



## Jamaica Civil Aviation Authority

*"Committed to the Safe and Orderly  
Development of Aviation in Jamaica"*



# KMIA - SKBO OFFLOAD ROUTE TRIAL UPDATE

4th Meeting of the NACC/WG (ATFM/TF/4) MIA-BOG OFFLOAD  
TRIAL

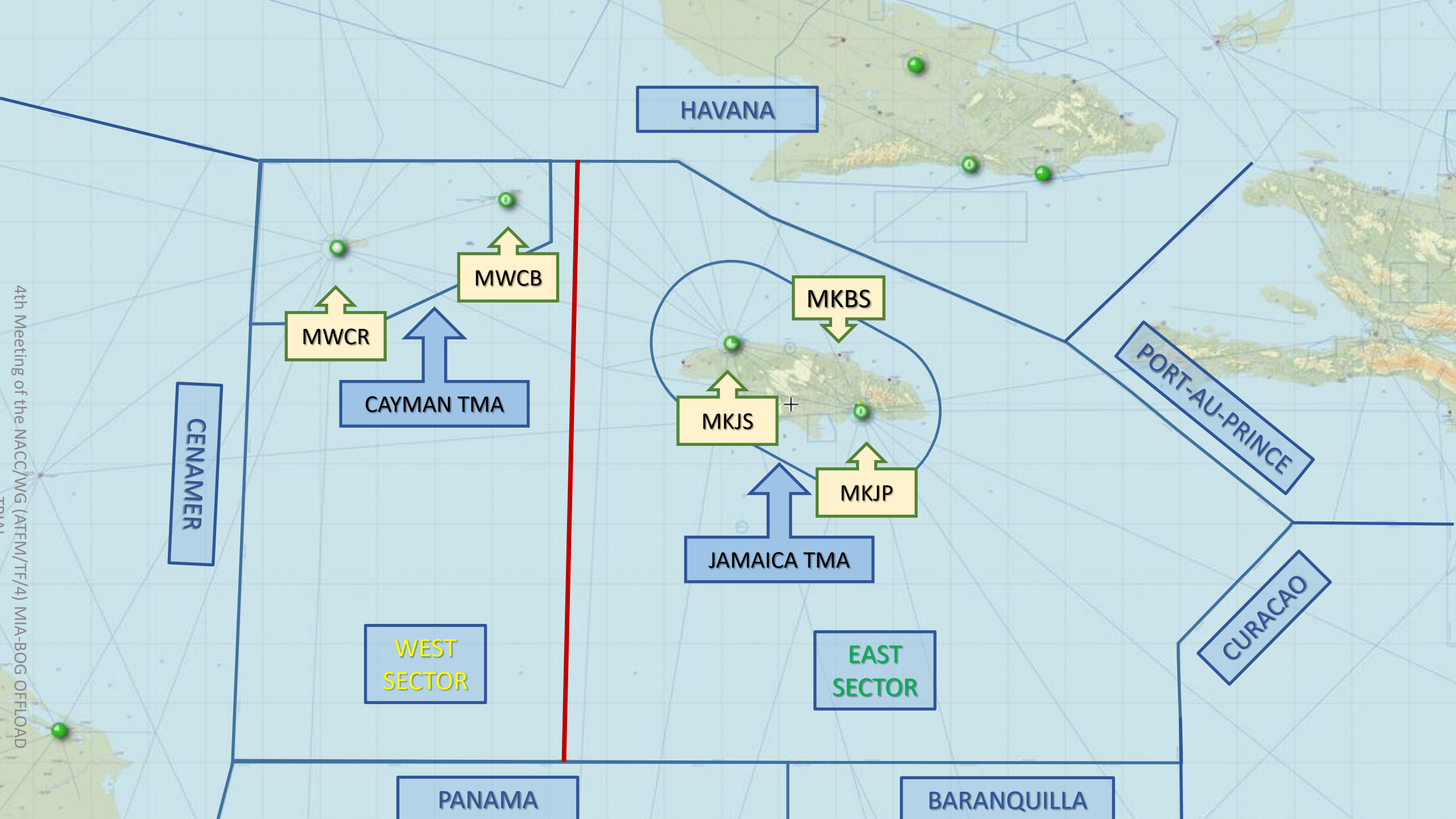
*PREPARED BY: TROY BLACKWOOD  
FEBRUARY 14, 2023.*



# SYNOPSIS



- Traffic demand to/through the Kingston FIR now exceeds 2019 levels.
- Increase in traffic destined for Colombia.
- The East sector is the busiest sector in the Kingston FIR.
- Most of the overflight traffic is concentrated in the center of the Kingston FIR which results in screen clutter for controllers.
- Datablock is unmodifiable (contributory factor to screen clutter).
- Increased coordination/communication, controller workload.
- Exploring the possibility of airspace restructuring/sectorization, however, doing so will require increased staffing and training as software reconfiguration.



