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# **CAR/SAM ATS ROUTES NETWORK OPTIMIZATION PROPOSAL**



# INTRODUCTION

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- It is Kingston's intention to restructure its FIR which will encompass few uni-directional routes in an effort to increase our capacity, increase safety and also manage our demand.
- In achieving this objective, we will strategically realign, create or utilize current routes to reduce the impact on our adjacent FIR operations.

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Most States are moving away from ground base navigational aids (VORs) to satellite based (GNSS) technology due to precision and reliability. To airline operators (AO), these routes will provide savings on fuel, reduce flying distance and lessens airborne time.

# PROPOSALS

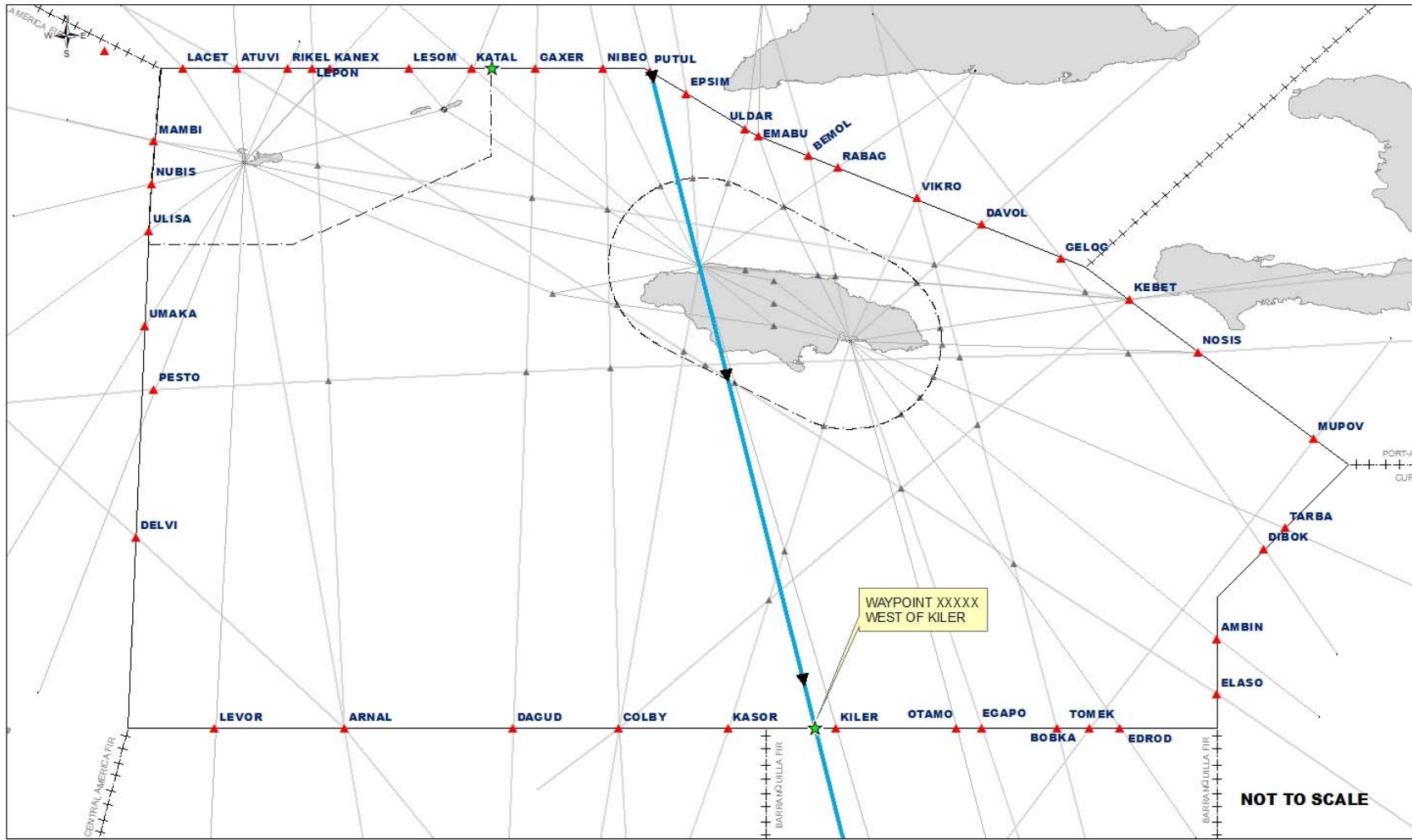
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- Southbound only PUTUL BUTAL creating a new point on MKJK/SKEC boundary west of KILER (new)
- Northbound only KILER EPSIM (realign and rename UG430) [SAM SC 5-21]
- Southbound only EMABU OTAMO (realign and rename UA301)
- Northbound only EGAPO BEMOL (realign UL417)
- BOBKA VIKRO remains bi-directional
- Northbound only UGUPI ATUVI (SAM SC 5-22 Proposal)

