Martínez, President, Dirección Nacional de Aeronáutica Civil (DINAC), Paraguay’s civil aviation agency, for example, said among the agreed short-term (2014-16) goals in the South

American region are to reduce the rate of accidents by 50% with relation to the world rate and to implement performance-based navigation on 60% of air routes.

DAY TWO

Through the session on the “Global Air Navigation Plan: Innovation and Best Practices,” GACS participants got a glimpse of the complexities of establishing and maintaining robust and effective air navigation surveillance. Speakers introduced different methods and technologies they employ, and described the immense challenge of harmonization that continues to exist in the field of air navigation. The consensus of this session was that ICAO, regulators, and service providers must work even more closely with industry and technology developers to optimize the surveillance of the skies. Thomas Buchanan, Head of International Affairs and Corporate Compliance Manager for Skyguide, Switzerland, discussed the “Virtual Centre Model,” or service-based air traffic management environment, which could reduce deployment costs in Europe while increasing redundancy through a system-wide information management (SWIM)-like infrastructure. Luc Tytgat, Director Pan-European Single Sky, said lessons learned by EUROCONTROL through recent experiences include:

- Acting together in the early lifecycle is more efficient – in Europe, SESAR (Single European Sky ATM Research) has become a vector for wider harmonization
- A deployment programme is needed... where and when, but based on common principles, common rules, common data, and interoperable technologies. One size does not fit all.

Challenges facing governments when procuring air navigation services was a theme of the “Implementing Air Navigation Solutions Through Cooperation” session – in particular financing, institutional and operational frameworks, and rigid and lengthy government procurement practices. Discussions included the need for economies of scale and projects that can be achieved on a commercial basis. In this respect, ICAO TCB and CANSO (Civil Air Navigation Services Organisation) can play an important part, including the fostering of collaborative win-win relationships for the development of solutions for States and their ANSPs. Patrick Molinari, Chief of the TCB Procurement Section, outlined the



Aviation financial experts (left to right): Boubacar Djibo, Director, Air Transport Bureau, ICAO (moderator); Dr. Rafael Echevarne, Director, Economics and Programme Development, Airports Council International World; Stephen Gifford, Head of Economic Regulation, UK Civil Aviation Authority; Antonin Combes, Junior Professional Officer, ATB/ECD/EAP; George Anjaparidze, Senior Economist, Chief Economist Department, IATA; Dominique Charreyre, Africa Regional Director, The Aeronav Group.



Roy D. Barnett (middle), Manager/Senior Technical Coordinator, PASO, comments on air traffic growth. Other panelists (left to right) include: Luis Manuel Aguirre Martínez, President, DINAC; Ruby Sayyed, Assistant Director, ATM Infrastructure, IATA.

requirements for States seeking technical assistance: compliance with ICAO SARPs, no adverse impact on Safety / Security, best value for money, timely delivery, and compliant goods / services.

“Aviation Security and Facilitation Assistance” presented a comprehensive overview of the importance of aviation security (AVSEC), the key role played by the ICAO Universal Security Audit Programme (USAP), and how it acts as a driver to help States achieve best results in the field of AVSEC. The speakers emphasized that success in aviation security depends on not only one or two players; it is the responsibility of everyone – governments, regulators, airport operators, airlines, police, immigration officers, even passengers. Examples were given how States can effectively implement robust aviation security measures only through open and honest dialogue. The Chief of ICAO’s Aviation Security Audit Section, Armando Quiroz, noted that “creating Cooperative Aviation Security Programmes (CASPs) to pursue mutually desirable security outcomes has proven effective,” and that provision of State-seconded officers to work with ICAO is also beneficial.

In the session following on “Security and Facilitation Best Practices: Regional Cooperation,” John Gratton, ICAO Programme Coordinator for the Cooperative Aviation Security Programme Asia Pacific (CASP-AP) said among issues inhibiting effective security implementation are “variable political will and technical capability in States,” including limited AVSEC knowledge or experience, funding, staffing, and training. However, the CASP-AP programme is helping to drive an “outcomes focus” and build relations between States with similar issues while providing aid, tools, and support. An important point highlighted by other session speakers was that, as in safety, there are many measures of aviation security that depend on the application of processes and procedures that should be shared openly. Understanding that a certain amount of information needs to remain confidential for national security reasons, most best practices can nevertheless be shared. Since AVSEC exists to fight against unlawful human interference, only through cooperation can States hope to mitigate against this threat, which is cross-border and ever-evolving.