CENAMER

HAVANA

MWCR

MWCB

CAYMAN TMA

MKJS

MKBS

MKJP

JAMAICA TMA

PORT-AU-PRINCE

WEST SECTOR

EAST SECTOR

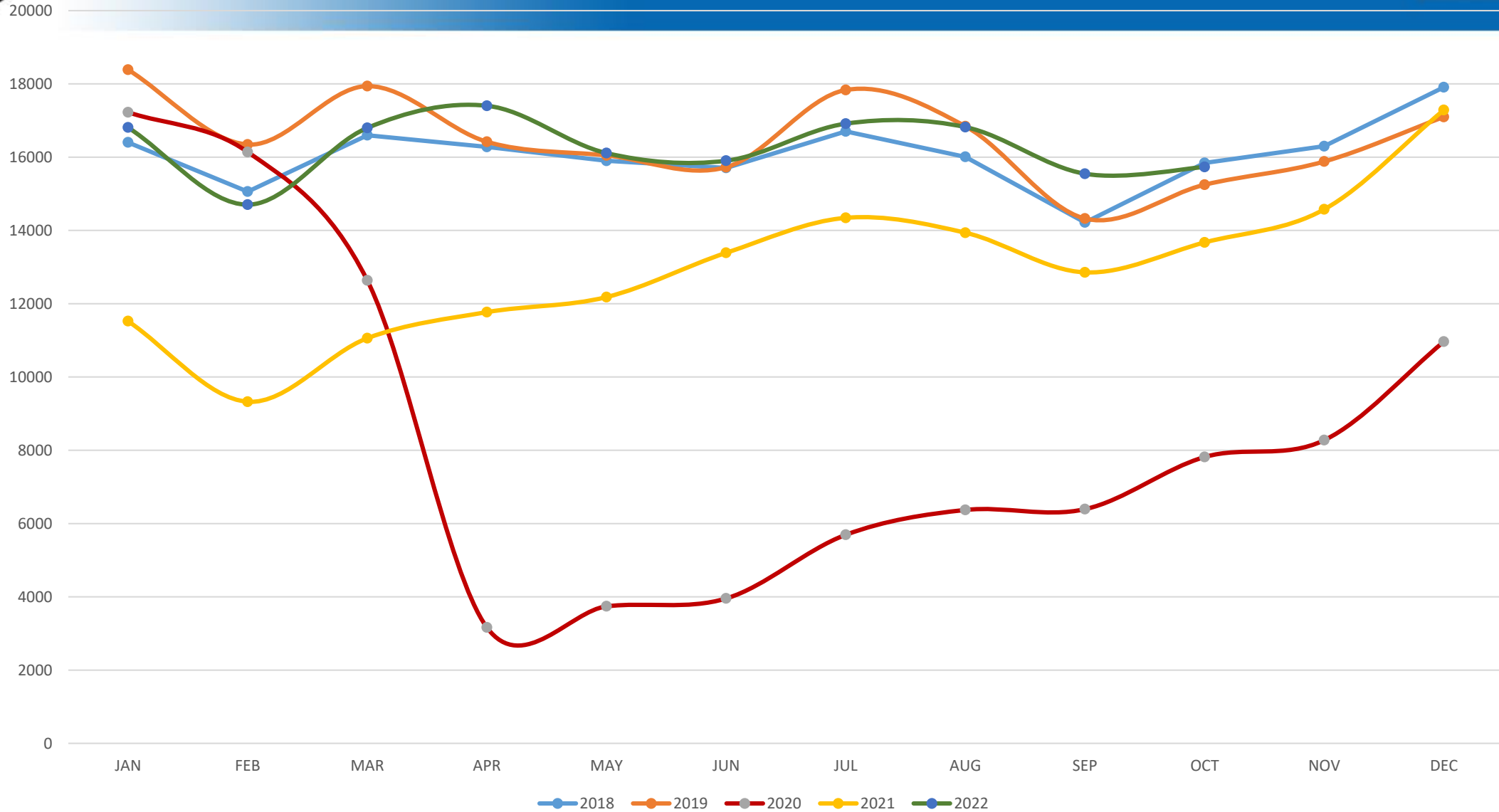
CURACAO

PANAMA

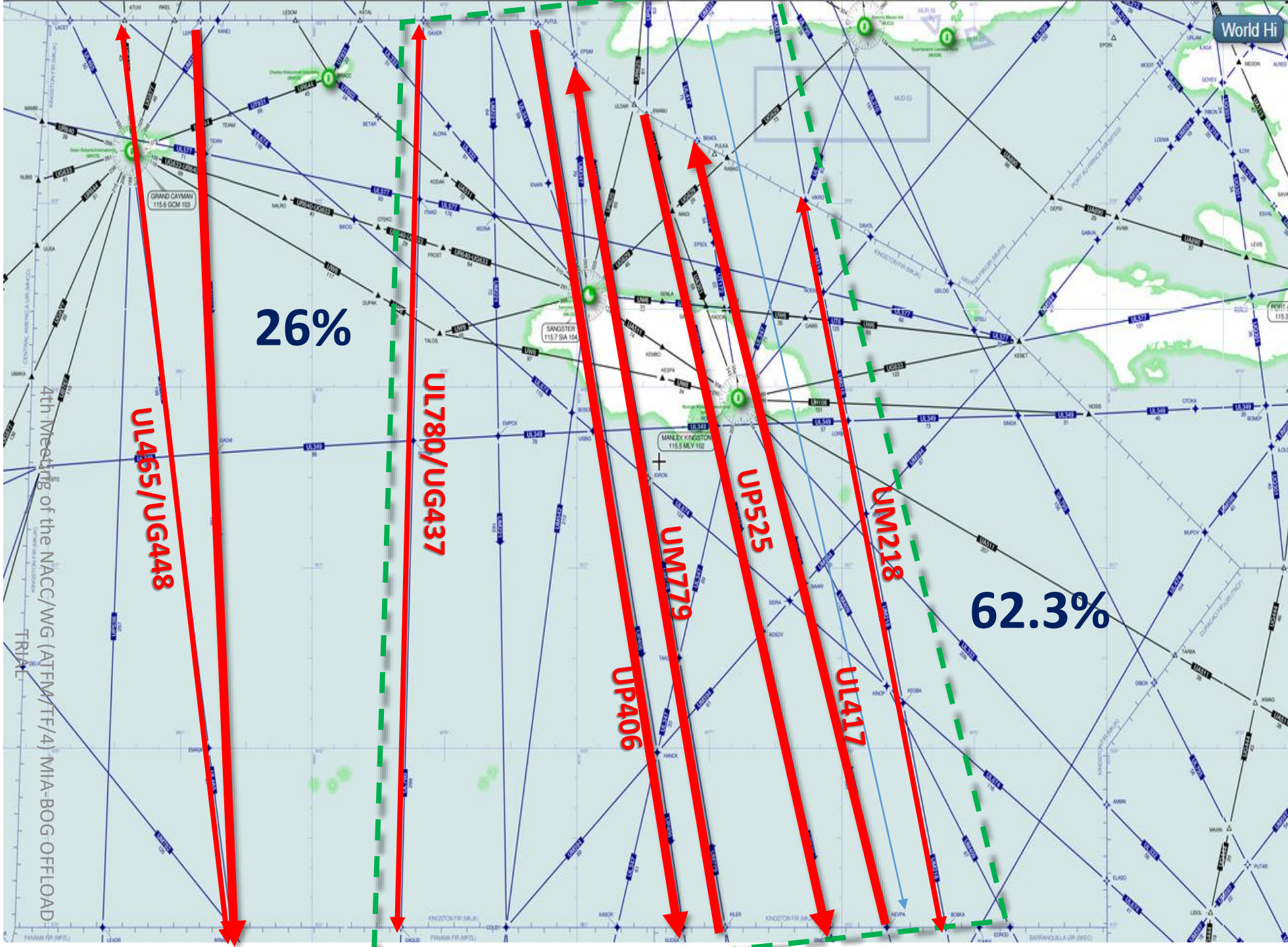
BARANQUILLA



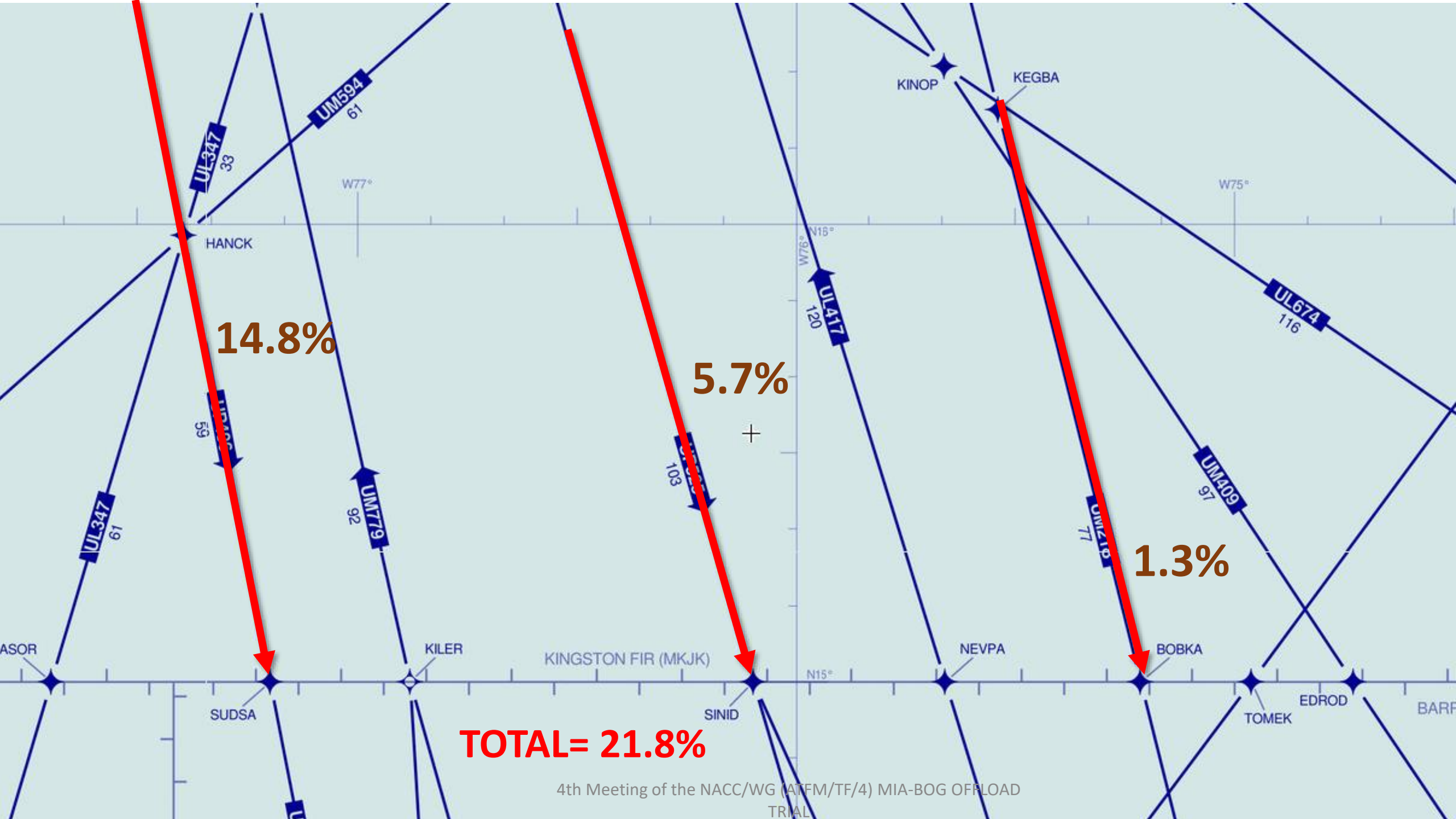
# KINGSTON FIR MOVEMENT COMPARISON







ROUTE(S)	EXIT POINT	PERCENTAGE SUM
UM779+UM347	EPSIM	19.6%
UP406	SUDSA	14.8%
UL465+UG448	ATUVI	14.6%
UL465+UG448	ARNAL	11.4%
UL780	DAGUD	9.3%
UP525	SINID	5.7%
UL417	BEMOL	4.6%
UL780	GAXER	3.4%
UM218	VIKRO	1.9%
UM542+UM221	COLBY	1.7%
UM218	BOBKA	1.3%
UL795	DIBOK	1.2%
UM347+UB767	PESTO	1.1%
UL332	AMBIN	1.0%
UL795	GELOG	1.0%
UB767	KANEX	0.7%
UL332	KATAL	0.6%
UM782	DELVI	0.5%
UL349	NOSIS	0.5%



