

P/02

Agenda Items 2, 3, 4 & 5

The 1st FRA Trial

Date: Mar 24, 2022

Presented by: CIIFRA Team



**GREPECAS
to Regional FRA**

First FRA Trial

CANSO

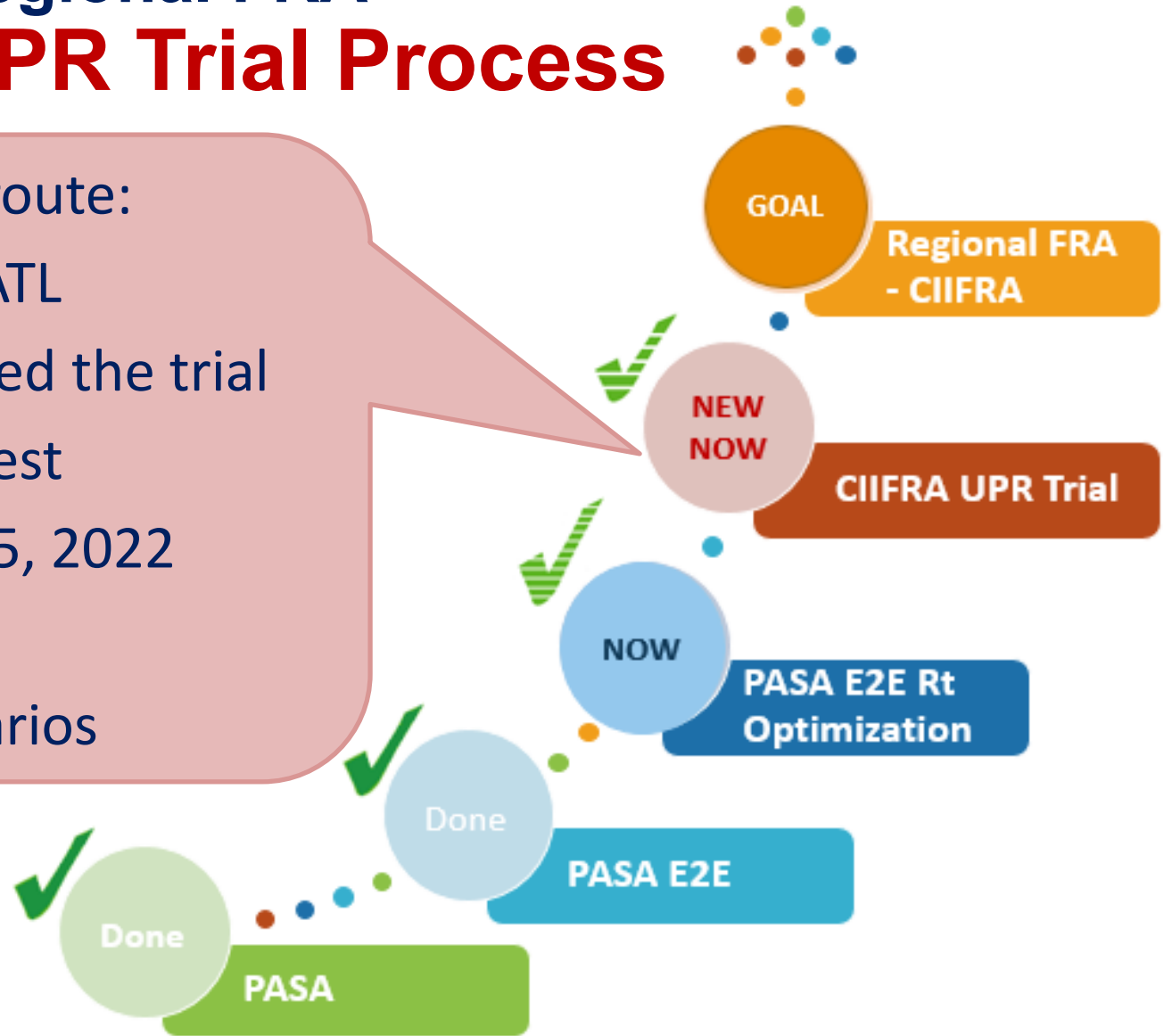


- CANSO, IATA, and ICAO collaboratively conducted the very first FRA trial on Feb 24 and 25, 2022
- The two DAL flights comprised the CIIFRA UPR Trial

