

**SUMMARY OF DISCUSSIONS**  
**2nd Meeting of the NAM CAR Regional Airspace Optimization Team**  
**Online, 18 November 2021**

***List of Participants***

36 participants from the NAM/CAR Regions attended the event, representing 11 States and 4 International Organizations (refer to **Attachment A**). All participants are members designated for this Team as SMEs.

***Objectives:***

The objectives of this second meeting were:

- a) to introduce the concept low airspace efficiency gains as well as high airspace efficiency gains. The team was also introduced to specialists from Delta Airlines, FEDEX and KLM airlines who shared their interest and expectations of the optimization project; and
- b) present Air Traffic Services (ATS) route amendment proposals from the NACC/SAM Air Navigation Service Provider (CANSO) Air Traffic Flow Management Data Exchange Network for the Americas (CADENA).

***Agenda:***

Refer to **Attachment B**.

***Opening***

Mr Julio Siu, Deputy Regional Director, opened the meeting with remarks on the importance of this project and expectations for participation in the meeting. Mr. Melvin Cintron, Regional Director, ICAO NACC Regional Office joined the Meeting later and expressed that the airspace projects would fall under one umbrella in order not to duplicate work effort.

***Documentation***

The Meeting related documentation is available at the following link:

<https://www.icao.int/NACC/Pages/meetings-2021-cartm2.aspx>

**Agenda Item 1: LIBERIA, Costa Rica Arrival Plan**

1.1 COCESNA provided P/02 outlining the proposal for optimizing the arrivals into Liberia from the East. It gave a briefing on arrivals into Liberia from the East that will save approximately 12 miles per flight; this will affect departures as well.

1.2 The Secretariat described its mission to Tegucigalpa and COCESNA during October and the enthusiasm the plan was greeted with.

**Optimization of Liberia arrivals from East yearly benefit assessment**

<b>21,900 miles</b>	<b>saved per year</b>
<b>3,129 min</b>	<b>saved per year</b>
<b>131,400 kg (fuel)</b>	<b>saved per year</b>
<b>289,687 lbs (fuel)</b>	<b>saved per year</b>
<b>415,224 kg (CO2)</b>	<b>saved per year</b>
<b>100,720 US \$</b>	<b>saved per year (fuel cost)</b>
<b>312,857 US \$</b>	<b>saved per year (operational cost)</b>
<b>413,577 US \$</b>	<b>saved per year (fuel &amp; operational cost)</b>

1.3 IATA introduced representatives from FEDEX, KLM and Delta airlines. The airlines each expressed their approval of the project and desire for success. The Secretariat welcomed them and told them that collaboration was key to this project's success and their input was be greatly valued. They will be invited to future meetings through IATA.

- The Meeting confirmed to FEDEX that this plan included high altitude routing and airspace review.
- KLM hoped for a farther-reaching plan than specific routes. This was answered by the Secretariat that this was the initial step towards Free Route Airspace.
- Delta has been actively participating in the CADENA Planned Airway System Alternatives (PASA) request process. It shared that the route requests that they have made through the PASA process

have been successful and were enthusiastic about how this project is going to expand the optimization of airspace in the region.