14.8%

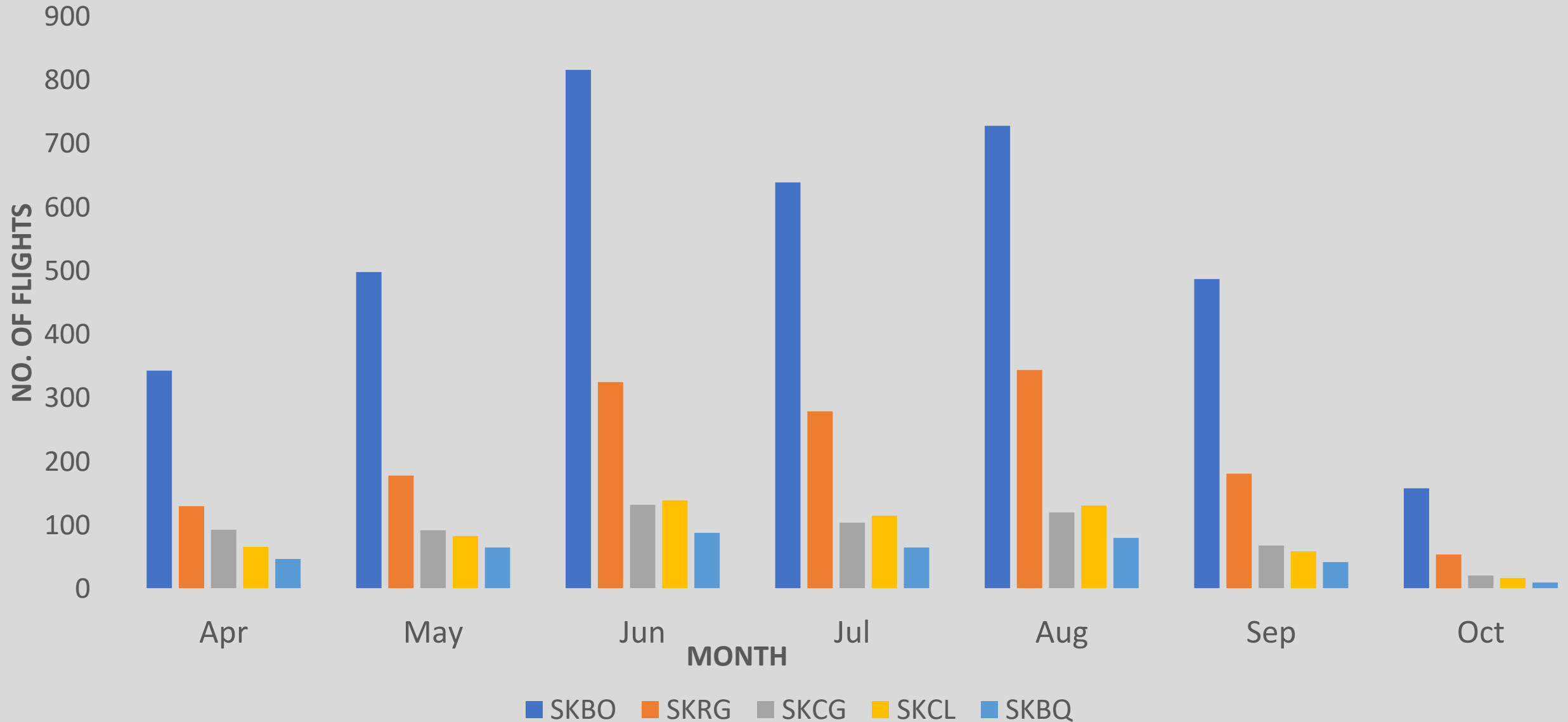
5.7%

1.3%

**TOTAL= 21.8%**

# KFIR OVERFLIGHTS TO COLOMBIA

## APRIL 2022 TO OCTOBER 2022



■ SKBO ■ SKRG ■ SKCG ■ SKCL ■ SKBQ

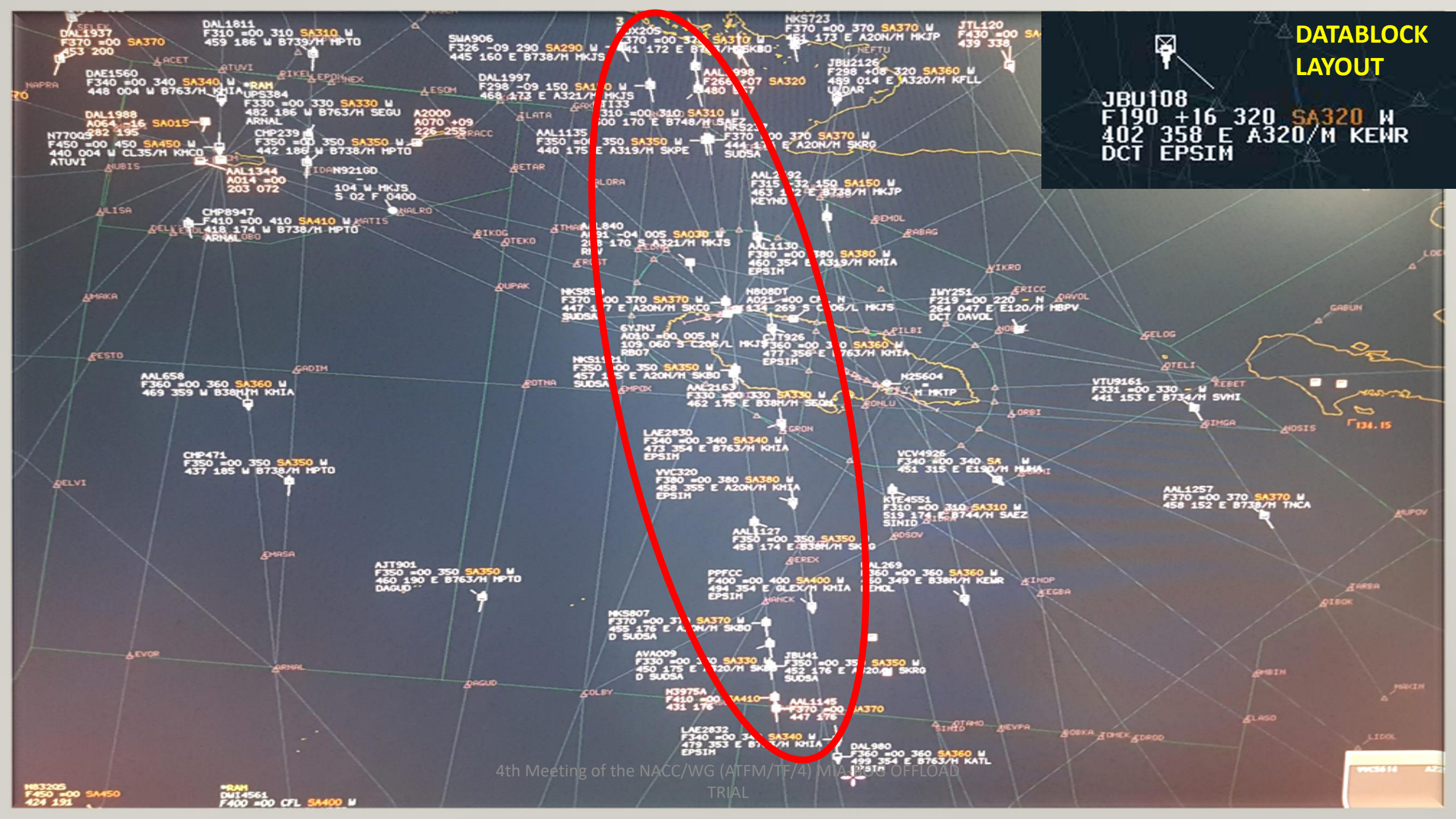
4th Meeting of the NACC/WG (ATFM/TF/4) MIA-BOG OFFLOAD

TRIAL



**DATABLOCK  
LAYOUT**

JBU108  
F190 +08 320 SA320 W  
402 358 E A320/M KEWR  
DCT EPSIM







# PROPOSED SOLUTIONS



TIMELINE	SOLUTION	STATUS
IMMEDIATE TERM	Use of TMMs (MITs etc) over shorter time periods on a “as needed basis”	<ul style="list-style-type: none"><li>• rarely used</li></ul>
NEAR TERM	<ul style="list-style-type: none"><li>• Pre-tactical/Tactical rerouting KMIA – SKBO TFC via EMABU UP406 SINID during the congested period of the day (1500-2000UTC).</li><li>• Datablock resize</li></ul>	<ul style="list-style-type: none"><li>• In progress (see NOTAM A0040/23)</li><li>• Plans to publish an AIC to concretise period of offload</li><li>• Plans in train to meet with software vendor re datablock modification/adjustment</li></ul>
MEDIUM TERM	Airspace restructuring/sectorisation (reimplementation of high/low sectors [A150- FL350; FL360+])  4th Meeting of the NACC/WG (ATFM/TF/4) MIA-BOG OFFLOAD TRIAL	<ul style="list-style-type: none"><li>• embryonic stages</li><li>• Requires additional staffing (training underway)</li><li>• Requires ATM software reconfiguration ( meeting scheduled with vendor to effect changes)</li></ul>



# KMIA- SKBO OFFLOAD RTE TRIAL

- Trial began on January 23, 2023.
- End date February 28, 2023.
- Target: All Miami departures destined to Bogota from entering KFIR 1400Z to 2000Z .
- Original (base) route: PUTUL UP406 SUDSA.
- Reroute: EMABU UP525 SINID.
- Purpose: optimize airspace via tfc redistribution (offload), reduce MITs & complexity.
- Benefits: optimal flight operations, reduced ATCO workload, greater efficiencies.