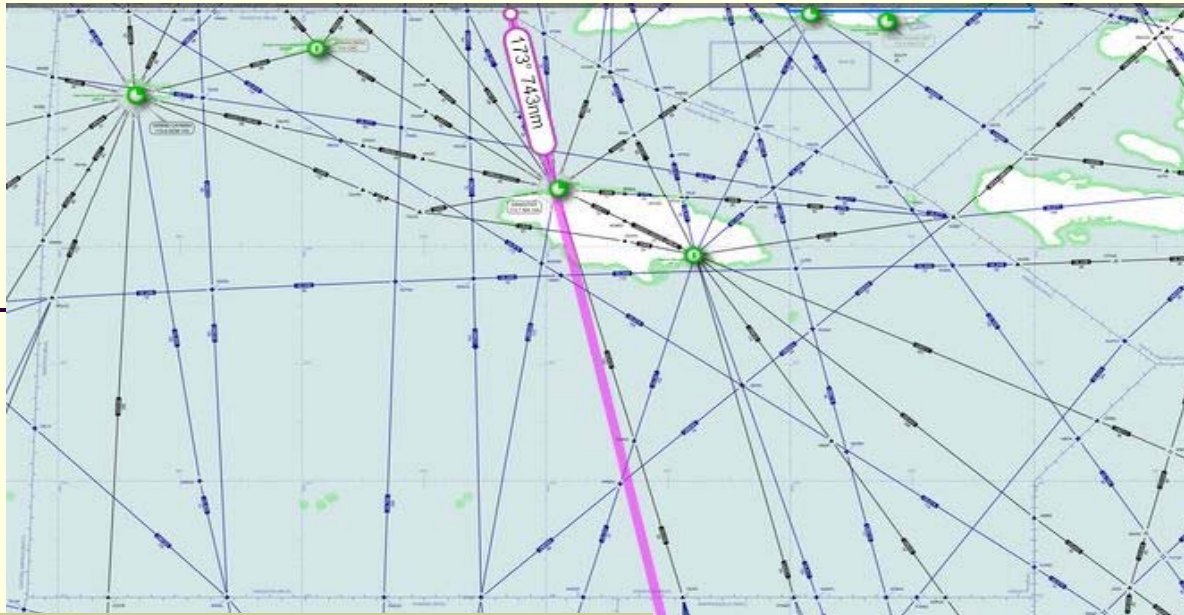


# JAMAICA/ COLOMBIA PROPOSALS

# S/BOUND ONLY - PUTUL DCT BUTAL



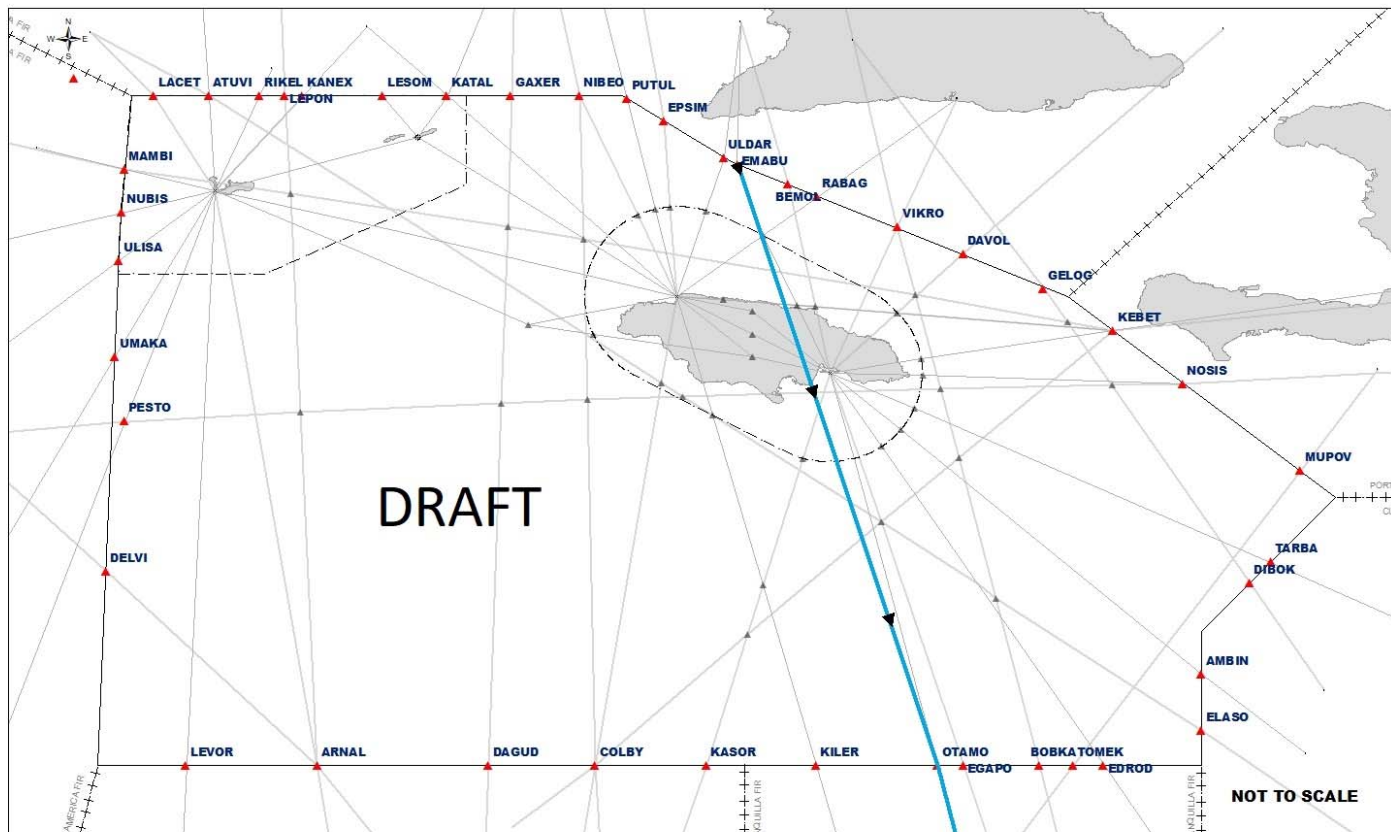
Southbound only PUTUL BUTAL creating a new point on MKJK/SKEC boundary west of KILER (new)



