

SAFE SKIES.
SUSTAINABLE
FUTURE.



# ICAO

## 2024 IFATCA Americas Regional Meeting



Air Traffic Flow Management (ATFM TF)

Airspace Optimization Task Force (AOTF) Update – 12/10/2024

### **Objectives**



#### Update on ATFM activities

Provide an update on the work conducted by the ATFM

#### Transition to FRTO

Discuss the challenges to the transition to FRTO

#### Update on AO activities

Work conducted by the AOTF

Discuss the challenges to the transition to FRTO

#### Goals of Region

Present the goals of the ATFM and AOTF







### ATFM TF Progress in last 12 months

- ✓ Monthly web conference meeting held
- ✓ Collaborative Decision Making (CDM) online workshop available at <a href="https://tfmlearning.faa.gov/tfm-training/atfm-basics/index.html">https://tfmlearning.faa.gov/tfm-training/atfm-basics/index.html</a>
- ✓ ATO ATCSCC Virtual Air Traffic Flow Management Workshop held in January 2024 with over 140 international participants, including many from the Western Hemisphere
- ✓ 2025 edition of the Virtual ATFM workshop will be held Jan 15<sup>th</sup> & 16<sup>th</sup> 2025 with a capacity of 1,000 attendees. All are invited. See <a href="https://tfmlearning.faa.gov/course-offerings.html">https://tfmlearning.faa.gov/course-offerings.html</a>, 50113101 FY25 Agenda (Virtual) for details and registration

### ATFM TF Deliverables and Results

- ✓ The ATFM taskforce continues to support, promote and utilize CADENA capabilities and resources for Cross Border, Regional ATFM implementation
  - Hurricane Planning, real-time mitigations, CDM updates (including flight operators), review and improvement
  - Other contingencies as they occur (power, CNS outages, staffing and equipment constraints, runway availability, etc.)
  - CADENA CDM support for special event planning, execution and post-event evaluation

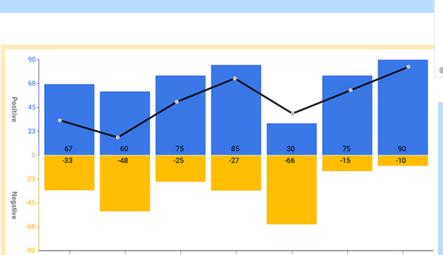


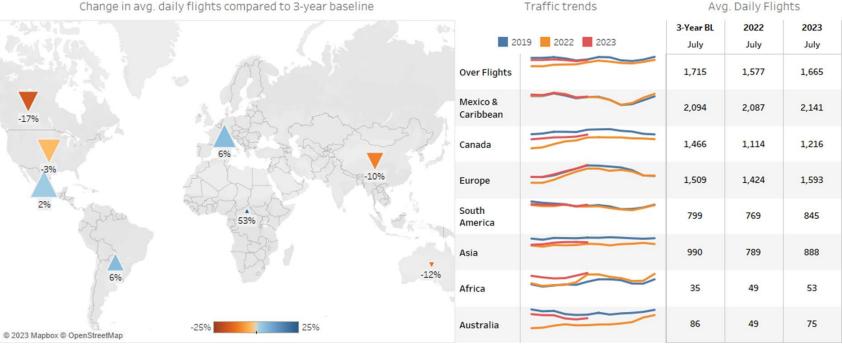
## ATFM TF Future Work Program priorities - 1

- ✓ Improve capacity to conduct Pre-Event planning and Post-Event data driven analysis
- ✓ Improve seasonal planning review capabilities
- ✓ Continue Collaborative Decision-Making outreach via virtual workshops.
- ✓ Continue efforts to enable ANSPs to connect to a basic ATFM platform for real-time demand visualization and awareness.

## ATFM TF Future Work Program priorities - 2

✓ Improve Pre-Event Planning and coordination, collaboration with stakeholders





- ✓ Improve Post-Event Analysis.
- ✓ Improve Seasonal Review Capability with stakeholders.

### ATFM TF Conclusions and Recommendations

- ✓ The ATFM TF will continue to support the region in its ongoing evolution toward better strategic decision making
- ✓ The ATFM TF will maintain it's advisory role in establishing performance measurement in the region
- The ATFM TF continues to encourage and promote the use of the CANSO Air Traffic Flow Management Data Exchange Network for the Americas (CADENA) platform as a mechanism to facilitate data sharing and promote a common situational awareness that is vital to the safe, efficient, and harmonized flow of air traffic.