**A0040/23** - FLOW CONTROL PROCEDURE ACTIVATED. ROUTING OF ALL TRAFFIC DEPARTING MIAMI DESTINED BOGOTA SHALL ROUTE IN KINGSTON FIR VIA EMABU UP525 SINID. 08 1846-2000, 09-28 1400-2000, 08 FEB 18:46 2023 UNTIL 28 FEB 20:00 2023.

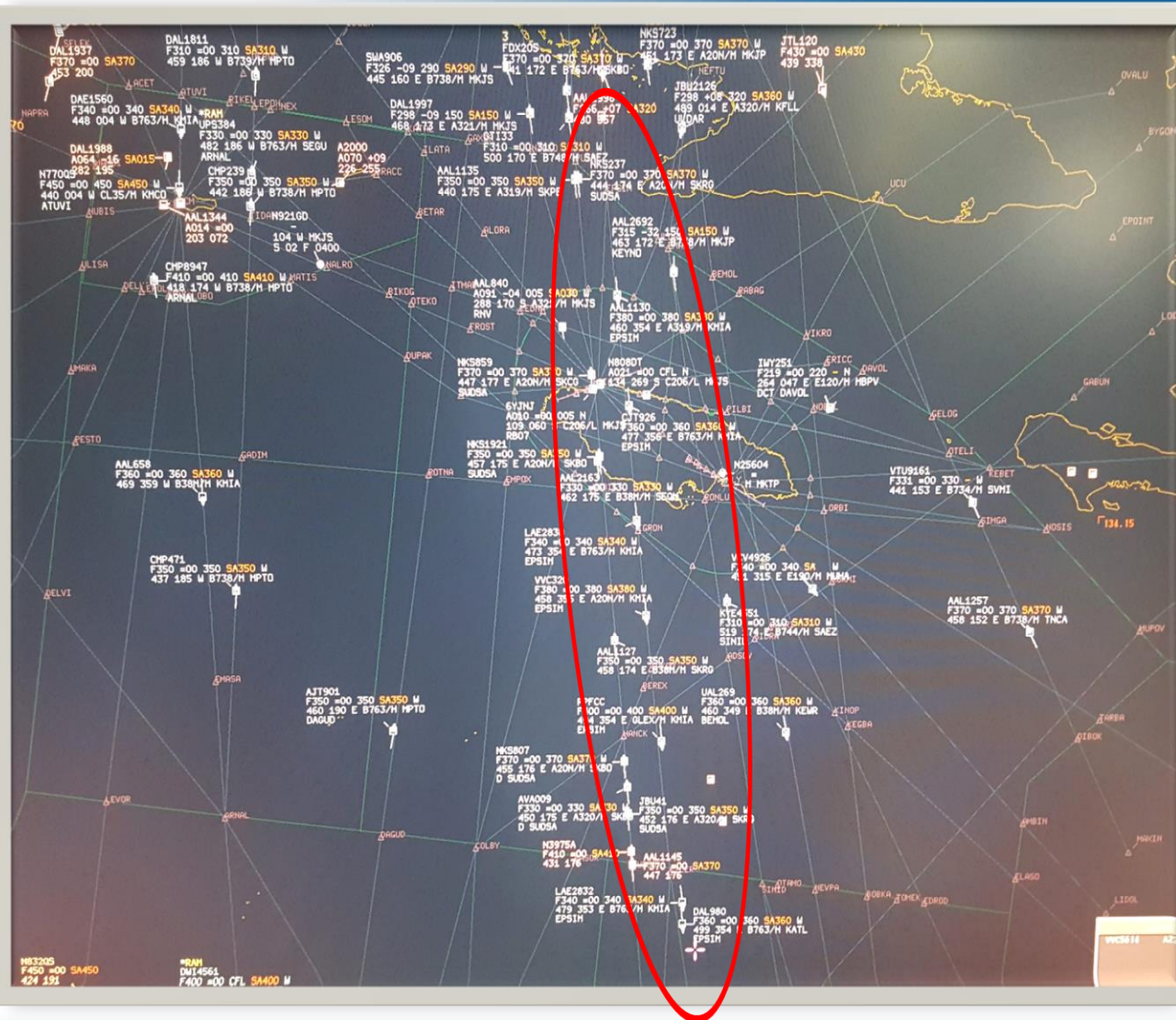
*MKJK REROUTE NOTAM*







# TRIAL PROGRESS

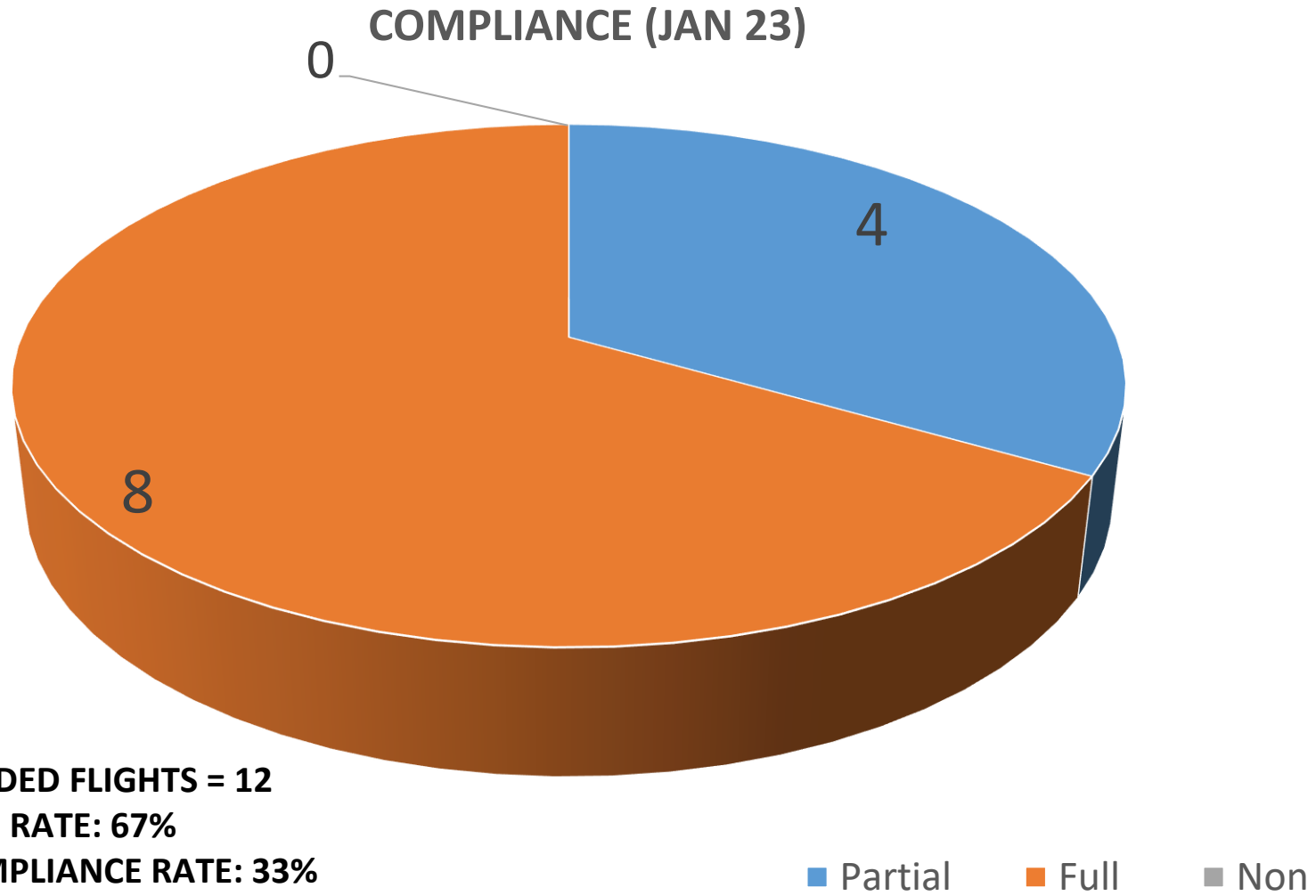


4th Meeting of the NACC/WG (ATFM/TF/4) MIA-BOG OFFLOAD TRIAL





# COMPLIANCE (JAN 23)

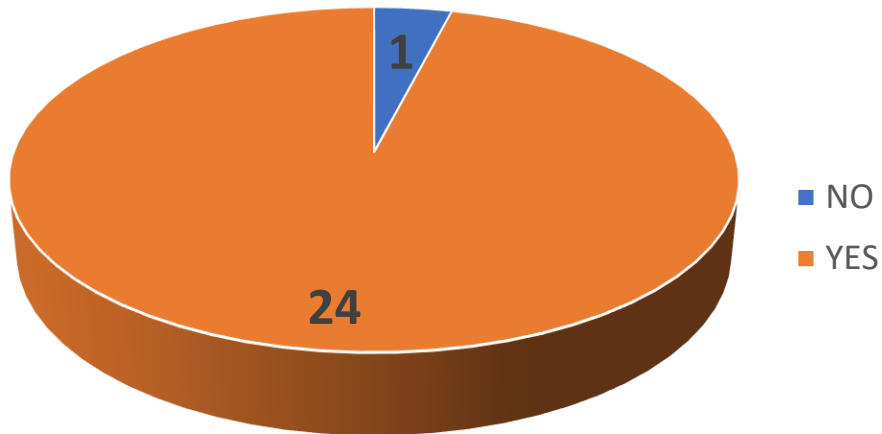




## NOTAM A0019/23

**FLOW CONTROL PROCEDURES ACTIVATED.  
ROUTING OF ALL TRAFFIC DEPARTING MIAMI  
DESTINED BOGOTA SHALL ROUTE IN KINGSTON  
FIR VIA EMABU UP525 SINID. 2301231400  
2301272100 DAILY 1400 - 2100**

COMPLIANCE (JAN 24-26)

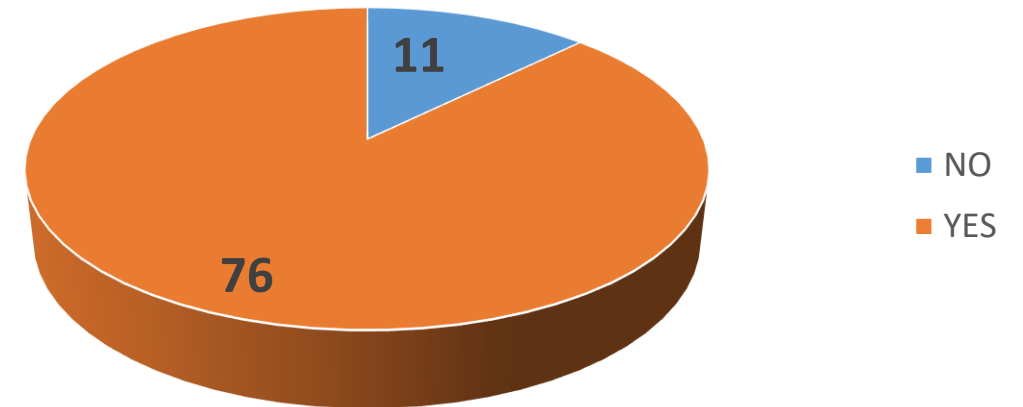


**TOTAL # OF OFFLOADED FLIGHTS = 25  
COMPLIANCE RATE: 96%  
NONCOMPLIANCE: 4%**

## NOTAM A0025/23 NOTAMR A0019/23

**FLOW CONTROL PROCEDURE ACTIVATED.  
ROUTING OF ALL TRAFFIC DEPARTING MIAMI  