Step-by-Step: From PASA to Regional FRA

Track A-2 (near-term): **CIIFRA UPR Trial Process**

- Identified the volunteer airline and route:
Delta Airlines and KATL-SPJC-KATL
- Identified ANSP/CAAs and coordinated the trial
- Used CADENA OIS PASA Route Request
- Conducted the trial on Feb 24 and 25, 2022
- Hosted the post-trial meeting
- Determined the following trial scenarios



Track A-2

The 1st CIIFRA UPR Trial Results

Route: KATL-SPJC-KATL

Feb 24, 2022: DAL150

Feb 25, 2022: DAL 151

Date	Flight (B764)	Flight Time (min)			Fuel (lb)			Distance (mile)		
		Base	PASA E2E	UPR	Base	PASA E2E	UPR	Base	PASA E2E	UPR
24-Feb	DAL150(ATL-LIM)	6:18	6:10	6:09	81290	79973	79787	2851	2808	2800
25-Feb	DAL151(LIM-ATL)	6:30	6:27	6:24	83271	82434	82199	2858	2885	2852

Date	Flight (B764)	Flight Time diff vs UPR		Fuel diff vs UPR		Distance diff vs UPR	
		Base	PASA E2E	Base	PASA E2E	Base	PASA E2E
24-Feb	DAL150(ATL-LIM)	0:09	0:01	1503	186	51	8
25-Feb	DAL151(LIM-ATL)	0:06	0:03	1072	235	6	33
	Total	0:15	0:04	2575	421	57	41

Track A-2

The 1st CIIFRA UPR Trial Results and Next Steps

	Baseline vs UPR	
Savings	1 Day	1 Year
Flight min:	15	5,475
Fuel (lb):	2,575	939,875
CO2 (kg):	3,691	1,347,173
Cost (\$):	2,269	828,060

	PASA Opt Rt vs UPR	
Savings	1 Day	1 Year
Flight min:	4	1,460
Fuel (lb):	421	153,665
CO2 (kg):	603	220,256
Cost (\$):	526	191,870

Step 1:

One round trip w/o pre-coordination

- Planned for March 24 & 25, 2022
- Pre-trial coordination
- Post-trial analysis and meeting

Step 2:

Three consecutive round trips w/o pre-coordination and follow-up

Step 3:

