LIR12NM Work P/02

Agenda Item 1

Date: November 18, 2021

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COCESNA

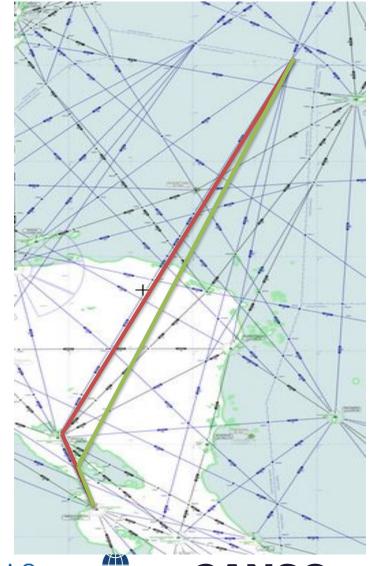








LIR12NM Work - Background



Describe background

Liberia Airport (MRLB/LIR) is one of two international airports in Costa Rica.

As part of airspace optimization efforts, COCESNA and Costa Rica suggests new higher altitude route that cut 12NM as shown.

Flight arriving LIR from North-East can take advantage.

7 airlines operate to LIR from east coast of US and Canada.







Airlines flying to MRLB November 1 to November 15

COMPANY	FTS/WEEK	Departure	Aircraft T.
AAL	7	KMIA	A319
DAL	6	KATL	B752
JBU	5	KJFK	A320
UAL	4	KEWR	B738
ACA	3	CYYZ/CYUL	B38M
WJA	3	CYYZ	B738
SWG	2	CYYZ	B738
	30		

Miles/week	Miles/month	Miles/year
84	336	4,032
72	288	3,456
60	240	2,880
48	192	2,304
36	144	1,728
36	144	1,728
24	96	1,152
360	1,440	17,280







LIR12NM Work – Estimation of Benefits

21,900 miles saved per year

3,129 min saved per year

131,400 kg (fuel) saved per year

289,687 lbs (fuel) saved per year

415,224 kg (CO2) saved per year

100,720 US \$ saved per year (fuel cost)

312,857 US \$ saved per year (op cost)

413,577 US \$ saved per year (fuel & op cost)

Significant savings can be achieved with LIR12NM work

Assumptions:

- 12 miles saved per flight
- 5 flights per day
- 365 days per year
- B737/A320
- 42 kg fuel burned per min
- 7 miles per min
- 3.16 kg of CO2 produced per kg of fuel
- 2.3295 US\$ per gallon
- 100 US\$ per min of op cost







LIR12NM Work – Next Steps

Training

- ANSP Controllers
- Airline Dispatchers/Pilots

Publish Route

Gather Data

Report Results









Any Questions?

Thank you!