DESTINED BOGOTA SHALL ROUTE IN KINGSTON  
FIR VIA EMABU UP525 SINID. DAILY 1400-2000.  
JAN 26-FEB 02, 2023.**

COMPLIANCE (JAN 26-FEB 02)



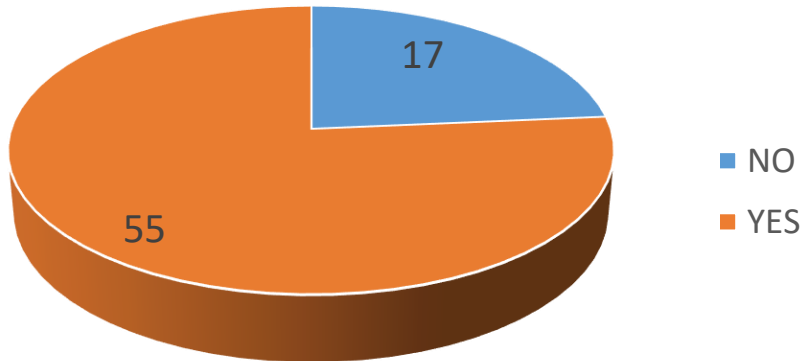
**TOTAL # OF OFFLOADED FLIGHTS = 87  
COMPLIANCE RATE: 87%  
NONCOMPLIANCE: 13%**



## NOTAM A0027/23 NOTAMR A0025/23

**FLOW CONTROL PROCEDURES ACTIVATED.  
ROUTING OF ALL TRAFFIC DEPARTING MIAMI  
DESTINED BOGOTA SHALL ROUTE IN KINGSTON  
FIR VIA EMABU UP525 SINID. 2301231400  
2301272100 DAILY 1400 - 2000**

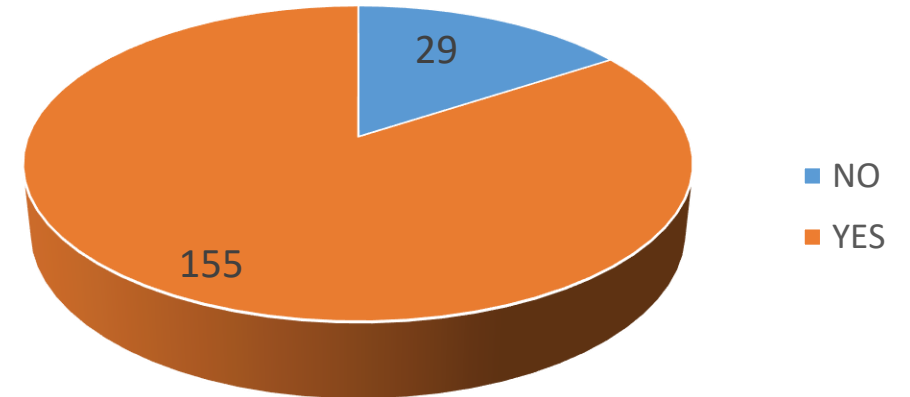
COMPLIANCE (FEB 02-FEB 09)



**TOTAL # OF OFFLOADED FLIGHTS = 72  
COMPLIANCE RATE: 76%  
NONCOMPLIANCE: 24%**

**FLOW CONTROL PROCEDURE ACTIVATED.  
ROUTING OF ALL TRAFFIC DEPARTING MIAMI  
DESTINED BOGOTA SHALL ROUTE IN KINGSTON  
FIR VIA EMABU UP525 SINID. JAN 24-FEB 09, 2023.**

COMPLIANCE (JAN 24-FEB 09)



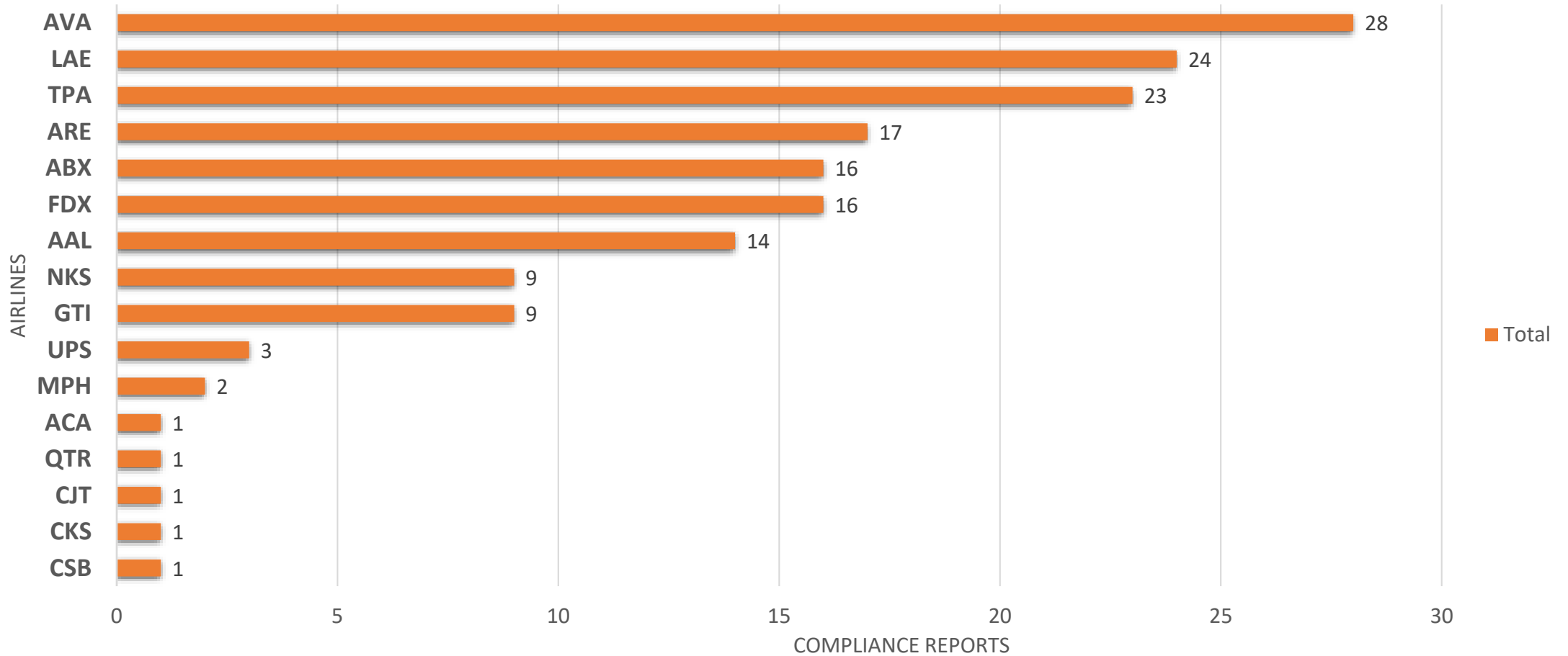
**TOTAL # OF OFFLOADED FLIGHTS =184  
COMPLIANCE RATE: 84%  
NONCOMPLIANCE: 16%**