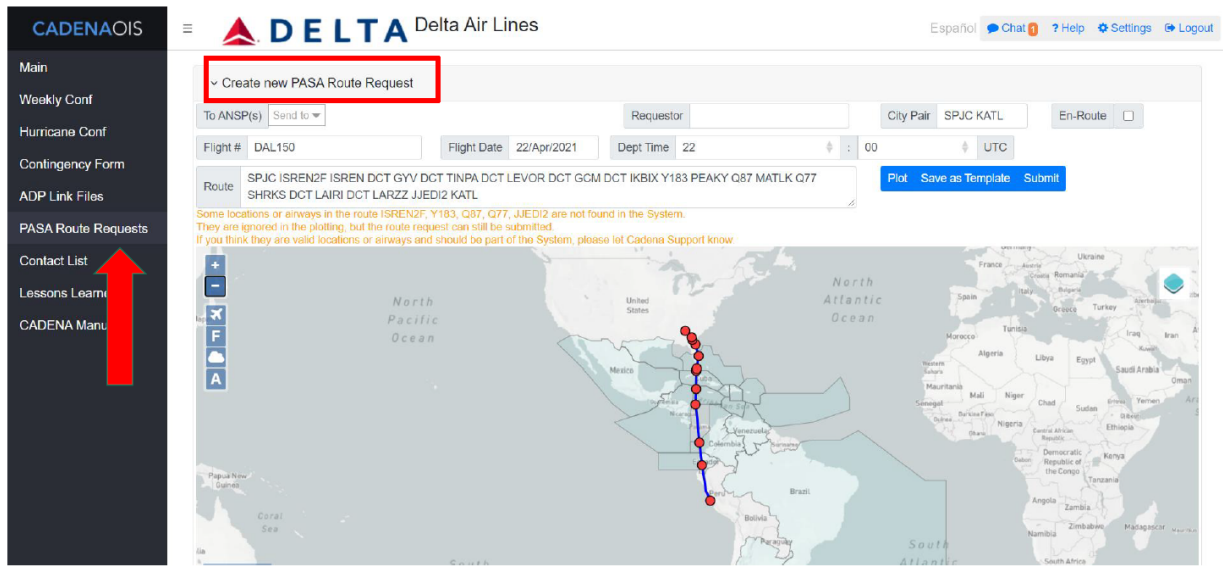
**Agenda Item 2: Route Proposals**

2.1 CADENA provided P/01 Rev. outlining the proposals for the next 5 routes:

- a. Route 1. SAEZ KMIA SAEZ
- b. Route 2. KATL SCEL KATL
- c. Route 3. KATL SAEZ KATL
- d. Route 4. TTPP KJFK TTPP
- e. Route 5. KIAH MMSD KIAH

2.2 Aerolneas Argentinas, United Airlines, Caribbean Airlines and Delta Airlines proposed these routes; however, any airline is welcome to participate. The routes are in the approval request status from the States/Flight Information Regions (FIRs). The plan is after approval, there will be a 90-day trial followed by metrics to display the effect of the new route. If the route is successful, it will be published.

2.3 The States have been participating in the PASA process for a while and are accustomed and responsive to requests made. The process occurs through the CADENA OIS Site. The following are snapshots from the CADENA OIS Route Request page.



	Origin	Dest	ETE	Burn (lbs.)	Route		
					<b>SOUTHBOUND</b>		
Current	ATL	LIM	6:25	69269	KATL VRSTY2 MCN YANTI Q89 SHRKS DEBRL Q97 TOVAR Y297 URSUS UG430 KILER UQ102 BOKAN		
Requested	ATL	LIM	6:20	68468	UP533 QIT UM674 ATATU ATATU2 SPJC		
					<b>SOUTHBOUND COORDINATION</b>		
					<b>SENT RECEIVED ACC/FIR CURRENT ROUTE REQUESTED ROUTE APPROVED IF NO, OPTIONS</b>		
					KZTL KATL VRSTY2 MCN YANTI REQUEST: <b>KATL VRSTY2 MCN URSUS</b>	NO	
					KZJX YANTI Q89 SHRKS DEBRL REQUEST: <b>KATL VRSTY2 MCN URSUS</b>	NO	
					1/18/2021 KZMA DEBRL Q97 TOVAR Y297 URSUS REQUEST: <b>MCN URSUS</b>	NO	
					1/18/2021 MUFH URSUS UG430 REQUEST: <b>URSUS SIA</b>		
					1/18/2021 MKJK UG430 KILER REQUEST: <b>URSUS SIA ARNOK</b>		
					1/18/2021 MPZL UG430 KILER REQUEST: <b>SIA ARNOK</b>		
					1/18/2021 SKEC KILER UQ102	N/A	
					1/18/2021 SKED UQ102 BOKAN REQUEST: <b>SIA ARNOK</b>		
					1/18/2021 SEFG BOKAN UP533 QIT UM764 REQUEST: <b>SIA ARNOK TOSES</b>		
					1/18/2021 SPIM UM764 ATATU ATATU2 SPJC NO CHANGE	N/A	
					<b>NORTHBOUND</b>		
Current	LIM	ATL	6:34	72701	SPJC ATATU2F ATATU UM674 TBG UL465 ARNAL ATUVI UG448 IKBIX Y183 PEAKY Q87 MATLK Q77		
Requested	LIM	ATL	6:31	71900	SHRKS LAIRI LARZZ JJEDI2 KATL		
					SPJC ATATU2F ATATU TOSES ENSOL TOKUT IKBIX LARZZ JJEDI2 KATL		
					<b>NORTHBOUND COORDINATION</b>		
					<b>SENT RECEIVED ACC/FIR CURRENT ROUTE REQUESTED ROUTE APPROVED IF NO, OPTIONS</b>		
					1/18/2021 1/21/2021 SPIM SPJC ATATU2F ATATU UM674 REQUEST: <b>SPJC ATATU2F ATATU TOSES</b>	YES	
					1/18/2021 SEFG ATATU UM674 REQUEST: <b>TOSES ENSOL</b>		
					1/18/2021 SKED ATATU UM674 REQUEST: <b>ENSOL TOKUT</b>		
					1/18/2021 MPZL ATATU UM674 TBG UL465 ARNAL REQUEST: <b>TOKUT IKBIX</b>		
					1/18/2021 MKJK ARNAL ATUVI REQUEST: <b>TOKUT IKBIX</b>		
					1/18/2021 MUFH ATUVI UG448 IKBIX REQUEST: <b>TOKUT IKBIX</b>		
					1/18/2021 KZMA IKBIX Y183 PEAKY Q87 MATLK REQUEST: <b>IKBIX LARZZ</b>	NO	
					KZJX MATLK Q77 SHRKS LAIRI REQUEST: <b>IKBIX LARZZ</b>	NO	
					KZTL LAIRI LARZZ JJEDI2 KATL REQUEST: <b>IKBIX LARZZ JJEDI2 KATL</b>	NO	

