



AP/ATM/6  
WP/37  
25/09/03

**International Civil Aviation Organization  
UNDP/ICAO Regional Project RLA/98/003  
Transition to the CNS/ATM Systems in the CAR and SAM Regions**

**Sixth Meeting/workshop of Air Traffic Management (ATM) Authorities and  
Planners for RVSM, RNAV routes and RNP implementation in the CAR and SAM Regions**

(San José, Costa Rica, 29 September-3 October 2003)

**Agenda Item 4: Other matters**

**Implementation of North Atlantic/Caribbean (NAC) Routes**

(Presented by the United States of America)

**SUMMARY**

The Federal Aviation Administration (FAA) recommends implementation of new NAC route designators for aircraft operating between the Caribbean and North Atlantic ICAO Regions. The NAC Routes do not add or change any existing routes, they allow multiple route-legs to be coded under a single NAC identifier. These routes will reduce coordination, simplify flight planning, eliminate confusion when exchanging route information, and increase safety

**1. Introduction**

1.1 Oceanic Air Traffic Control clearances for aircraft southwestbound across the Atlantic are issued in accordance with ICAO North Atlantic (NAT) requirements for "Oceanic Clearances." An oceanic clearance includes the portion of the route from the oceanic entry point to the oceanic exit point. For aircraft proceeding beyond the NAT and continuing in Caribbean oceanic airspace, the oceanic clearance must be appended with the remainder of the route which is often quite lengthy. This is usually performed with High Frequency radio relay and can take up to 20 minutes to ensure complete understanding between the pilot and ATC.

**2. Discussion**

The U.S. has developed 14 NAC routes serving 21 airports. Additional routes could be developed and added as necessary to ensure the most efficient service to operators.

2.1 NAC routes do not add or modify existing routes or airways. They allow lengthy clearances to be condensed into a short phrase

2.2 For example: an aircraft filed from London across the Atlantic to Mexico City would have an oceanic clearance that ends at MTHOL, a fix located at 28N60W. The controller is required to issue/confirm the remainder of the routing with the pilot which includes: MTHOL A705 MILLE A637 ALUTE ZQA CANOA B646 ROBIN UR522 PAZ UJ102 PCA direct MMMX. We propose that this routing be coded as NAC 6 which could be filed by dispatch and issued to the pilot as such.

2.3 Adopting the NAC routes as shown in the attachment would dramatically reduce HF frequency congestion. More importantly, it will eliminate incidents wherein the pilot and ATC are using different route information. There have been several instances where operational deviations have occurred because the pilot and ATC did not have the same route information for the flight. Using the NAC route format will allow quick and easy verification.

2.4 It would be advantageous for the NAC routes to be implemented as soon as possible. All involved States will need to agree in order to implement the system. However, since existing Air Traffic Service Routes will not require modification, and no additional routes or fixes are being added, very little modification to ATS automation systems and operational procedures are required.

2.5 Additional NAC routes may be added anytime they are needed. Again, our view is that they would simply incorporate existing, commonly-flown routes. They would never be developed as a "stand-alone" route.

2.6 We do not envision that the NAC routes would be published on charts, although if the group believes it to be useful, it could easily be done. We propose the NAC routes be contained in the International Flight Information Manual (IFIM) and initially implemented via International NOTAM.

### **3. Action**

3.1 The FAA asks that the Meeting consider the implementation of the NAC routes as described in this paper and on the attached list.

-----

**APPENDIX A**  
**Proposed North Atlantic/Caribbean (NAC) Routes**

<b><u>NAC#</u></b>	<b><u>DSTN</u></b>	<b><u>ROUTE</u></b>
1	MYNN	MTHOL A705 MILLE A637 ALUTE ZQA
2	MIA	MTHOL A705 MILLE A637 ALUTE FOWEE FOWEE STAR
2a	FLL	MTHOL A705 MILLE A637 ALUTE CAREY DEKAL DEKAL STAR
3	PBI	R514/A699 SUMRS A699 NUCAR WALIK DIRECT
4	MUHA	MTHOL A705 MILLE A637 ALUTE ZQA R628 TANIA
	MUVR	MTHOL A705 MILLE A637 ALUTE ZQA R628 TANIA
5	MUGM	LETON DIRECT BYGON
6	MMMX	MTHOL A705 MILLE A637 ALUTE ZQA CANOA B646 ROBIN UR522 PAZ UJ102 PCA
7	MMUN	MTHOL A705 MILLE A637 ALUTE ZQA CANOA B646 VINKA B879 GUN
	MMCZ	MTHOL A705 MILLE A637 ALUTE ZQA CANOA B646 VINKA B879 GUN
8	MBGT	LUNNI B891 WATRS
9	MUHG	LUNNI B891 WATRS GTK ZIN
	MUHA	LUNNI B891 WATRS GTK ZIN
	MUVR	LUNNI B891 WATRS GTK ZIN
	MUGM	LUNNI B891 WATRS GTK ZIN
10	MDPP	LUNNI B891 POKEG
	MDSO	LUNNI B891 POKEG
12	MDLR	GRANN A523/G432 THANK A319 BETIR
13	MTPP	LUNNI B891 WATRS BOTES
14	MKJP	LUNNI B891 ETBOD G633 BENET
	MKJS	LUNNI B891 ETBOD G633 BENET