DAY THREE

In back-to-back sessions focused on airport challenges, data was shared about how quickly traffic growth has impacted the industry and how most regional or smaller airports are struggling to remain sustainable. The overarching conclusion was that airports are a “living system” that depends not only on the operator, but also on close collaboration and continuous dialogue with all the relevant stakeholders. Real cases presented included airport expansion in Saudi Arabia, how Brazil prepared its airports to host the World Cup in 2014, and new airport construction in Mexico. Gilberto López Meyer, General Manager, Aeropuertos y Servicios Auxiliares (ASA), described the vision for the new Mexico City International Airport, which he said is needed because the four auxiliary airports around the capital are unattractive to passengers because of the distance and time required to reach them. The new three-runway, 94-gate, 50-million annual passengers airport will incorporate an economic construction system, an environmentally friendly and sustainable design, and will feature intelligent baggage handling, bio-smart security, and other passenger experience enhancements. Joseph Fidanque III, General Manager, Tocumen International Airport, Panama, said some of the biggest challenges associated with airport operations are “different departments operating with different information (and sources)” and “lack of communication and coordination among departments.” These issues are often exacerbated by “operational and information systems not integrated to provide a ‘single source of truth.’”

“No country should be left behind.”

– Dr. Olumuyiwa Benard Aliu,
President, ICAO Council

DAY FOUR

In the final Symposium session, “Economic Growth and Financing of the Air Transport System,” a panel of financial experts discussed the key role air transportation plays in the global economy. However, infrastructure funding remains a challenge, and aviation stakeholders need to address financing for implementing the Aviation System Block Upgrades (ASBUs). Options to fund the air transport system were discussed, including operational leasing, finance leasing, sale and leaseback, public private partnership, and other mechanisms. Stephen Gifford, Head of Economic Regulation, UK Civil Aviation Authority, described some of the considerations in analyzing possible runway expansion at Heathrow and Gatwick airports. These included regulatory time period, cost of capital, allocating risk to those parties best able to manage it, recovery of costs, assets in operation, and impact of slot regulations. ■



Architect's concept of the new Mexico City International Airport, courtesy Foster & Partners.

WORLD'S AIR TRAFFIC FLOW MANAGEMENT EXPERTS CONVERGE IN MEXICO



ABOUT NICOLAS HINCHLIFFE

He is currently seconded from the French DGAC to the Air Navigation Bureau of ICAO, where he is in charge of supporting the development of Air Traffic Flow Management worldwide. Previously he worked as an air traffic controller and as ATFM specialist in the enroute centre, Marseille, France.

✈ More than 100 delegates from some 20 States and international organizations met to discuss and better understand Air Traffic Flow Management (ATFM) and Collaborative Decision Making (CDM) during three days (November 4-6) in Cancun, Mexico. The 8th Global ATFM Conference theme was "Globally Harmonized ATFM - Next Steps Toward Regional Implementation."

While the conference brought together delegates from all around the world, it carried a strong emphasis on Central and South American projects; the conference location in the Yucatan province made it convenient for those States to participate.

Air Traffic Flow Management (ATFM) increases the efficiency of Air Traffic Management (ATM), but it is also a key contributor to the achievement of safety. Any portion of airspace or any airport can only accommodate a given number of airplanes over a given period. Too many aircraft at the same time makes for traffic overloads, which can rapidly lead to critical situations. ATFM is needed to prevent those situations. The ability to manage flows of airplanes before they saturate a given airspace or airport is therefore essential. All the more so for those States who experience important traffic growth, such as many in the Caribbean, Central America, or South America.

How can we measure and calculate the capacity of an airport? How can traffic be delayed or re-routed to avoid specific airspace disproportions? What kind of information do we need to anticipate traffic peaks? Who makes those decisions? How can they be communicated to neighbouring States? How are the airlines informed? How can they participate in the decision-making process? Such were some of the questions that were raised during the conference organized by the Civil Air Navigation Services Organisation (CANSO), Eurocontrol, the U.S. Federal Aviation

Administration (FAA), Mexican air navigation services provider SENEAM-SCT, the International Air Transport Association (IATA), and the International Civil Aviation Organization (ICAO).

The discussions highlighted the importance of using the *Manual on Collaborative Air Traffic Flow Management* (ICAO Doc 9971) as a reference. ATFM possesses, by nature, a very strong cross-border dimension. Which is why it is essential to use the same language and the same references. Many participants also remarked that there is an obvious link between ATFM and Performance-Based Navigation (PBN), as sound and efficient airspace design is fundamental to ensure that ATFM is not used to protect patches of inefficiencies embedded in the route network.