2.4 For the 90-day trials, the process will be the same as the route requests.

**Next Route Optimization - SAEZ..KMIA..SAEZ**

Continue to follow the established processes

- Phase 1: Pilot route is selected
- Phase 2: Airspace capability readiness is checked
- Phase 3: PASA Optimized Route Validation Process
- Phase 4: PASA Optimized Route Approval Process
- Conduct the 90-day trial

**Agenda Item 3: WALKY Intersection**

3.1 P/03 was provided by CADENA outlining the collocating of WALKY intersection in the Gulf of Mexico with UB764. CADENA shared a briefing on WALKY intersection and UB764 that are extremely close, yet not collocated. By locating these together, users would have more options for flight planning and seeking the best route for their flights. Co-locating the two would give users more options in filing as well as save on distance from the east into Cozumel.

Co-location of WALKY and UB764 - Yearly benefit assessment:

<b>8,760 miles</b>	<b>saved per year</b>
<b>1,251 min</b>	<b>saved per year</b>
<b>115,340 lbs (fuel)</b>	<b>saved per year</b>
<b>165,323 kg (CO2)</b>	<b>saved per year</b>

<b>40,102 US \$</b>	<b>saved per year (fuel cost)</b>
<b>125,143 US \$</b>	<b>saved per year (operational cost)</b>
<b>165,245 US \$</b>	<b>saved per year (fuel &amp; operational cost)</b>

**Agenda Item 4: Other Business**

4.1 The Team is moving forward as several city-pair routes are being worked to improve efficiency, and the States are realizing their input is crucial in advancing this project. At the next meeting, the idea of airspace corridors will be introduced and ULTRA-High Free Route Airspace as the next step towards moving to a Free Route Airspace.

**Conclusion**

4.2 This Meeting was successful in many areas; the Team:

- was introduced to several carriers and heard from them the importance of this project
- saw a presentation from COCESNA and Costa Rica showing how all can participate in looking for efficiencies. Belize offered work that it is doing in its airspace and will share a presentation at the next meeting
- was introduced to 5 new route proposals and the process of approval was explained
- saw a proposal surrounding an airway and a fix (WALKY) that by co-locating would offer users more opportunities and efficiency gains.

**Next Actions**

4.3 The facilitator (ICAO/IATA/CADENA) team has scheduled a meeting on December 3 to begin the process of a work plan to be delivered by 15 January 2022.

4.4 The Proposal for Amendment (PFA) to amend the Air Navigation Plan (ANP) and to publish routes that have gone through the process will be processed by the Secretariat. The Secretariat will accomplish this when several routes have been approved to save on publishing costs.

4.5 The NACC Regional Office Secretariat will inform the ICAO SAM Regional Office on the meetings' results and will continue coordinating with the ICAO SAM Regional Office its participation in all meetings.

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**ATTACHMENT/ADJUNTO A**  
**2nd Meeting of the NAM CAR Regional Airspace Optimization Team**  
**2ª Reunión del Equipo Regional NAM/CAR de Optimización del Espacio Aéreo**  
Online, 18 November 2021 / En línea, 18 de noviembre de 2021

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**LIST OF PARTICIPANTS/ LISTA DE PARTICIPANTES**

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2. Gilberto Torres
3. Randy Banner

**COSTA RICA**

4. Anthony Salas

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16. Saiman Morales

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20. Curtis Peters

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24. Joe Hof

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- 27. José Antonio Ruiz
- 28. José Fernando Rojas
- 29. Marco Vidal
- 30. Rocco Heesters
- 31. Bob Oberstar
- 32. Phil Santos

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- 33. Melvin Cintron
- 34. Julio Siu
- 35. Eddian Méndez
- 36. Ernie Snyder

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**ATTACHMENT/ADJUNTO B**

**2nd Meeting of the NAM CAR Regional Airspace Optimization Team**

**AGENDA**

**18 November 2021**

<https://icao.zoom.us/meeting/register/tJ0od--hpzMsEtL5IOmFUuL0CGa1BPK8OQTh>

1. LIB Arrival Plan-Anthony Salas Costa Rica
2. Route Proposals
3. WALKY Request
4. Other Business

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**2ª Reunión del Equipo Regional NAM/CAR de Optimización del Espacio Aéreo**

**ORDEN DEL DÍA**

**18 de noviembre de 2021**

<https://icao.zoom.us/meeting/register/tJ0od--hpzMsEtL5IOmFUuL0CGa1BPK8OQTh>

1. Plan de llegada LIB-Anthony Salas Costa Rica
2. Propuestas de rutas
5. Solicitud WALKY
6. Otros asuntos