### North America International Sporting Competitions

- ★ 2024 Cricket T20 World Cup, Copa America
- ★ 2025 FIFA Club World Cup, CONCACAF Gold Cup
- ★ 2026 FIFA Men's World Cup
- ★ 2028 Summer Olympics Los Angeles (and other locations).

## ATFM TF Future Work Program priorities - 3

Task force will support planning for the FIFA 2026 World Cup which will be held in three states within the region. Flows could impact multiple ANSPs in the NACC.

CADENA will be a key tool for TMM collaboration

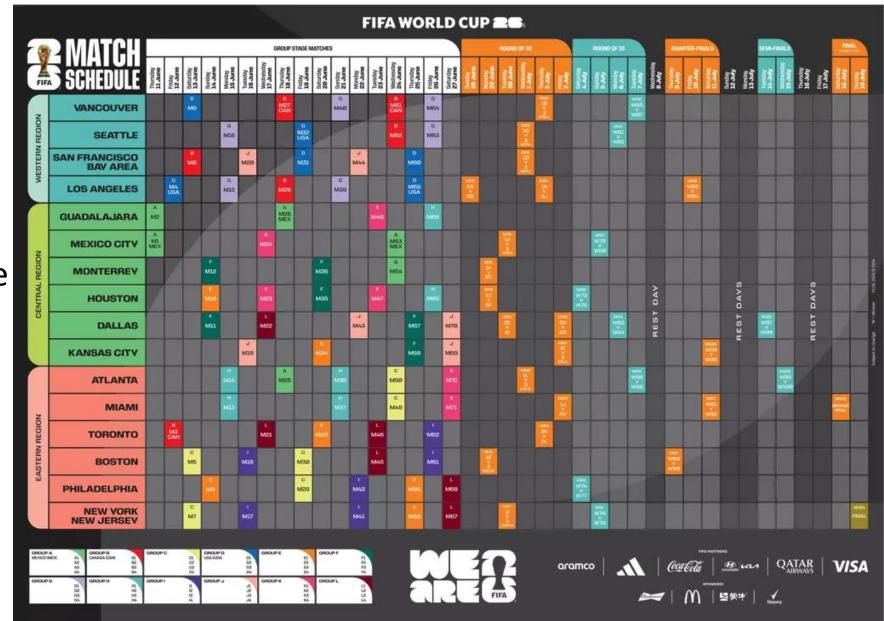


Match schedule released

Next step – FIFA will release Team Base Camp Candidates. Teams will select their pool play training location after the draw.

Next meeting with FIFA will be in November





### FIFA has already advised of their flight priorities

- ❖ VIP, VVIPs, heads of state special airport landside arrangements
- Game Officials, based in Miami and will fly commercial to all game locations, returning to MIA the day after the game
- Teams will be based at their selected base camp locations during pool play and then travel to game locations via FIFA chartered flights
- FIFA support personnel will fly commercial days before and after the games at each location.
- ❖ VVIP movement between the 3<sup>rd</sup> place game in MIA and the Final in NYC via chartered flights
- FIFA would like all flights they are involved with to be exempt from all TMMs, however, that is unrealistic
- FIFA will base a country transportation representative in Mexico City at SmartMex, Toronto at NTMU and at the ATCSCC to communicate any problem flights and the FMUs will do what is possible to assist, weather and volume permitting.

#### What is FRTO?

### Improved operations through enhanced en-route trajectories

- **FRTO:** Flexible Use of Airspace & Free Route Operations
- Purpose: Allows aircraft to fly optimal, direct routes, enhancing efficiency and reducing fuel burn.

#### Objectives

- Optimize Airspace: Increases routing flexibility for better traffic flow.
  - Environmental Benefits: Lowers CO2 emissions.

#### ❖ ICAO's Role

- Provides a global framework under the GANP.
- Promotes regional cooperation for airspace optimization.
- **Establishes standards for seamless operations across regions.**

GREPECAS Decision 21/07 – Approval of the Caribbean/South American Airspace Optimization Program and the NEOSPACE -1 project.

Development of an action plan geared towards a harmonized approach to the optimization of the airspace across the CAR/SAM Region; taking into consideration:

- a) ASBU modules/elements related to APTA and FRTO;
- b) Participation of States;
- c) Input from all relevant stakeholders; and
- d) Continuation and strengthening of ongoing implementations.