ATFM possesses, by nature, a very strong cross-border dimension.

PENCIL, PAPER, TELEPHONE

Participants were given a glimpse of the variety of systems and technical tools available to perform ATFM. Discussion on past experience quickly highlighted, however, that a step-by-step approach is crucial to success. The road to effective ATFM invariably begins with a pencil, a sheet of paper, and a couple of telephone lines.

The conference debated on ways to enhance capacity and to improve its management. New procedures, new technologies, or new pieces of equipment bring constant improvements to existing systems and they need to be taken into account. Defining capacities comes as one of the first steps in ATFM. Working to improve them is the immediate next step. Managing air traffic flow is a never-ending quest for improvement that cannot be successful unless the right stakeholders are informed, involved, and kept in the loop. ATFM and CDM are intrinsically linked.

As demand for air transport increases, so do the strains on air traffic management systems. Well designed and managed systems are essential to support the safe development of air transport. The task may seem daunting from the onset. The good news, though, is that, as the 8th ATFM Global Conference demonstrated, the wealth of experience worldwide is massive, and readily available.

FROM FLOW CONTROL TO CDM

"ATFM began as what was called Flow Control," commented Robert Eagles, IATA's Director of Infrastructure. "Air traffic control would react to what it perceived as excessive demand by 'stopping' traffic, imposing delays, and making unilateral decisions with little regard to the airspace users' business needs. The Collaborative Decision Making model has evolved over the years to include other facets of ATM such as airspace and procedure

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CAB supports the calculation of charges according to ICAO Doc. 7100, and the ability to select multiple pricing models, based on customer requirements, while it can also be optionally integrated with a customer provided ERP system.

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The ATFM global conference bolstered the understanding of flow management and of collaborative decision making.

design. The initial reaction of constraining demand when faced with insufficient capacity has migrated to seeking ways to increase capacity before resorting to negotiated constraints."

ATFM: AN ICAO PRIORITY

Air Traffic Flow Management (ATFM) stands, alongside Performance-Based Navigation (PBN), Continuous Climb Operations (CCO), and Continuous Descent Operations (CDO) as a major component of the ICAO approach to safety and efficiency. While the need to manage flows of traffic may become more and more obvious to all, ATFM must be implemented in a timely and consistent manner. Timely because changes are always more complex to implement under strain. Consistently because ATFM operations carry consequences that go beyond national frontiers; interoperability is, therefore, fundamental.

To support ATFM implementation, ICAO began by establishing a common reference for ATFM, centered around *DOC 9971 - Manual on Collaborative Air Traffic Flow Management*, that completes and strengthens existing ICAO provisions. In parallel, many ICAO Regional Offices began developing regional ATFM concept documents, detailing operational best practices and concepts of operations applicable to their areas of responsibility.

ICAO also places a significant emphasis on training. Conferences, symposia, and workshops, organized either in Montréal or locally by the ICAO regional offices and sub offices, are all opportunities to foster understanding and implementation of CDM and ATFM. The integration of an ICAO ATFM global conference is yet another illustration of the emphasis placed on training.

ICAO will further reinforce its support to member States by producing implementation kits and by availing to States – to overcome a potential ATFM implementation issue – the expertise of ad hoc teams, organized to assist any State or group of States who would request it. Building on the success of the well-known go-teams used for PBN, these ATFM teams will operate in an identical mode, yet State sponsored. ■

SHARING ATFM EXPERIENCES SINCE '98

The first edition of ATFM global conferences took place some 16 years ago as a forum to share experiences and best practices related to ATFM and CDM. Since then, seven other ATFM global conferences were organized, always in regions of the world where ATFM implementation projects were underway.

As years went by, the conferences grew in size, importance, and scope to become a unique place of exchange on Air Traffic Flow Management and Collaborative Decision Making, while retaining a very strong operational and regional focus.

The ninth edition of ATFM global will be organized as an ICAO event and will be hosted in the United Arab Emirates (UAE) in 2016.

MEXICO TAKES SMART APPROACH TO AFTM


Mexican skies are notoriously crowded around its capital airport, and the popularity of many regional airports as touristic destinations brought the Mexican authorities to the early realization that they needed Air Traffic Flow Management (ATFM) to handle the increasing demand for air transport in their national skies.