Seven consecutive round trips w/o pre-coordination and follow-up

Comments and Questions



PASA E2E Optimized Routes and Proposals

Date: Mar 24, 2022

Presented by: CIIFRA Team

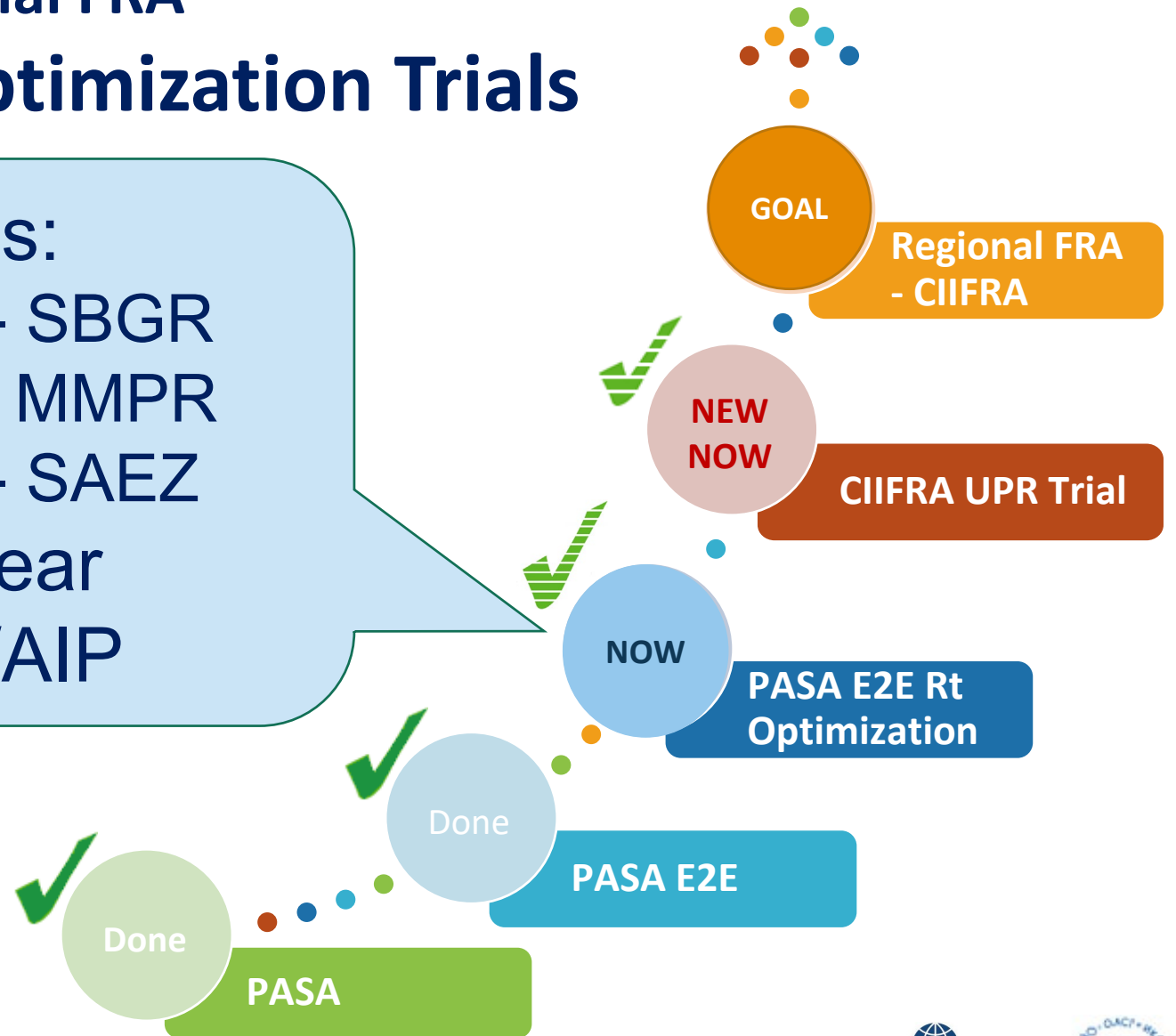


**GREPECAS
to Regional FRA**

Step-by-Step: From PASA to Regional FRA

Track A-1: PASA E2E Route Optimization Trials

- Six completed 90-day trials:
 - KATL - SPJC
 - KATL - SBGR
 - TTPP - KMIA
 - KIAH - MMRP
 - SAEZ - KMIA
 - KATL - SAEZ
- Extended usage for one year
- Publish trial routes in AIC/AIP



Track A-1: PASA E2E Route Optimization 90-Day Trials

Delta Airlines  DELTA	Delta Airlines  DELTA	Caribbean Airlines 
KATL↔KPJC	KATL↔SBRG	TTPP↔KMIA
Jul 9 - Oct 6, 2021	Jul 27 - Oct 24, 2021	Aug 6 - Nov 3, 2021

Savings	90-Day	1-Year	90-Day*	1-Year	90-Day	1-Year
Flight min:	515	2,089	235	1,175	256	1,038
Fuel (lb):	145,425	589,779	62,035	310,175	46,780	189,719
CO2 (kg):	208,445	845,360	88,918	444,590	67,052	271,934
Cost (\$):	94,693	384,033	41,925	209,625	39,494	160,170

United Airlines  UNITED	Delta Airlines  DELTA	Aerolineas Argentinas 
KIAH↔MMPR	SAEZ ↔KATL	SAEZ ↔KATL
Sep 1 - Nov 29, 2021	Dec 6, 2021-Mar 5, 2022	Dec 6, 2021-Mar 5, 2022