**Southbound only PUTUL BUTAL creating a new point on MKJK/SKEC boundary west of KILER (new)**

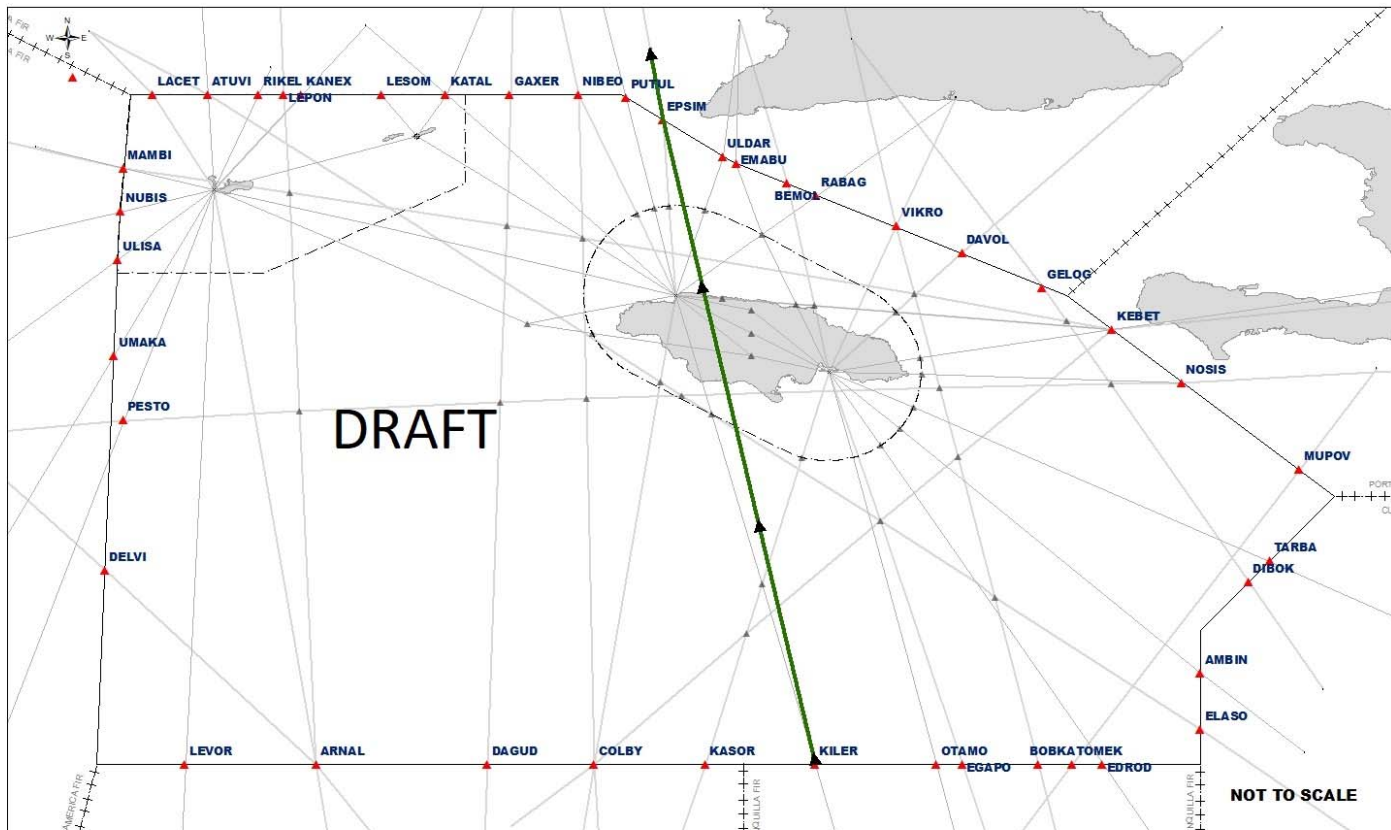


## S/BOUND ONLY -EMABU DCT OTAMO



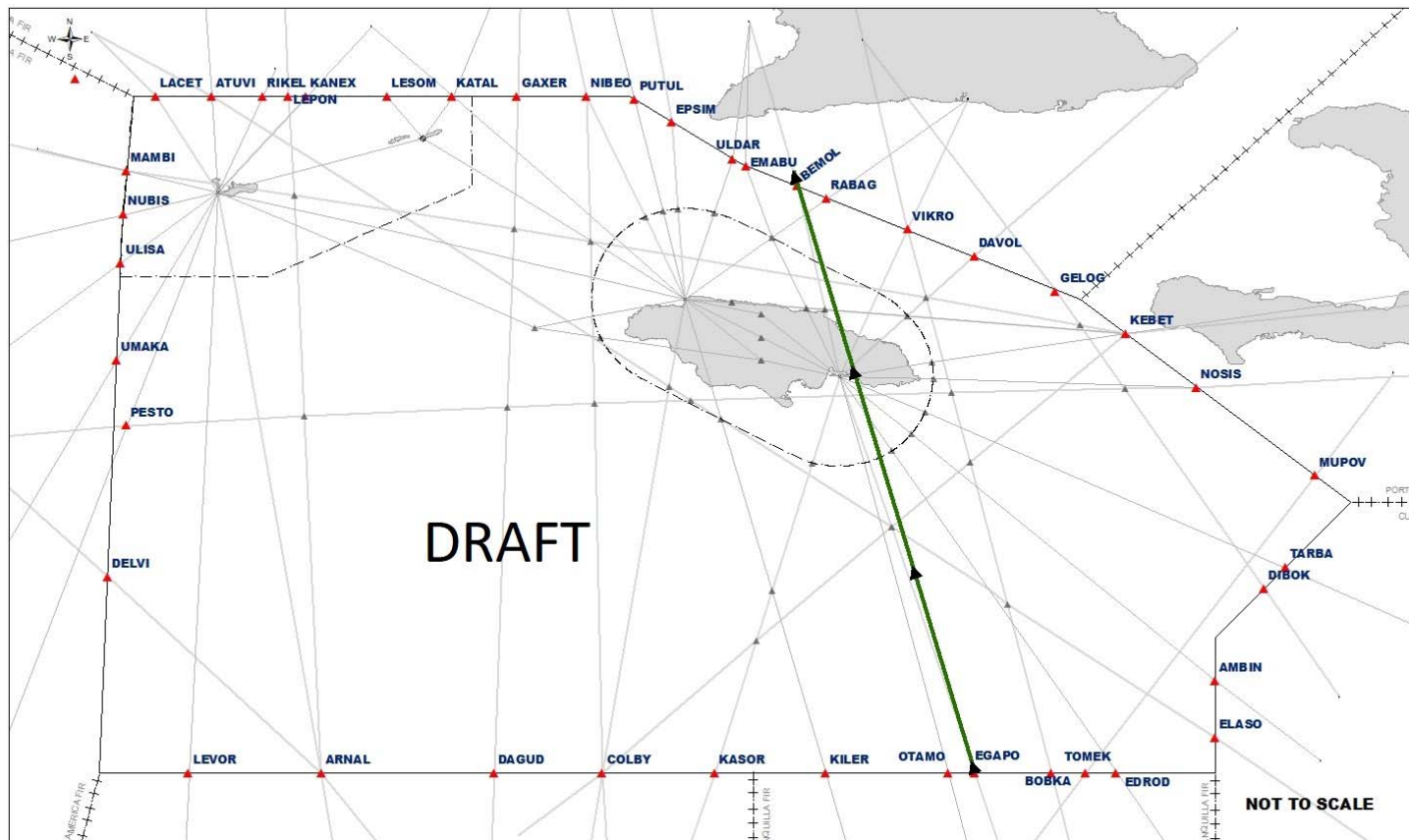