#### **CAR Airspace Concept Document**

- Reviewed and edited
- > SDR guidance material added
- Roadmap with objectives added
- Submitted for approval



INTERNATIONAL CIVIL AVIATION ORGANIZATION

OPTIMIZED AIRSPACE CONCEPT DOCUMENT FOR THE CAR REGION 2025-2030

CAO REGIONAL TECHNICAL COOPERATION PROJECT — "MULTI-REGIONAL CIVIL AVIATION ASSISTANCE PROGRAMME (MCAAP)"

Version 1.0



### CIIFRA – CANSO, IATA, ICAO Free Route Airspace Team

- ➤ Participation: Currently, 12 airlines, including major carriers such as American Airlines, Delta Airlines, and United Airlines, along with cargo and general aviation entities, are actively involved in CIIFRA initiatives.
- Inter FIR SDR Trial: COCESNA and SENEAM initiated an inter FIR SDR Trial involving major airlines like American Airlines, Delta Airlines, United Airlines, and Aeromexico, with plans for temporary suspension in September 2024 for system updates.
- ➤ Route Standardization Efforts: Efforts to standardize flight plan filing procedures in the Latin America and the Caribbean (LAC1) region are underway, supported by ICAO NACC recommendations to streamline AIP publication and improve accessibility.





### Challenges to transition to FRA

- The requirement of some Flight Data Processors (FDP) within the automated ATM system to accept flights without a prior known position in its database
- > The inability of the automated ATM system to predict conflicts on random tracks
- > Lack of harmonization of UPR publications in States' AIPs
- ➤ Lack of training and briefings to Air Traffic Controllers (ATCOs), pilots and dispatchers
- ➤ Outdated LOAs/MOUs between adjacent facilities
- > Connectivity between upper airspace and TMAs
- > Financial cost of system upgrades
- > Lack of SMEs within some States with knowledge on ATM systems





### Short – term goals of the AOTF

- ➤ Collaborate with the SAM/IG on the harmonization of Airspace Optimization initiatives throughout the CAR/SAM Region
- > Analyze the capability of the various FIRs within the CAR region to allow SDRs
- Collaborate with stakeholders to harmonize AIP Publication of UPRs and SDRs
- > Collaborate with States/Organizations to address the issues related to:
  - Errors in the ICARD database; and
  - FIR boundary inconsistencies



### **Projected Benefits**





Improved flexibility for dispatchers to file routes based on operational considerations



Improved predictability based on advanced information on intended flight paths

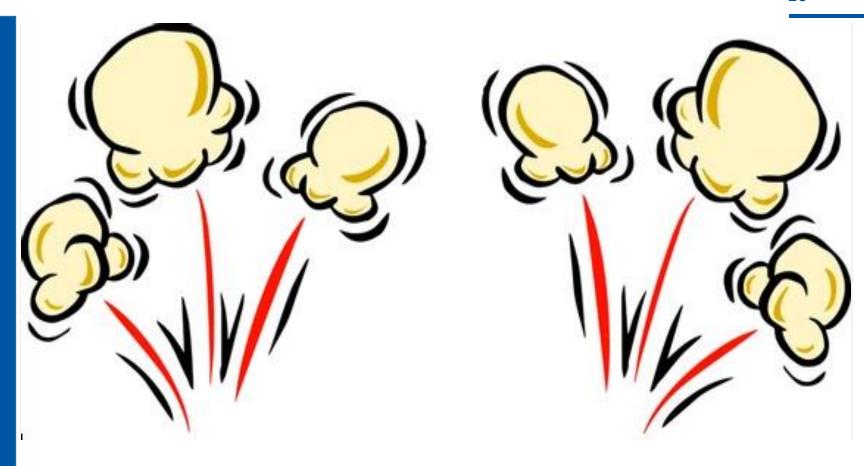


Reduced coordination between ATCOs and dispatchers



Reduced transmissions between ATCOs pilots, and dispatchers

Thank you for your attention





### Thank You

ICAO Headquarters Montréal European and North Atlantic (EUR/NAT) Office Paris

> Middle East (MID) Office Cairo

Western and Central African (WACAF) Office Dakar

> Asia and Pacific (APAC) Office Bangkok

**Asia and Pacific** 

Beijing

(APAC) Sub-office

Eastern and Southern African (ESAF) Office Nairobi

Central American and Caribbean (NACC) Office Mexico City

North American

South American (SAM) Office

