



International Civil Aviation Organization

**The Fourth Meeting of the Bay of Bengal Reduced Horizontal Separation
Implementation Task Force (BOB-RHS/TF/4)**

Bangkok, Thailand, 18 to 22 October 2010

Agenda Item 3: Operational Issues

**BOBCAT CONFIGURATION FOR
50 NM LONGITUDINAL SPACING IN THE KABUL FIR**

(Presented by Thailand)

SUMMARY

This working paper presents a potential configuration of the BOBCAT system during the phased implementation of 50NM longitudinal separation on ATFM ATS routes transiting the Kabul FIR.

1. INTRODUCTION

1.1 The meeting would recall operational implementation of ATFM procedures using the BOBCAT system for westbound traffic through the Kabul FIR during the busy period of 2000-2359UTC commenced on 7 July 2007. In addition, it should be noted that, since the commencement of the ATFM operational trial in July 2006, the BOBCAT system was configured to provide minimum spacing of 15 minutes entering the Kabul FIR on the same route/level, composing of the 10-minute procedural separation and a 5-minute buffer.

1.2 With the proposed implementation of RNP10 longitudinal spacing of 50NM across the Bay of Bengal, as well as the introduction of 50NM longitudinal separation within the Kabul FIR on these transit routes, there is an opportunity to decrease spacing parameters used by the BOBCAT system in accordance with the new procedures.

1.3 Furthermore, the meeting is advised that spacing parameter on the BOBCAT system is independently configurable for each waypoint within the system.

2. DISCUSSION

2.1 The current waypoints and routes used for these ATFM/BOBCAT operations are listed below in Figure 1.

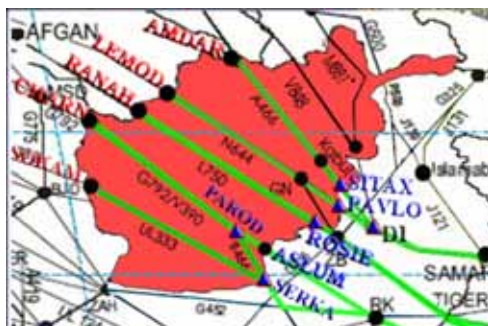


Figure 1: Current BOBCAT Airspace Configuration over the Kabul FIR
(Waypoints with blue triangles are entry waypoints)

2.2 The meeting should note current spacing parameter within the BOBCAT system of these waypoints in Figure 2.

Waypoint	Total Spacing	Separation-based Spacing	Buffer Spacing
DI	10 minutes	5 minutes	5 minutes
PAVLO	15 minutes	10 minutes procedural	5 minutes
SITAX	15 minutes	10 minutes procedural	5 minutes
ROSIE	15 minutes	10 minutes procedural	5 minutes
PAROD	15 minutes	10 minutes procedural	5 minutes
SERKA	15 minutes	10 minutes procedural	5 minutes

Figure 2: Current BOBCAT waypoint spacing configuration

2.3 It should be noted that it would be possible to adjust spacing parameter within the BOBCAT system to accommodate 50NM separation by reducing the 10-minute procedural separation part of the spacing parameter to 7 minutes, which should be approximately equivalent to 50NM separation. This would reduce total spacing from 15 minutes to 12 minutes on ATS routes where RNP10 50NM longitudinal separation is proposed to be implemented.

2.4 The meeting is also invited to note that configuration workload on the BOBCAT system required to implement such change would be minimal in time and effort. In fact, the configuration change could be done within the same day 50 NM separation is implemented on any or all of the selective routings.

Phase 1 Implementation of 50NM Separation

2.5 Based on the proposal mentioned in Secretariat WP/04 also presented to the meeting it would appear that Phase 1 implementation of the 50NM longitudinal separation in the Kabul FIR would affect southern routes, namely G792/V390 (ASLUM – PAROD – CHARN) as well as those using B466 to join G792/V390 (SERKA – PAROD – CHARN).

2.6 The meeting is also invited to note that, due to concerns related to tactical Air Traffic Management in the Bay of Bengal, UL333 aircraft (SERKA – SOKAM) do not require a BOBCAT slot.

2.7 Taking present circumstances into account, the BOBCAT waypoint spacing parameters could be configured based on parameters presented in Figure 3.

Waypoint	Total Spacing	Separation-based Spacing	Buffer Spacing
DI	10 minutes	5 minutes	5 minutes
SITAX	15 minutes	10 minutes procedural	5 minutes
PAVLO	15 minutes	10 minutes procedural	5 minutes
ROSIE	15 minutes	10 minutes procedural	5 minutes
PAROD	12 minutes	7 minutes (~50NM)	5 minutes
SERKA	12 minutes	7 minutes (~50NM)	5 minutes

Figure 3: Proposed Phase 1 BOBCAT waypoint spacing configuration

Phase 2 Implementation of 50NM Separation

2.8 In the second phase of 50NM separation, it is envisaged that all other routes feeding into the Kabul FIR would be involved. This would in effect enable BOBCAT waypoint spacing configuration in Figure 4.

Waypoint	Total Spacing	Separation-based Spacing	Buffer Spacing
DI	10 minutes	5 minutes	5 minutes
SITAX	12 minutes	7 minutes (~50NM)	5 minutes
PAVLO	12 minutes	7 minutes (~50NM)	5 minutes
ROSIE	12 minutes	7 minutes (~50NM)	5 minutes
PAROD	12 minutes	7 minutes (~50NM)	5 minutes
SERKA	12 minutes	7 minutes (~50NM)	5 minutes

Figure 4: Proposed Phase 2 BOBCAT waypoint spacing configuration

2.9 The meeting is also invited to note that ATS arrangement at DI may change in the near future when a route linking SAMAR – LAJAK is established within the Lahore FIR. This positive change would enable parallel traffic flows from GUGAL (M875) and SAMAR to LAJAK. In such a case, the proposed BOBCAT waypoint spacing configuration in Figure 5 could be applied.

Waypoint	Total Spacing	Separation-based Spacing	Buffer Spacing
LAJAK	12 minutes	7 minutes (~50NM)	5 minutes
PAVLO	12 minutes	7 minutes (~50NM)	5 minutes
ROSIE	12 minutes	7 minutes (~50NM)	5 minutes
PAROD	12 minutes	7 minutes (~50NM)	5 minutes
SERKA	12 minutes	7 minutes (~50NM)	5 minutes

Figure 5: Proposed Alternate Phase 2 BOBCAT waypoint spacing configuration in case of SAMAR – LAJAK route segment implementation

2.10 The meeting is advised that, while BOBCAT configuration to accommodate 50NM separation implementation takes a relatively small amount of time, announcements via AIP Supplement of NOTAM should be made to all involved ahead of the implementation time in accordance with ICAO procedures to ensure a smooth transition to 50NM separation within the Kabul FIR.

3. ACTIONS BY THE MEETING

3.1 The meeting are invited to:

- a) note information presented in this WP;
- b) discuss phased configuration change of the BOBCAT system to accommodate implementation of RNP10 50NM separation in the Kabul FIR.

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