



# ICAO

International Civil Aviation Organization  
North American, Central American and Caribbean Office

INFORMATION PAPER

CIIFRA-T/05— IP/03 Rev.  
08/08/22

## 5th Meeting of the CIIFRA Team (CIIFRA-T/05) Miami, United States, and on-line 2 to 4 August 2022

### Agenda Item 7: Optimization CIIFRA

#### AIRSPACE OPTIMIZATION AND CIIFRA

(Presented by the Secretariat)

##### EXECUTIVE SUMMARY

Airspace Optimization Team and CIIFRA have been working over a year on the optimization of the airspace in the region. This Information Paper will discuss the progress, where we are now and the future of the optimization.

*Strategic Objectives:*

- Safety
- Air Navigation Capacity and Efficiency

#### 1. Introduction

1.1 As seen earlier, the optimization of the region's airspace has been continuing for some time. This briefing will provide an update.

#### 2. Discussion

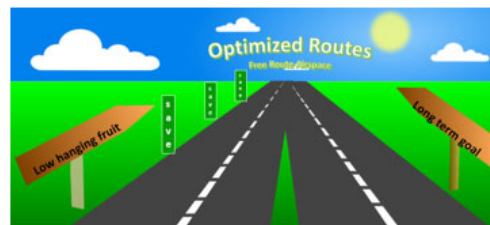
2.1 The Secretariat will brief the Task Force on the progress of the optimization. The two-pronged attack will be discussed.

### Airspace Optimization CAR Region

North American, Central American and Caribbean Working Group (NACCWG)  
Air Space Optimization Task Force

#### Two Pronged Attack

- End to End route Optimization
- User Preferred Route
- Free Route Airspace



2.3 Results of both tracks will be discussed.

## Results Track 1

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

- CIIFRA initiative created for Regional FRA
- Airlines select a city pair route for UPR trials and ANSPs do their best to accommodate
- Small steps

- ✓ Step 0: one northbound and one southbound legs
- ✓ Step 1: one round trip
- ✓ Step 2: three consecutive round trips
- ✓ Step 3: seven consecutive round trips
- ❑ Step 4: 30 consecutive round trips (initiated on July 15, 2022)
- ❑ Step 5: 90 consecutive round trips
- ❑ Goal: continued use of CIIFRA UPR

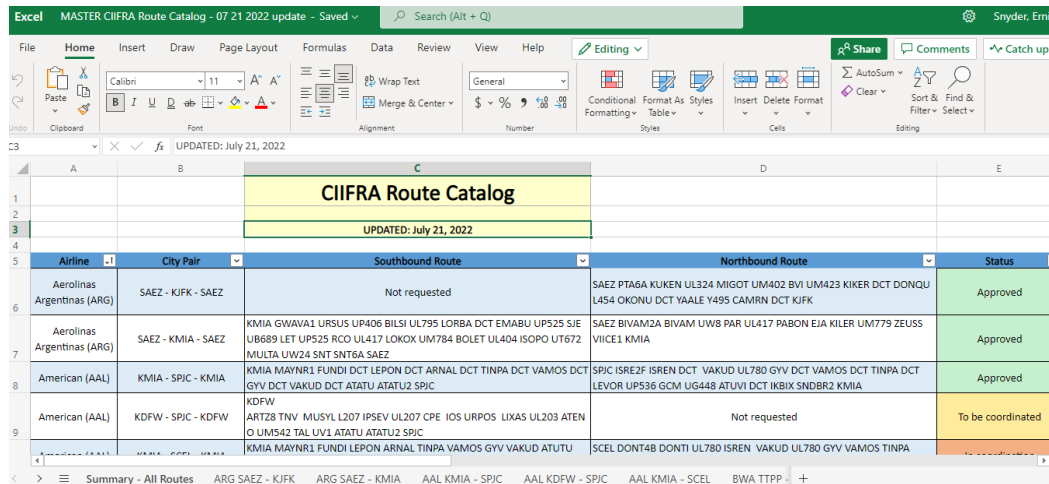
KATL-SPJC-KATL  
 DAL151/DAL150

	Baseline vs UPR	
Savings	12 Day	1 Year
Flight min:	116	3,528
Fuel (lb):	12,479	379,570
CO2 (kg):	17,887	544,057
Cost (\$):	15,325	466,138

Estimation of 1-year savings based on 12 days of data obtained from Steps 0, 1, 2, and 3

2.4 Also discussed will be the metrics of each path, and the “rule of 20”. This rule stipulates that the team will entertain 20 “path 1” routes at a time. This will require assistance from the States in getting Aeronautical information Publications (AIPs) updated as route trials are completed. We are approaching that number quickly.

2.5 An excel spreadsheet has been developed that shows all the routes and their coordination status.



2.5 CIIFRA is also working on an addition to the ICAO Airspace Optimization Task Force website that will provide information as well as allow new route requests for optimization.

The screenshot shows the ICAO website header with the logo and 'UNITE AVIATION A UNITED NATIONS SPECIALIZED AGENCY'. Below the header is a navigation bar with links: About ICAO, Global Priorities, Events, Information Resources, Careers, Uniting Aviation, ICAO TV, and Subscribe. The main content area is titled 'Welcome to CIIFRA' and features three icons: 'History' (an hourglass), 'Collaboration' (hands joined in a circle), and 'Route Request' (a map showing a flight path). A table below these icons lists route request titles and languages.

Title	Language
New version of ATS Routes for the CAR/SAM Regions, July 2018 (FINAL DRAFT Oct 12 2018)	EN
Version 05 of the SAM ATS routes network: SAM-CAR interregional ATS routes	Link Zip Link RAR
New version of ATS Routes for the CAR/SAM Regions, October 2020 (SECOND COMPLETE DRAFT)	EN

2.6 A chart was show explain the relationships between the Task Force and other groups.