# COMPLIANCE RATE BY AIRLINES

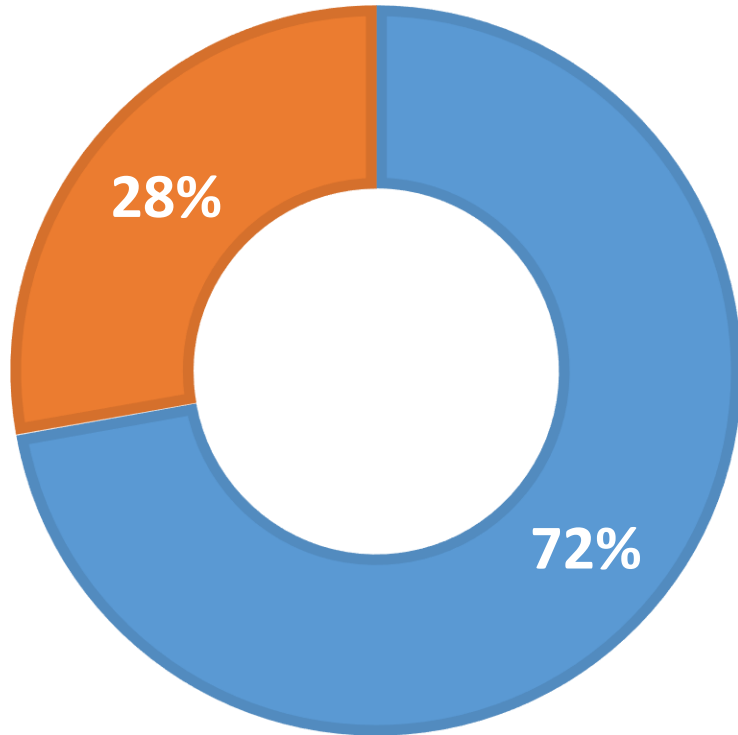
## COMPLIANCE BY AIRLINES (JAN 23-FEB 09)





