



**THE FORTY-FOURTH MEETING OF THE
INFORMAL PACIFIC ATC CO-ORDINATING GROUP
(IPACG/44)**

(Honolulu, Hawaii, 22 & 23 August 2018)

Agenda Item 6: Air Traffic Management (ATM) Issues

Strategic Lateral Offset Procedure (SLOP)

(Presented by Federal Aviation Administration)

SUMMARY
This paper requests coordination in support of the NAT Math Working Group for one specific US operator to fly offset positions in increments of 1/10 of a nautical mile (NM) to the right of the route centerline up to a maximum of 2 NM. Data obtained from these flights would support more robust implementation of Strategic Lateral Offset Procedures (SLOP), in increments of 1/10 of a NM.

1. Introduction

- 1.1. The Strategic Lateral Offset Procedure (SLOP) has been a recommended practice in the North Atlantic airspace (NAT) since June 2004. The purpose is to reduce the concentration of aircraft operations about route centerline, which is characteristic of aircraft with highly accurate navigational systems, such as Global Navigation Satellite System (GNSS), thus reducing the risk of collision in the vertical dimension.
- 1.2. Paragraph 16.5 of the ICAO Doc 4444, Procedures for Air Navigation Services Air Traffic Management (PANS ATM) now includes offsets to the right of the centerline relative to the direction of flight in tenths of a nautical mile up to a maximum of 2 NM. However, authorization for the application of strategic lateral offsets from the appropriate air traffic systems (ATS) authority responsible for the airspace concerned is required. However, only three SLOP options are listed in State Aeronautical Information Publications (AIP): centerline, 1 NM right, or 2 NM right.
- 1.3. This paper assumes the reader is familiar with the safety benefits of SLOP. The SLOP with three options reduces risk by simply introducing randomness to an aircraft's route. The SLOP with twenty-one options (1/10 NM SLOP) provides the opportunity for even more randomness to be introduced, which would further reduce the risk estimates.

2. Discussion

- 2.1. The Federal Aviation Administration requests your coordination in support of a request by the North Atlantic Math Working Group (NAT/ MWG, MWG54 IP10 refers)) to facilitate collection and processing of Automatic dependent surveillance — contract (ADS-C) reports where offsets were flown in 0.1NM increments. This NAT/MWG work is intended to support adoption of the 0.1NM offsets published in the PANS ATM, paragraph 16.5. SLOP flown in

- 2.2. 0.1NM increments increases the available offset options, thereby favourably affecting the collision risk estimate.
- 2.3. The specific request is to allow a single operator, the US Air Force (USAF), with a single aircraft type, the C-17 Globemaster, to fly SLOP in 0.1NM increments, up to a maximum of 2.0NM right of centreline, as is published in Doc 4444. State AIPs in the NAT currently restrict SLOP to centreline, or right offsets of either 1NM or 2NM, so this authorization would be valid despite contrary language in the State AIPs. The C-17s flying 0.1NM offsets would be for a 1-year defined period, to begin as early as October 1, 2018, and could be terminated at any time if unexpected problems arise. The USAF would use an offset schedule associated with the Julian Date, coordinated with the NAT/MWG. Typical call sign for the USAF C-17s is "RCH;" there are approximately 220 C-17s in the USAF fleet, with frequent Transatlantic crossings.

3. Conclusion

- 3.1 The meeting is invited to note the information provided.