Southbound only EMABU OTAMO (realign and rename UA301)

## N/BOUND ONLY -KILER DCT EPSIM



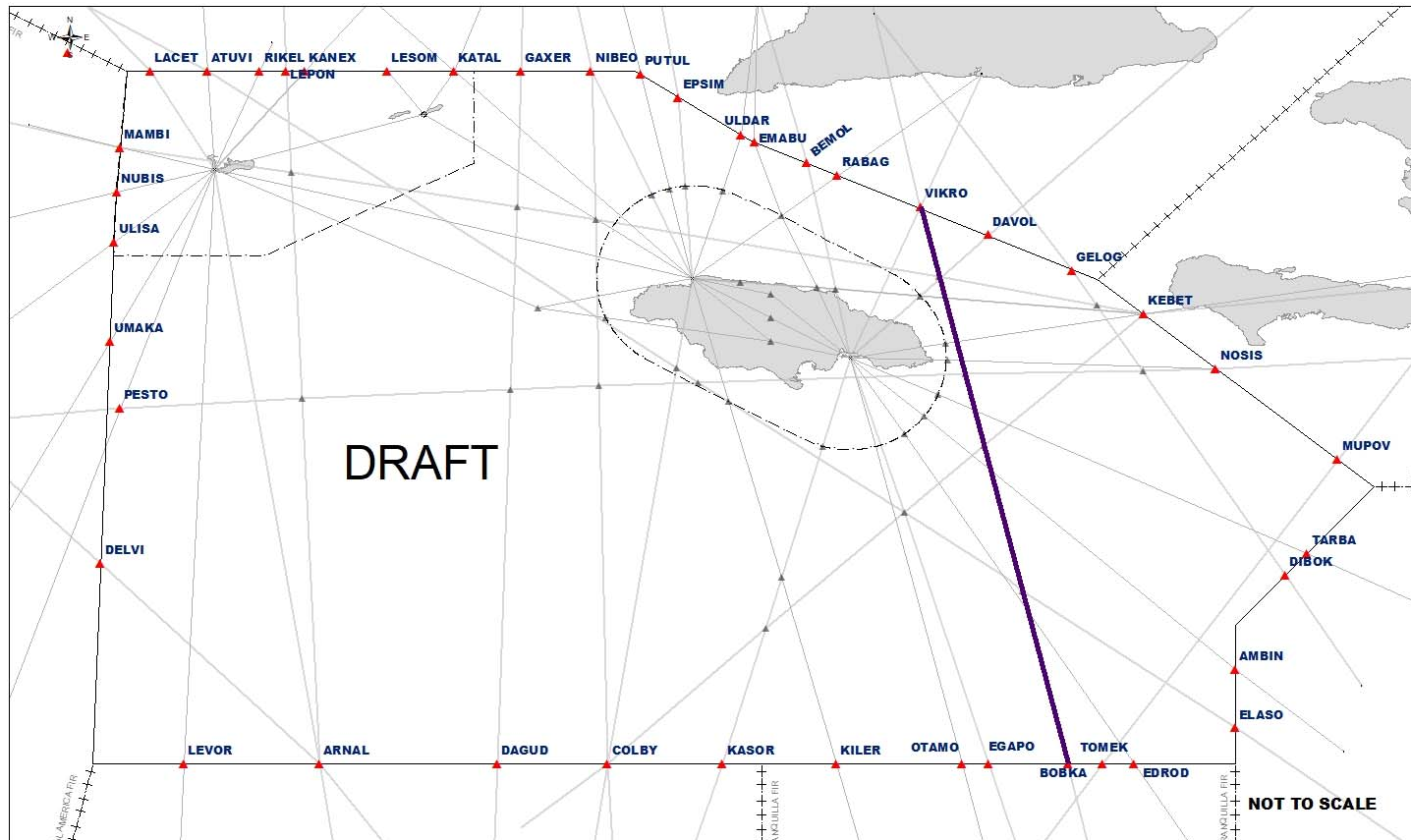
Northbound only  
KILER DCT EPSIM  
(realign and rename UG430)  
[SAM SC 5-21]