# KMIA-SKBO OFFLOAD TRIAL RESULTS

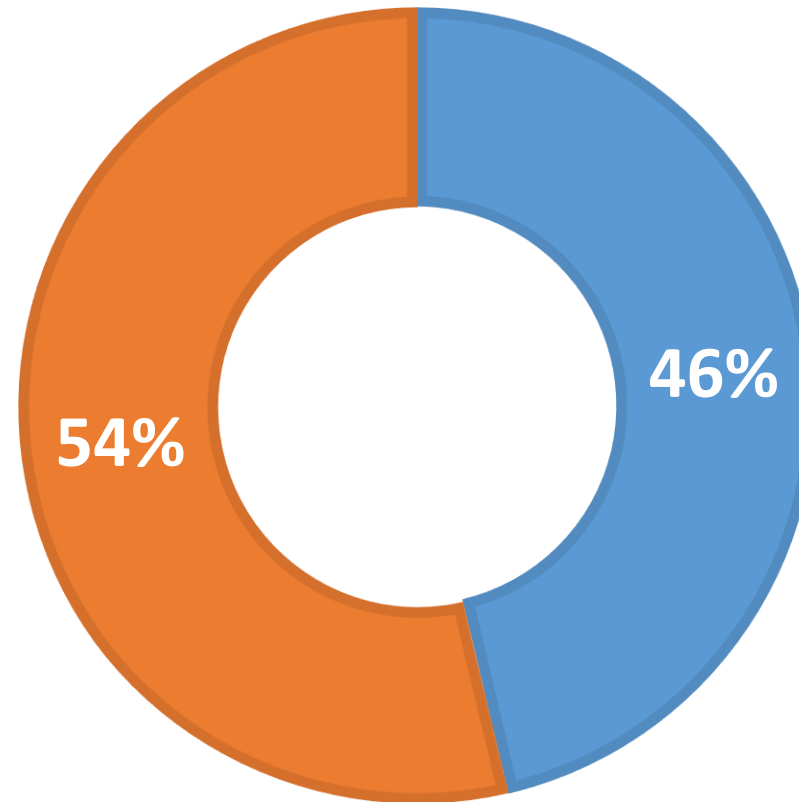
TFC DISTRIBUTION BEFORE OFFLOAD TRIAL



■ SUDSA

■ SINID

KMIA-SKBO OFFLOAD RESULTS JAN 23-FEB 09

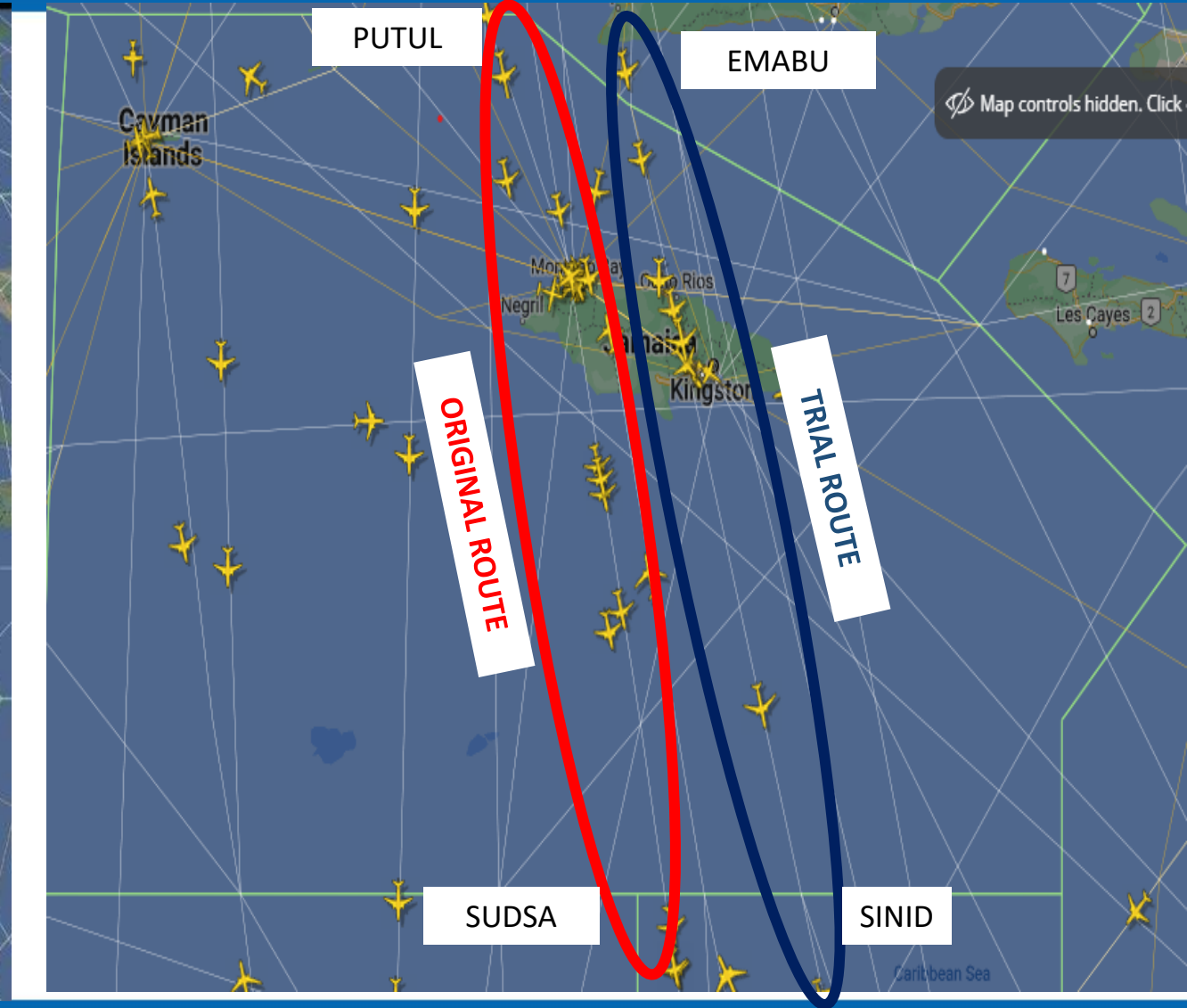
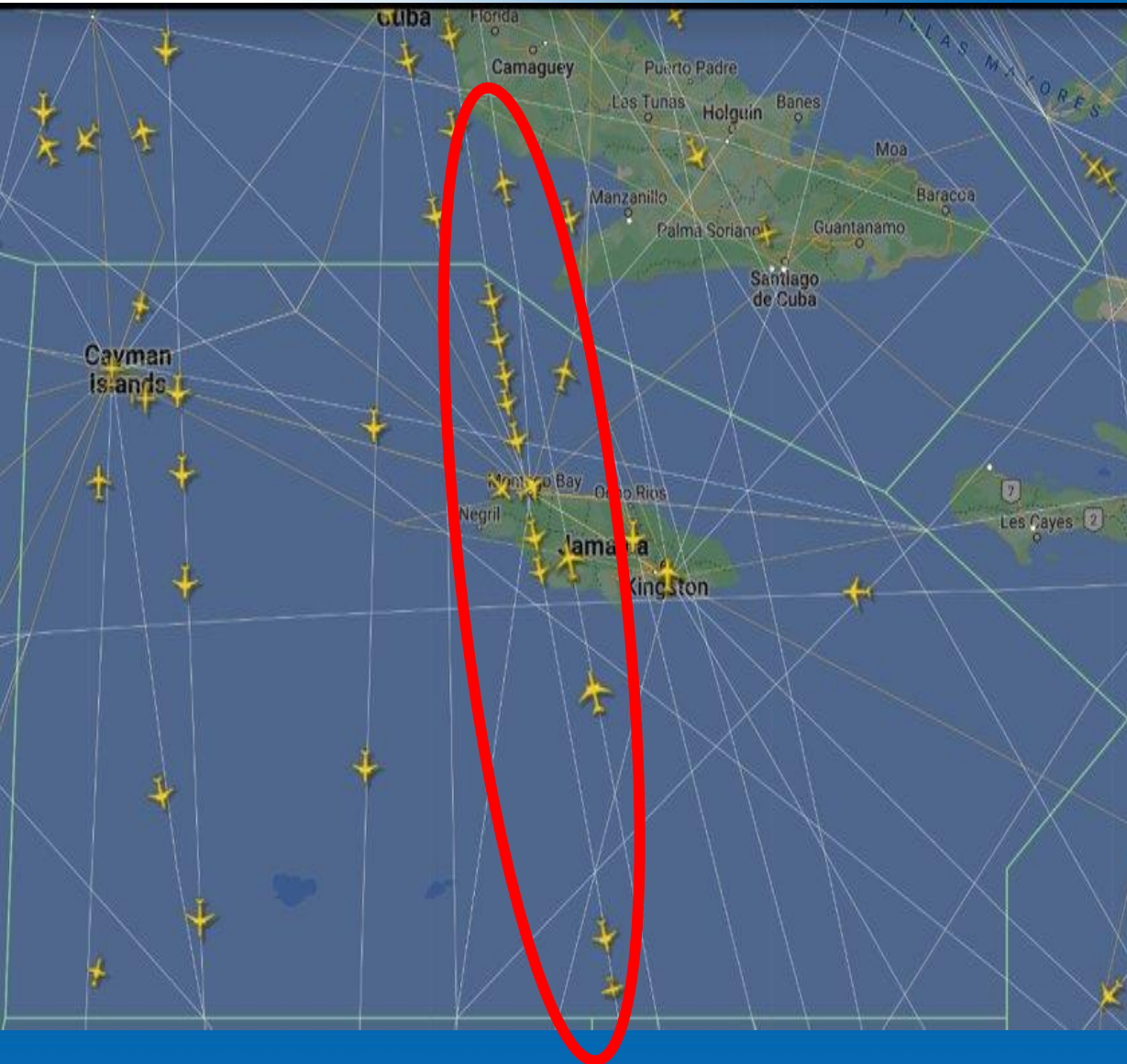


■ SINID

■ SUDSA



# KMIA-SKBO OFFLOAD TRIAL RESULTS







# FEEDBACK

- KMIA, MUFH & Bogota has been cooperative.
- Minimal complaints/issues from airlines/pilots (main concern is ROF after SINID).
- KFIR controllers surveyed (12) have been receptive & have expressed experiencing decreased workloads.
- Though early in trials, offload strategy has been achieving its purpose thus far, i.e. positive impact.
- Trial has been extended to Feb 28, 2023 (see NOTAM A0040/23)
- Publication of AIC in the pipeline.



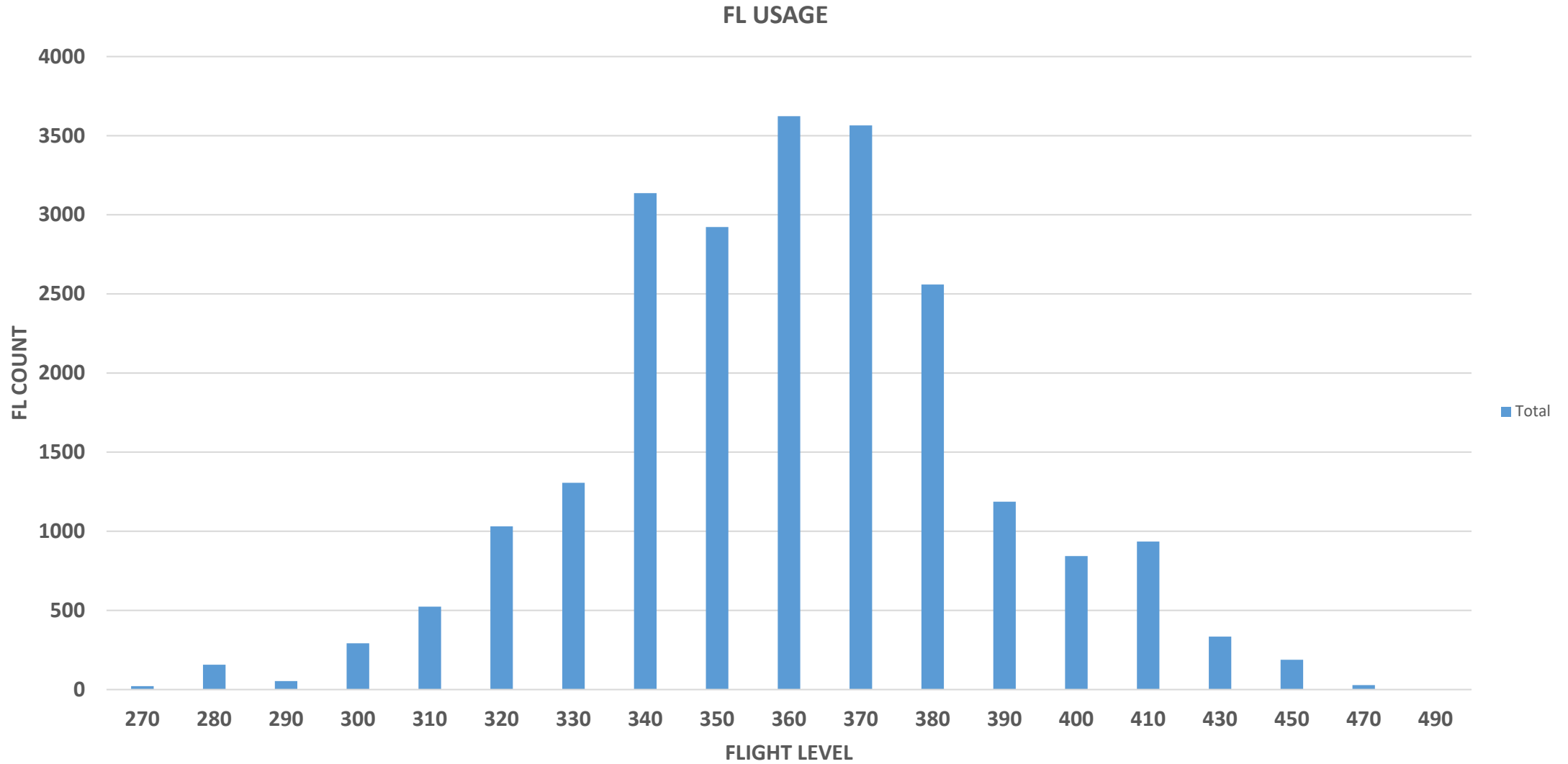
# What are your thoughts/comments?