Savings	90-Day	1-Year	90-Day*	1-Year	90-Day	1-Year
Flight min:	558	2,263	940	5,446	275	1,115
Fuel (lb):	52,841	214,300	175,508	1,016,832	64,673	262,283
CO2 (kg):	75,740	307,168	251,565	1,457,480	92,699	375,944
Cost (\$):	72,993	296,027	146,390	848,135	51,638	209,420

Estimated 1-year savings of the 6 completed PASA Optimized Routes

KATL ↔ SPJC

KATL ↔ SBGR

TTPP ↔ KMIA

KIAH ↔ MMPR

SAEZ ↔ KATL

KATL ↔ SAEZ

Savings	
Flight min:	13,126
Fuel (lb):	2,583,088
CO2 (kg):	3,702,477
Cost (\$):	2,107,410

Track A-1: PASA E2E Route Optimization 90-Day Trials

- TTPP..KJFK..TTPP by Caribbean Airlines (in coordination)
- KATL..SCEL..KATL by Delta Airlines (in coordination)
- Selected city-pairs by Federal Express (in 2022)
- American Airlines is evaluating flights that could be added to the existing trials
- CIIFRA Team is evaluating other flights / city pairs that could be coordinated based on input from IATA



American Airlines

All airlines are invited to submit city-pair requests

PASA Optimized Routes in AIC/AIP Process

- CIIFRA Team is leading the efforts to coordinate the publishing of twelve PASA optimized routes in AIC/AIP
- These routes are segmented and have been delivered (or will be delivered) to the appropriate ANSPs for their approval and publication

1. KATL..SPJC Route: KATL SMLTZ2 WALET DCT YUESS Q79 MCLAW Y442 FUNDI DCT LEPON DCT ARNAL DCT TINPA DCT VAMOS DCT GYV DCT VAKUD DCT ATATU ATATU2 SPJC

2. SPJC..KATL Route: SPJC ISREN2F ISREN DCT VAKUD UL780 GYV DCT VAMOS DCT TINPA DCT LEVOR UP536 GCM UG448 ATUVI DCT IKBIX Y183 PEAKY Q87 MATLK Q77 SHRKS DCT LAIRI DCT LARZZ JJEDI2 KATL

PASA Optimized Routes in AIC/AIP Process

3. KATL..SBGR Route: KATL VRSTY2 MCN DCT YANTI Q89 MANLE Y185 RENAH Y355 FIPEK Y294 GESSO L467 ANADA DCT KORTO DCT SUMVA ... SBGR

4. SBGR..KATL Route: SBGR ... SUMVA DCT KORTO DCT ANADA L452 HARBG Y421 HAGIT Y306 VENDS Y185 MANLE Q89 SHRKS DCT LAIRI DCT LARZZ JJEDI2 KATL

5. TTPP..KMIA Route: TTPP DCT ANADA DCT MUNOZ DCT HARBG Y330 FODED DCT MADIZ DCT FOXID DCT FLIPR FLIPR7 KMIA

6. KMIA..TTPP Route: KMIA SKIPS2 SKIPS Y290 HAGIT Y421 HARBG L452 ANADA UG449 PERGA ITRAK NAPKO LEXOR TALUS TTPP

7. KIAH..MMPR Route: ... CRP MTY OTEKA KEDMA MMPR

8. MMPR..KIAH Route: ... XUDED UT148 OTEKA MTY CRP ...

PASA Optimized Routes in AIC/AIP Process

9. SAEZ..KMIA Route: SAEZ BIVAM2A BIVAM UW8 PAR UL417 PABON EJA KILER UM779 ZEUSS VIICE1 KMIA

10. KMIA..SAEZ Route: KMIA GWAVA1 URSUS UP406 BILSI UL795 LORBA DCT EMABU UP525 SJE UB689 LET UP525 RCO UL417 LOKOX UM784 BOLET UL404 ISOPO UT672 MULTA UW24 SNT SNT6A SAEZ

11. KATL..SAEZ Route: KATL SMLTZ2 WALET DCT YUESS Q79 FEMID DCT DHP A509 URSUS UP406 BILSI EMABU UP525 RCO UL417 TOPOG UL404 ISOPO UT672 MULTA UW24 SNT SNT6A SAEZ