## N/BOUND ONLY -EGAPO DCT BEMOL



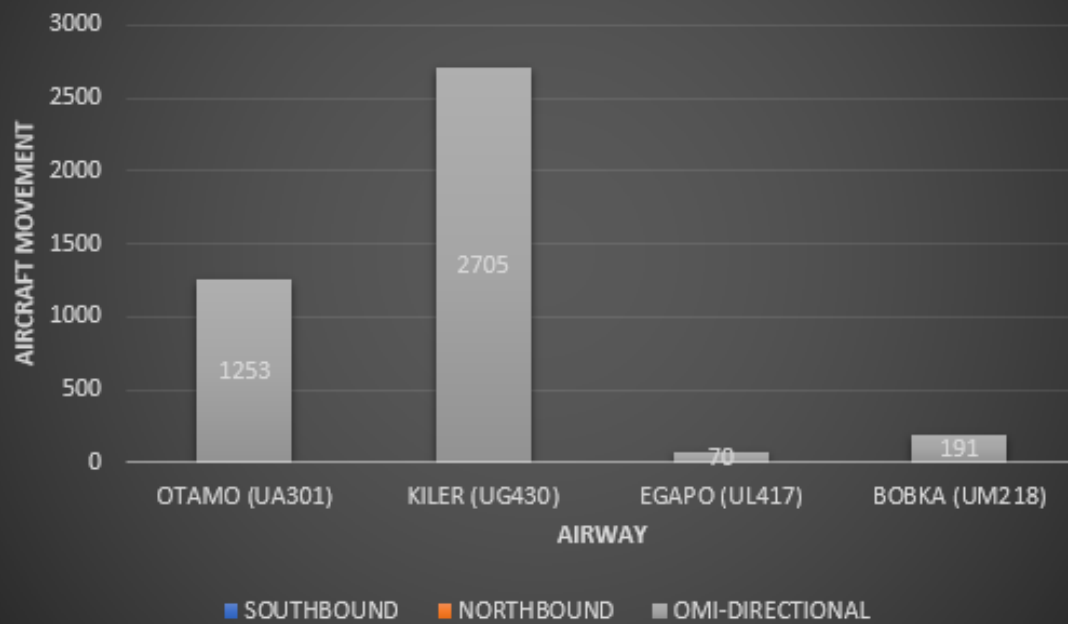
Northbound only  
EGAPO BEMOL  
(realign UL417)