In a very pragmatic approach, building on cooperation agreements with the U.S. FAA, and starting as early as in 2000, the Mexican Air Traffic Service Provider SENEAM progressively developed Collaborative Decision Making (CDM) and ATFM procedures and systems.

The Mexican ATFM/CDM centre, known as SMART (*Sistema de Monitoreo Administración y Regulación de Tránsito Aéreo*), opened in 2013. In addition to various coordination activities, now conducted with airlines and neighbouring States, it operates slot allocation algorithms and in-house developed systems in order to control and limit the congestion around Mexico City International Airport and a few other regional airports. In the near future, SMART's operations are scheduled to progressively encompass all of the Mexican airports and the entire Mexican airspace.

Claudio Arellano, Director General of SENEAM, said, "The development of an ATFM unit is a long process – in our particular case, a process years in the making. The first thing to consider is approaching States or service providers with experience in ATFM implementation and adopt the best methods to adapt them to your particular situation."

NEW ICAO GUIDANCE FOR ENVIRONMENTAL ASSESSMENT OF ATM CHANGES

 In response to a growing need for ICAO Member States to measure environmental impacts (emissions, fuel consumption, noise, etc.) associated with operational air traffic management (ATM) changes in a globally harmonized and compatible way, an ICAO technical committee of experts developed a new guidance document: *Guidance on Environmental Assessment of Proposed Air Traffic Management Operational Changes*, Doc 10031, published in May 2014.

This guidance document is applicable for the assessment of aircraft emissions, fuel consumption, and noise.

Doc 10031 provides States, airport operators, air navigation service providers (ANSPs), and other stakeholders with environmental assessment guidance to support sound and informed decision-making when analyzing proposed operational ATM changes such as those related to operational procedural changes, airspace re-designs, and other operational aspects.

This environmental assessment guidance was developed without specific geographic restrictions so as to be applicable worldwide.

The document also provides a framework within which specific and detailed assessment methodologies can be developed, meeting local requirements while facilitating the global compatibility of results. It identifies high-level principles that facilitate the robust definition and application of environmental assessment methodologies and their respective metrics.

In particular, it provides a “stepped review” process (as shown on *Page 43*), which will ensure that these fundamental questions are addressed:

- When should a formal environmental assessment be conducted?
- What should be prepared before conducting an environmental assessment?
- How should the proposed change, its purpose, and alternatives be described?
- How should the scope and extent of the environmental assessment be determined?
- What types of environmental impact should be taken into account, and when (see *Table 1*)?
- How should an environmental assessment be conducted?
- What should be documented and communicated?



Through examples, it also provides insight on interdependencies and trade-offs between environmental impacts (such as fuel, emissions, and noise), and between environmental impacts and non-environmental performance aspects (safety, capacity, flexibility, etc.).

This guidance document is intended to be a “living” document which can be updated as more experience is gained in carrying out environmental assessments.

An important consideration when developing this guidance document was to ensure that these principles could also be used to support the development of State Action Plans. These are used by States to report on the environmental benefits expected from the implementation of the elements or modules outlined in the ICAO Global Air Navigation Plan (GANP) or, more generally, the implementation of various mitigation measures to reduce emissions. In this guidance document, the concept of “environmental assessment of air navigation services” refers to impacts arising from changes to where, when, and how aircraft are operated.

Doc 10031 includes an appendix of assessment examples at the local, regional, and intercontinental levels. However, including additional assessment cases to present a greater variety of examples would be of great use and a request for additional case studies has been made by ICAO. These assessment cases should detail how the assessment carried out differed from that which was proposed in Doc 10031, possible lessons learned, and how

TABLE 1: ENVIRONMENTAL IMPACTS AND THEIR MOST RELEVANT HEIGHTS

IMPACT \ HEIGHT AGL	Below 1,000 ft (300 m)	1,000-3 000 ft (300-900 m)	3,000-10,000 ft (900-3,000 m)	Above 10,000 ft (3,000 m)
Air Quality (e.g. NO _x , PM, etc.)	Most relevant	Relevant (Note 1)	Less relevant	Less relevant
Noise	Potentially (Note 2)	Relevant	Relevant	Potentially (Note 3)
Fuel Use / CO ₂	Relevant	Relevant	Most relevant (Note 4)	Most relevant (Note 4)
Climate Change	Relevant	Relevant	Most relevant (Note 5)	Most relevant (Note 5)

Notes:

