THE FORTY-FIFTH MEETING OF THE INFORMAL PACIFIC ATC CO-ORDINATING GROUP (IPACG/45)

(Tokyo, Japan, 11 & 12 December 2019)

Agenda Item 7: ATM Issues

Strategic Lateral Offset Procedure (SLOP) Updates

(Presented by *United States*)

SUMMARY

Several updates regarding SLOP are provided, including FAA implementation of SLOP in 0.1NM increments (also referred to as "micro SLOP"), avionics capability of offsets in 0.1NM increments, and the close-out of the C-17 SLOP data-gathering effort.

1. Introduction

1.1 The Strategic lateral offset procedure (SLOP) has been promoted and practiced in oceanic airspace for a number of years. The standards for SLOP have been established by ICAO through Document 4444, Procedures for Air Navigation Services − Air Traffic Management.

1.2 This paper provides updates on SLOP, in the following categories:

a) FAA implementation of SLOP in 0.1NM increments;

b) avionics capability of offsets in 0.1NM increments; and

c) close-out of the C-17 SLOP data-gathering effort (IPACG/44 – IP/09 refers).

2. Discussion

FAA implementation of SLOP in 0.1NM increments

2.1. Attachment A to this IP is an item excerpted from the FAA's November 7, 2019 edition of its "Notices to Airmen Publication (NTAP)," titled "Strategic Lateral Offset Procedure (SLOP) while within Oceanic Airspace." This item originally appeared in the September 12, 2019 edition of the NTAP, in accordance with the globally coordinated implementation date. The notice will be removed from the AP after the procedures are published in the Aeronautical Information Publication, planned for the January 30, 2020 edition.

2.2. The item describes FAA implementation of SLOP in 0.1 NM increments, which is to provide an additional safety margin and mitigate the risk of conflict when non−normal events, such as aircraft

navigation errors, altitude deviation errors, and turbulence−induced altitude−keeping errors occur.

Avionics Capability of Offsets in 0.1NM Increments

2.3. During the 8th Meeting of the North Atlantic Technology Interoperability Group (NAT TIG08 Summary of Discussions and NAT Implementation Management Group (IMG)/55 - WP10 refer), avionics manufacturers described their capabilities for offsets in 0.1 NM increments. Following is a summary of what they presented:

a) Airbus:
None of the currently certified FMS S/W on the Airbus civil fleet has an Offset capability with a resolution of 0.1NM (all versions have a resolution of 1NM). 0.1NM SLOP capacity would be introduced in the proposed functional scope of new generation FMS S/W for the whole Airbus fleet, with the timeline for first availability in-service around the 2024 timeframe.

b) Boeing:
B737 NG/Max, B787 (and expected for B777-9) have 0.1NM SLOP capability, while other Boeing models (civil fleet) have 1NM SLOP capability (there were no current plans to retroactively add 0.1NM SLOP functionality to these models).

c) IGA Aircraft:
Out of 8648 in-service International General Aviation (IGA) aircraft, 81% had the 0.1NM SLOP capability and the remaining (19%) had 1NM SLOP capability.

2.4. The International Business Aviation Council (IBAC) also presented a paper at NAT TIG/08 (NAT TIG/08 – WP/19 refers), which describes a discrepancy between DO-258A and SLOP flown in 0.1 NM increments. IPACG/45 – IP/xx, presented separately, describes this issue and provides the NAT TIG paper as an attachment. Further evaluation is needed to determine whether there are operational or safety impacts caused by this discrepancy. The FAA will be closely coordinating with the avionics manufacturers on this issue and provide updates as needed.

Close-out of the C-17 SLOP Data-Gathering Effort (IPACG/44 – IP/09 refers)

2.5. In IPACG/44 – IP/09, the United States described a data-gathering effort to support implementation of SLOP in 0.1NM increments. U.S. Air Force C-17s flew offsets in the North Atlantic in accordance with a Julian date-oriented schedule.

2.6. On October 1, 2019, the US Air Force concluded its data gathering, given that SLOP in 0.1NM increments had been authorized in accordance with the NTAP item discussed above, beginning on September 12, 2019.

3. Conclusion

3.1 The meeting is invited to note the information provided.