# BOBKA VIKRO REMAINS BIDIRECTIONAL

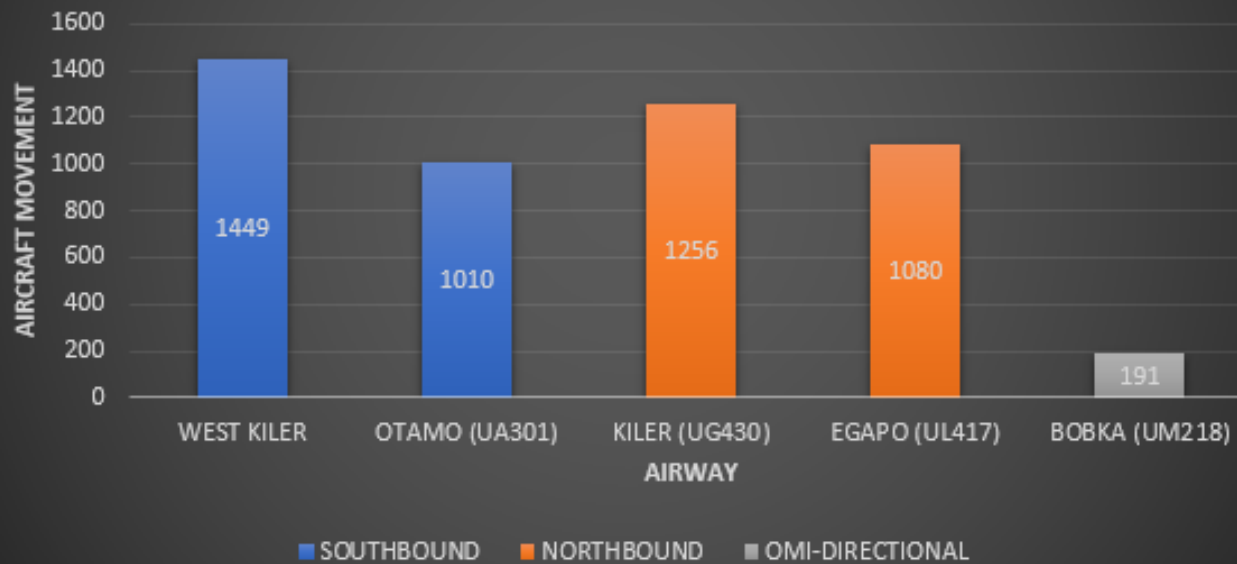


BOBKA VIKRO remains bi-directional

## CURRENT SITUATION MAY 2019 CUBA/JAMAICA/COLOMBIA



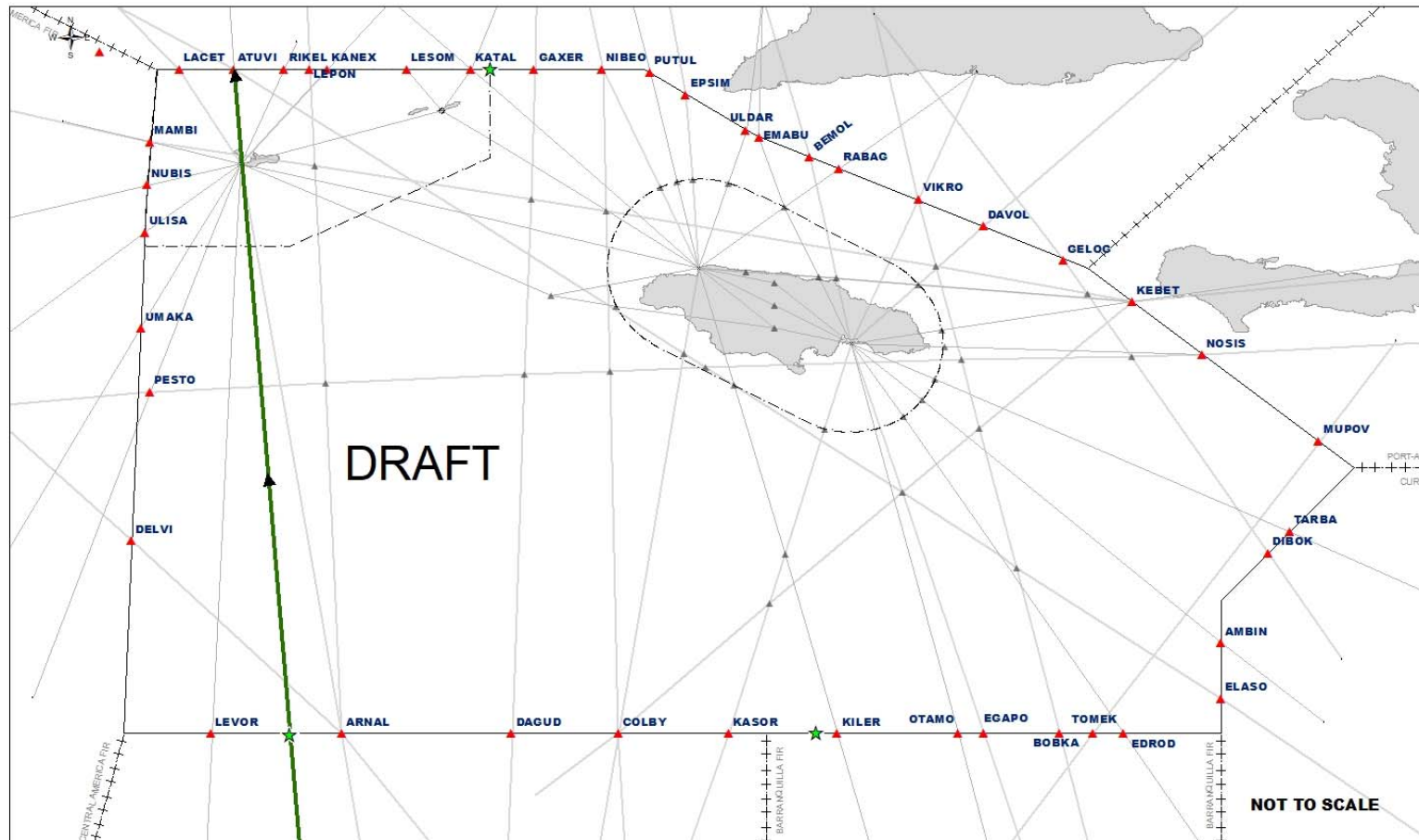
## AFTER UNI-DIRECTIONAL ROUTES ARE IMPLIMENTED