1. Differences to emissions above 1,000 ft / 300 m will normally have little impact on changes in ground level concentrations (*Air Quality Guidance Manual* - ICAO Doc 9889), but may need to be included in air quality assessments for other reasons.
2. Current legal constraints preclude Noise Abatement Departure Procedures from being applied below 800 ft / 240 m (*Procedures for Air Navigations Services — Operations, PANS-OPS, ICAO Doc 8168*).
3. Noise may need to be assessed for changes above 10,000 ft / 3,000 m in areas where the background noise levels are very low (for example, in some specific areas protected by law), in which case an upper limit of 18,000 ft / 5,500 m or higher may be more appropriate in certain circumstances.
4. With regard to fuel burn / CO₂ emissions, although it is important to evaluate the changes to this parameter at all levels, they tend to dominate overall during the climb and cruise phases of flight, and therefore changes in low-level emissions may represent only a very small change when considering the whole flight.
5. Including the impacts of non-CO₂ emissions such as NO_x and contrails, though the full impacts of these emissions are not yet certain.

the proposed methodology could be improved. These examples could be, amongst others, local, regional, intercontinental, global, en-route, or airport-related, or related to noise, emissions, and community engagement.

Five examples using the principles of guidance documents have been received by ICAO – one each from Australia, Sweden, and the United Kingdom, and two by France – each of a different level of complexity:

- Changes to the Required Navigation Approach (RNP) approach and departure procedures for Canberra Airport, Australia;
- Validation and Implementation of Next Generation Airspace (VINGA) at Göteborg Landvetter Airport, Sweden, from the approach, landing, and surface phases to parking at the gate;
- The Point Merge concept in the London Terminal Control Area (TMA), UK;

- Instrument Landing System (ILS) interception altitude increase in the Paris, France area;
- A new Global Navigation Satellite System (GNSS) procedure - QFU 30 - at Nevers, France airport.

It is expected that more assessment cases will be submitted, in particular from the European Single European Sky ATM Research (SESAR) programme¹, which has aligned its environmental impact assessment methodology to Doc 10031.

An important development is that the ongoing “Aviation System Block Upgrade” (ASBU²) fuel and CO₂ assessment process currently being conducted by ICAO is aligned to the approach advocated by Doc 10031, taking into account that the task involves the preparatory development of assumptions and assessment methodology for a database analysis but does not involve under-

¹The mission of the SESAR programme is to develop a modernized air traffic management system for Europe, which will prevent crippling congestion of the European sky and reduce the environmental impact of air transport.

²The Aviation System Block Upgrade (ASBU) initiative is a programmatic framework that develops a set of ATM solutions or upgrades to enable global interoperability. It consists of a number of operational improvements defined by time periods or Blocks, which may be deployed in a coherent transition from basic to advanced capability as time progresses. Such operational improvements are grouped together in Performance Improvement Areas (PIAs) to provide operational and performance objectives. For more on ASBUs, see “Consider the Bigger Picture in ASBU Implementation Strategy” on page 28 and “Performance-Based ASBU Methodology Addresses Evolving Demand” on page 31 of this issue of ICAO Journal.

This environmental assessment guidance was developed without specific geographic restrictions so as to be applicable worldwide.

taking an actual environmental assessment. The ASBU analysis task therefore constitutes another example of its applicability.

It should be noted that Doc 10031 does not cover direct environmental impacts due to facility development or operation (terminal buildings, airport access, etc.). Therefore, it is recommended that additional guidance be consulted for the assessment of other types of changes that are not considered “operational changes,” such as those related to aircraft technologies and alternative fuels.

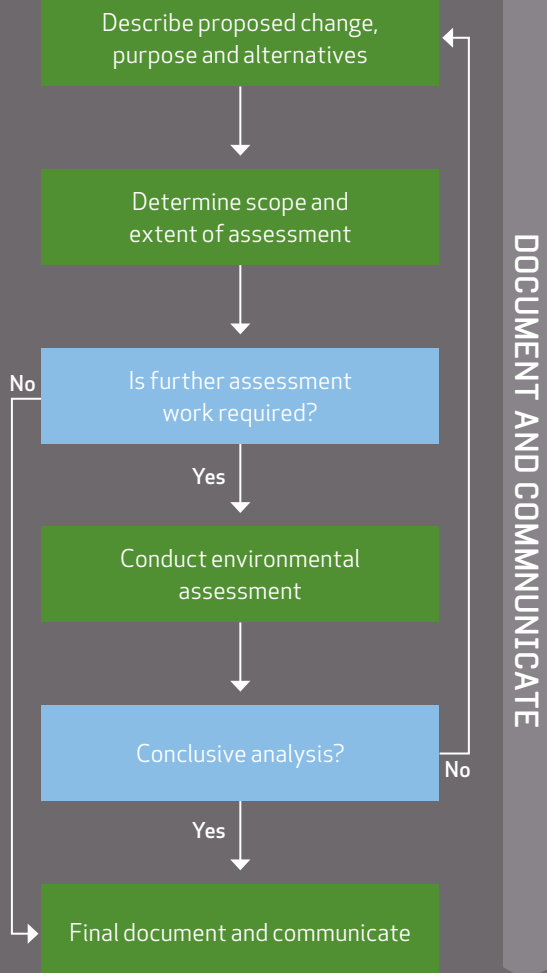
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ENVIRONMENTAL ASSESSMENT - STEPS