- Airlines
- Impacted ANSPs
- Other stakeholders?



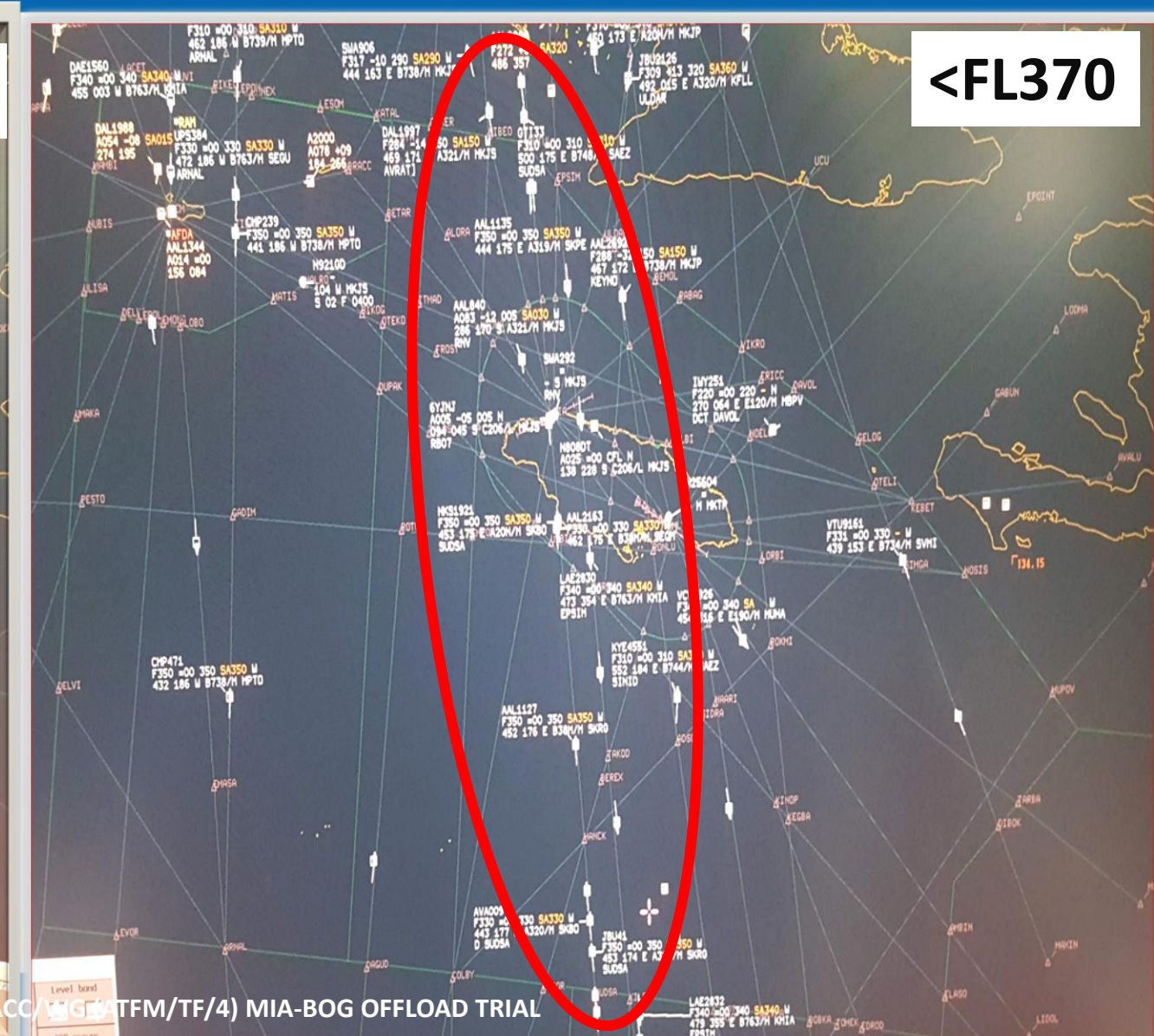
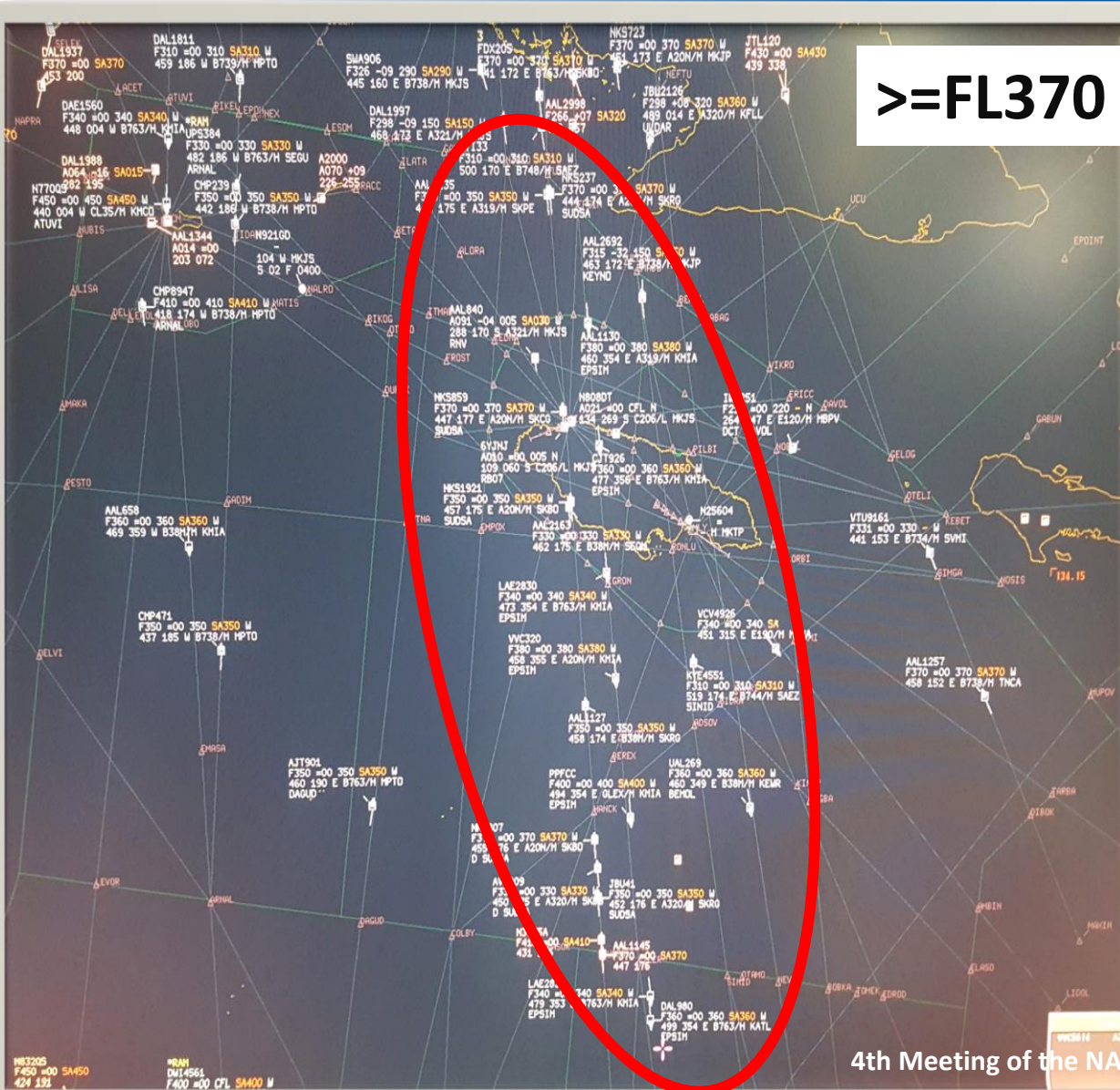
# AIRSPACE RESTRUCTURING/SECTORISATION







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4th Meeting of the NACC/NG (ATFM/TF/4) MIA-BOG OFFLOAD TRIAL



# AIRSPACE RESTRUCTURING/SECTORISATION

## 1. Requires additional staffing

- staff training underway.

## 2. Reconfiguration of ATM Software

- meeting scheduled with vendors to effect changes

## 3. New documentation needed

## 4. AIDC implementation

- more work needed to facilitate appropriate communication with MUFH





# THANK YOU



## QUESTIONS & COMMENTS?