CUBA/JAMAICA/COLOMBIA



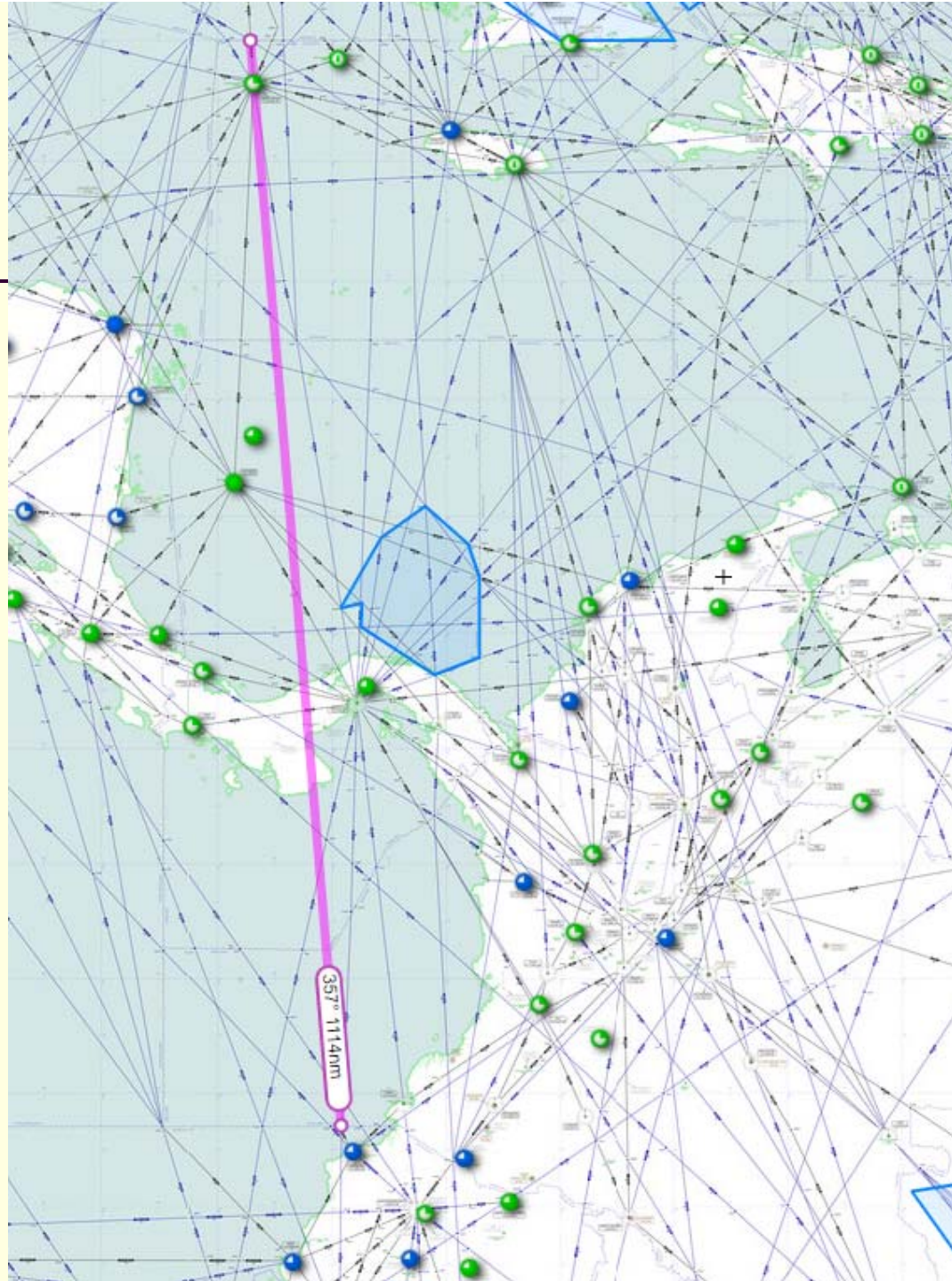


# JAMAICA/ PANAMA PROPOSAL

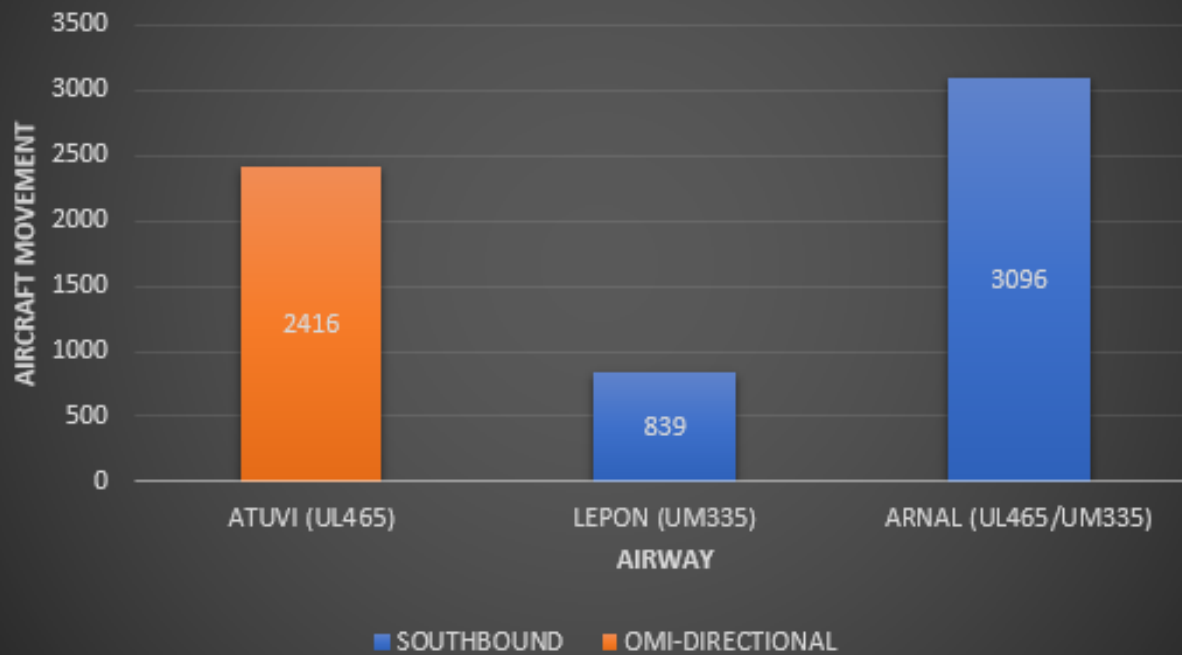
# N/BOUND UGUPI DCT ATUVI



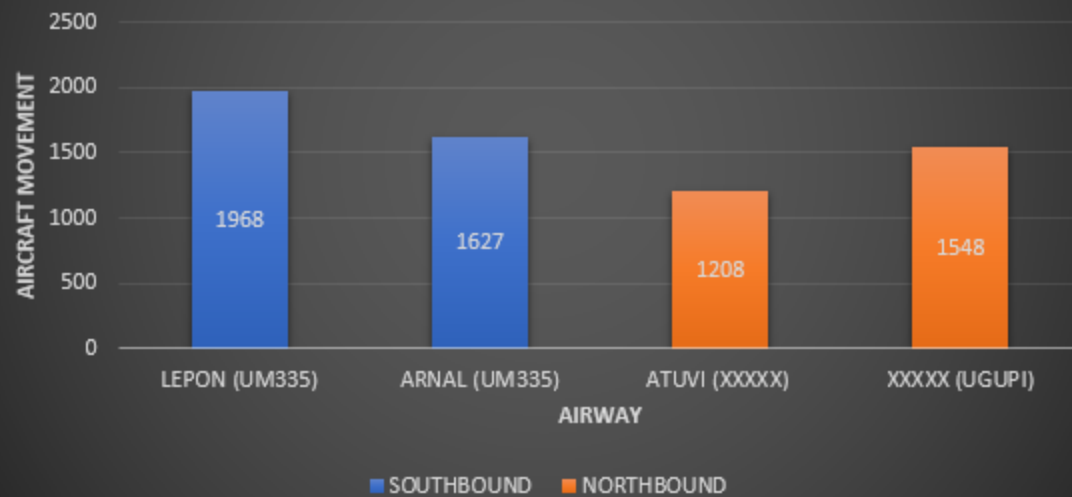
Northbound only  
UGUPI ATUVI  
(SAM SC 5-22 Proposal)