12. SAEZ..KATL Route: SAEZ BIVAM2A BIVAM UW8 PAR UL417 BORDO Y259 OCTAL Q77 SHRKS DCT LAIRI DCT LARZZ JJEDI2 KATL



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Task Force - PBN

TASK FORCE ON IMPLEMENTATION OF PERFORMANCE-BASED NAVIGATION (PBN) AIRSPACE CONCEPT

Based on the ANI/WG Terms of Reference for expediting the work progress and to focus on the regional priorities, and considering the existence of various Ad hoc Groups that were working in support of the implementation working groups, such as the ADS-B Ad hoc Group, the AMHS Implementation Group, etc., the ANI/WG/1 Meeting considered necessary to group them under the ANI/WG structure, including any other specific implementation task group, with the aim of providing continuity. In this regard, seven topics that shall be developed through Task Forces under the ANI/WG were formed.

Rapporteur: **Riaaz Mohammed**, Trinidad and Tobago.

[Terms of reference](#)

[Membership](#)

[Work Programme](#)



DCT Identification and Implementation

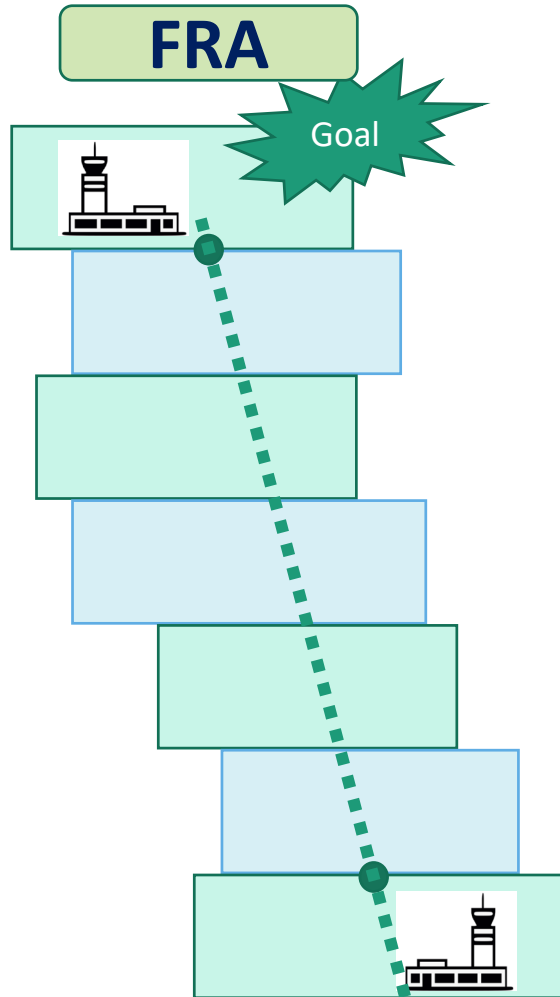
Baseline: KATL VRSTY2 MCN **DCT** YANTI Q89 SHRKS **DCT** DEBRL Q97 TOVAR Y297 URSUS G430 KILER **DCT**
BOKAN UP533 QIT UM674 ATATU ATATU2 SPJC

UPR: KATL SMLTZ2 WALET **DCT** YUESS Q79 MCLAW Y442 FUNDI **DCT** LEPON UM335 ARNAL **DCT** PUMRI
DCT IRUKA **DCT** BUXOS UL780 UGUPI **DCT** GYV **DCT** VAKUD **DCT** ATATU ATATU2 SPJC

UPR Actually Flown: KATL SMLTZ2 WALET **DCT** YUESS Q79 MCLAW Y442 FUNDI **DCT** LEPON UM335 ARNAL
DCT PUMRI **DCT** IRUKA **DCT** BUXOS UL780 UGUPI **DCT** GYV **DCT** VAKUD **DCT** ATATU ATATU2 SPJC

- Airlines to collect and create the list of DCTs they desire to have included in AIC/AIP
- Enter the PfA process to publish
- Supports UPR Trials and CIIFRA

Regional FRA: Paso a paso!



Your work and support will make this ground-breaking initiative possible!