INPUT FROM PREPARATORY WORK



NEW WEBSITE FOR ASSESSMENT CASES

A dedicated website has been developed - www.icao.int/environmental-protection/Pages/EnvironmentalAssessment.aspx - which serves as an interface both for submitting new cases using the “Good Practice Examples of Environmental Assessment” template provided in Appendix E of Doc 10031 and for demonstrating/illustrating cases that have been previously submitted and approved.

NEWS IN BRIEF



REGIONAL DIRECTOR HONORED



Capt Carlos Salazar Sánchez, Director General of the Nicaraguan Civil Aviation Institute (INAC), presented Mrs. Loretta Martin with recognition for her valuable support and performance as ICAO Regional Director for

North America, Central America and Caribbean (NACC). The presentation was made during the Central American Intergovernmental Air Navigation Services Corporation (COCESNA) Board of Directors Meeting, held in the ICAO NACC Regional Office in Mexico City, Mexico, in October 2014.

NIGERIA SIGNS MONTREAL PROTOCOL OF 2014



ICAO's Secretary General Raymond Benjamin (centre) and Council President Olumuyiwa Benard Aliu (far right) oversee the recent signing by the Federal Republic of Nigeria of the Montréal Protocol of 2014 at ICAO HQ in Montréal. Signing on behalf of Nigeria is its Honourable Minister of Aviation, Osita Chidoka, accompanied by Nigeria's Deputy High Commissioner, Ambassador Charles Onianwa (second from left) and Mr. Martins Emeka Nwafor, Representative of Nigeria on the ICAO Council (far left).

COUNCIL PRESIDENT ATTENDS UN CLIMATE SUMMIT IN PERU

"The ICAO Council's Environment Advisory Group, with the support of our Committee on Aviation Environmental Protection, is leading the development of the global Market-Based Measures (MBM) scheme and is making good progress," Dr. Olumuyiwa Benard Aliu, ICAO Council President, said in remarks to the Forty-first Session of the UNFCCC Subsidiary Body for Scientific and Technological Advice (SBSTA41). The event – which took place in early December 2014 in Lima, Peru – was part of the 20th session of the Conference of the Parties (COP20) to the United Nations Framework Convention on Climate Change (UNFCCC) and the 10th session of the Conference of the Parties serving as the meeting of the Parties to Kyoto Protocol (CMP10).

Dr. Aliu also told the SBSTA41 audience, "ICAO will be conducting a series of Global Aviation Dialogues on this topic in all ICAO Regions during 2015 in order to ensure full transparency on this process and exchange views with our Member States. Governments, the aviation industry, and other stakeholders are working together to develop a proposal capable of being implemented from 2020, for decision by the next ICAO Assembly in 2016."



Dr. Olumuyiwa Benard Aliu, ICAO Council President (left) and Franklin Hoyer, ICAO Regional Director (right), with His Excellency, Ollanta Moisés Humala Tasso, President of the Republic of Peru.

During the visit to Peru, Dr. Aliu and Franklin Hoyer, ICAO Regional Director, met the President of the Republic of Peru, Ollanta Moisés Humala Tasso, as well as Minister of Foreign Affairs Gonzalo Gutierrez Reinel and José Gallardo Ku, Minister of Transport and Communications.

In a separate meeting with Minister Ku, Dr. Aliu and Mr. Hoyer discussed support and participation of Peru for ICAO events, ICAO Strategic Objectives and additional Protocols to the Chicago Convention,

and renewal of the Commodatum Agreement regarding the ICAO South American (SAM) Regional Office facilities.

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