## CURRENT SITUATION (MAY 2019) CUBA/JAMAICA/PANAMA



## AFTER UNI-DIRECTIONAL ROUTES ARE IMPLIMENTED CUBA/JAMAICA/PANAMA



# JUSTIFICATIONS

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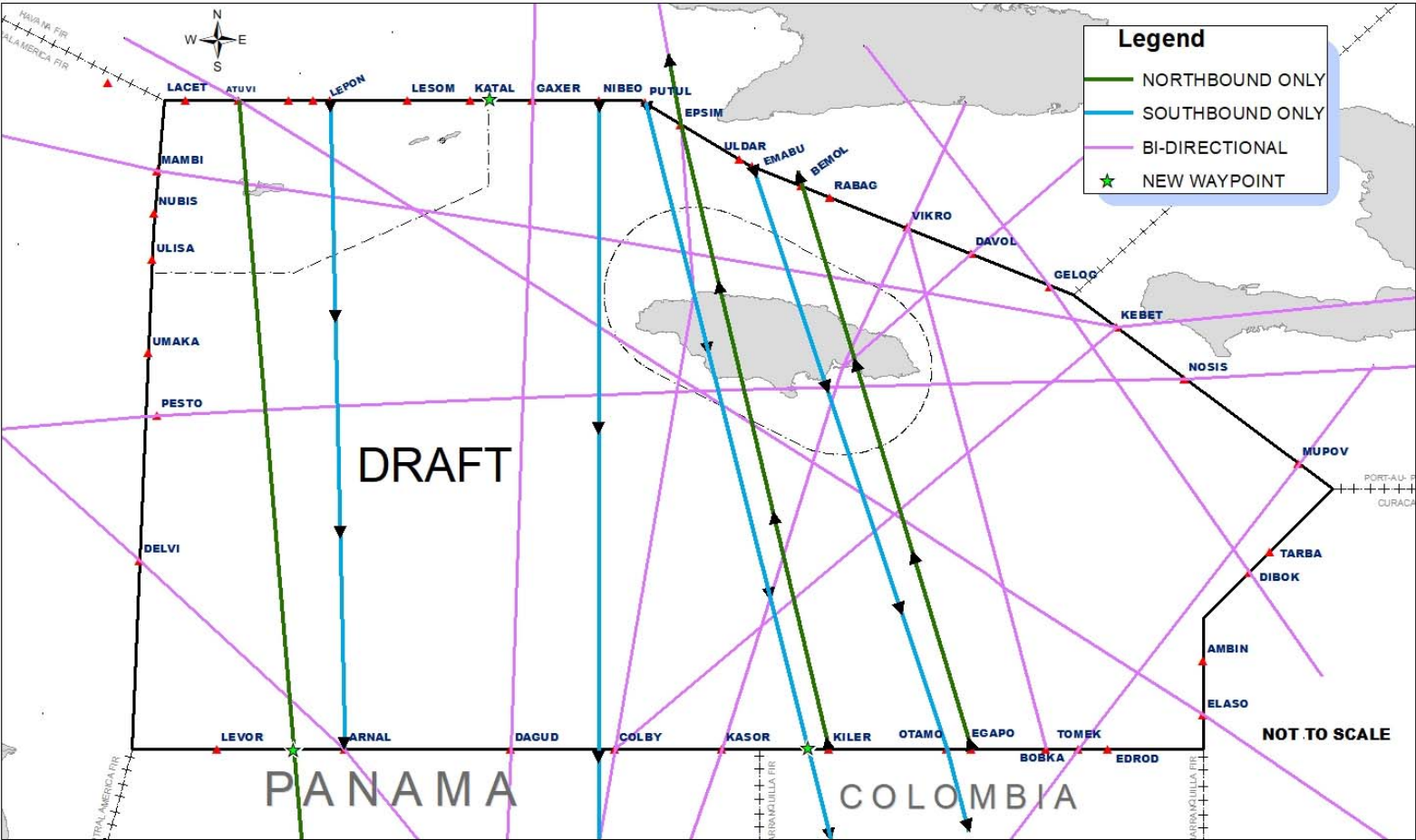
- These uni-directional routes are currently in use between Havana ACC and Miami ACC to efficiently manage the flow of traffic in and out of airports in Florida. This has reduced safety concerns which existed and increase their capacity.

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- As a result of, Havana has introduced those routes to Kingston ACC; a few of which are already implemented to the north.
  - Reduces complexity within the airspace, departures are easily integrated into traffic flow because there is no opposition directional traffic to separate

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- Arrivals are effortlessly transitioned from the stratum to Approach Control using the tunnelling tools available in air traffic flow management
  - Similarity to the Direct Routing system which some States currently utilizes
  - More aircraft operating at optimal flight level reducing CO2 emissions

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- Facilitates CCO and CDO by allowing pilots to manage the configuration to their aircraft making it more fuel and cost efficient

# KFIR UPPER AIRSPACE



# ¿PREGUNTAS?

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**GRACIAS**