Comments and Questions



WALKY Project Update

Date: Mar 24, 2022

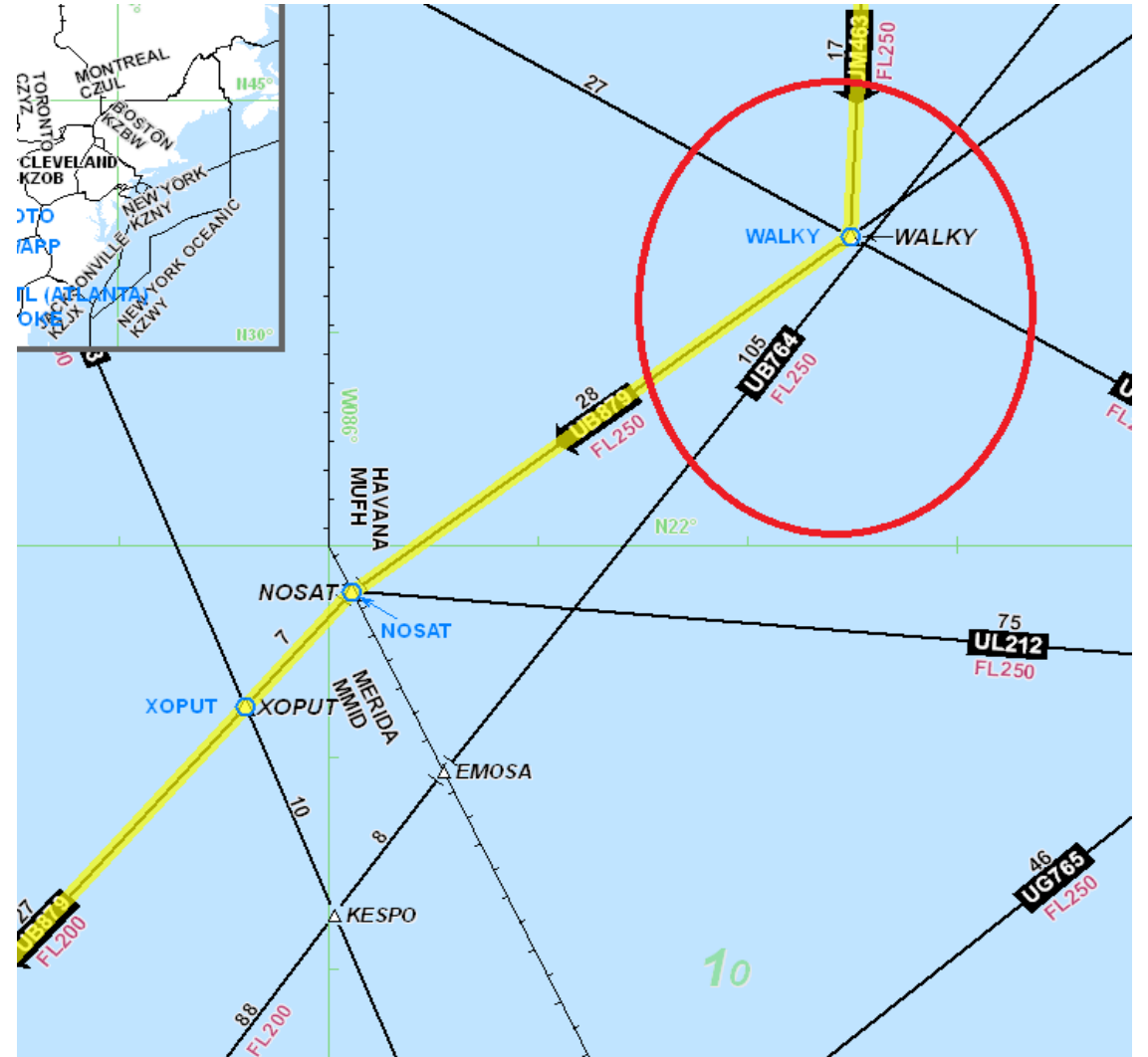
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**GREPECAS
to Regional FRA**

Connecting WALKY to UB764 for overflights into Merida

- Requested through CADENA by United Airlines
- Currently being evaluated and reviewed by Havana ACC and Merida ACC



Comments and Questions



Thank you!

