



International Civil Aviation Organization

**Second Meeting of the Southeast Asia Route Review Task Force
(SEA-RR/TF/2)**

Bangkok, Thailand, 22 – 26 March 2010

Agenda Item 6: ATS Route Development

**PROPOSED ESTABLISHMENT OF A UNI-DIRECTIONAL ROUTE STRUCTURE WITHIN
THE MANILA FIR**

(Presented by the Philippines)

SUMMARY

This paper presents establishment of a uni-directional parallel route structure based on the Regional PBN Implementation Plan with the aim of enhancing the route capacity, operational efficiency and environmental considerations.

1. INTRODUCTION.

1.1 The SEA-RR/TF Meeting1 (8 – 11 December 2009/Bangkok) recommended to conduct a review of the existing routes and identify those that could be enhanced to improve en-route airspace efficiency, taking into account the need for inter-regional harmonization.

1.2 The meeting noted IATA’s outlook on Southeast Asia Route Review as the AR9 traffic flow encompasses operations within several FIRs and majority of the busiest airports in the Asia Pacific Region.

**2. DISCUSSION ON THE PROPOSED ROUTE STRUCTURE PARALLEL
TO RNAV ROUTE L628:**

2.1 In the South China Sea Route Restructuring of 2001, ATS/RNAV Route L628 was implemented in the Manila FIR. This bi-directional route serves flights Manila- Bangkok and beyond, and vice-versa.

2.2 In the revised WPAC/SCS RVSM FLOS of July2008, the NO-PDC FLs on L628 allocates the following flight levels based on the direction of flight; Eastbound = FL330, 370, 410 and Westbound= FL280, 340

2.3 Two major parallel routes (L625& N892) cross L628. In addition, three other airways also intersect with waypoints along L628. These are;

- a. M772 (Uni-directional/Northbound route) with level allocation of FL300, 380 and intersect at waypoint EMPUL.
- b. M754 (Bi-directional) with level allocation of FL290, 330, 370, 410 (Southbound) and FL300, 340, 380 (Northbound). It intersects at waypoint GUKUM.

- c. A583 (Bi-directional) with level allocation of FL290, 330, 370, 410 (Southbound) and FL300, 340, 380 (Northbound). It intersects at waypoint IBOBI.

2.4 To address operational issues (merging traffic, bunching of traffic) and to prevent potential conflicts at the intersecting points, Manila ACC recommends an additional route parallel to the existing ATS/RNAV Route L628 so as to enable the establishment of a uni-directional traffic flow. This will allow airspace users more access to optimum flight levels, ATC has more flexibility in selecting alternative flight levels and ultimately, to the environment thru reduced carbon emissions.

2.5 Manila ACC recommends that the combined FLs of the existing Eastbound and Westbound route L628 be allocated for the proposed uni-directional parallel route.

2.6 Manila ACC recommends that the current ATS/RNAV Route L628 and the proposed additional parallel route be upgraded/established as PBN RNAV10 category to enable greater route capacity and increased safety.

3. ACTION BY THE MEETING

4.1 The Meeting is invited to consider the following proposals:

- a. Establishment of additional route parallel to the existing ATS/RNAV Route L628 with RNAV10 category
- b. Upgrading of ATS/RNAV Route L628 into RNAV10 category
- c. Allocating FL280, 330, 340, 370, 410 as the No-PDC FLs for the uni-directional parallel routes

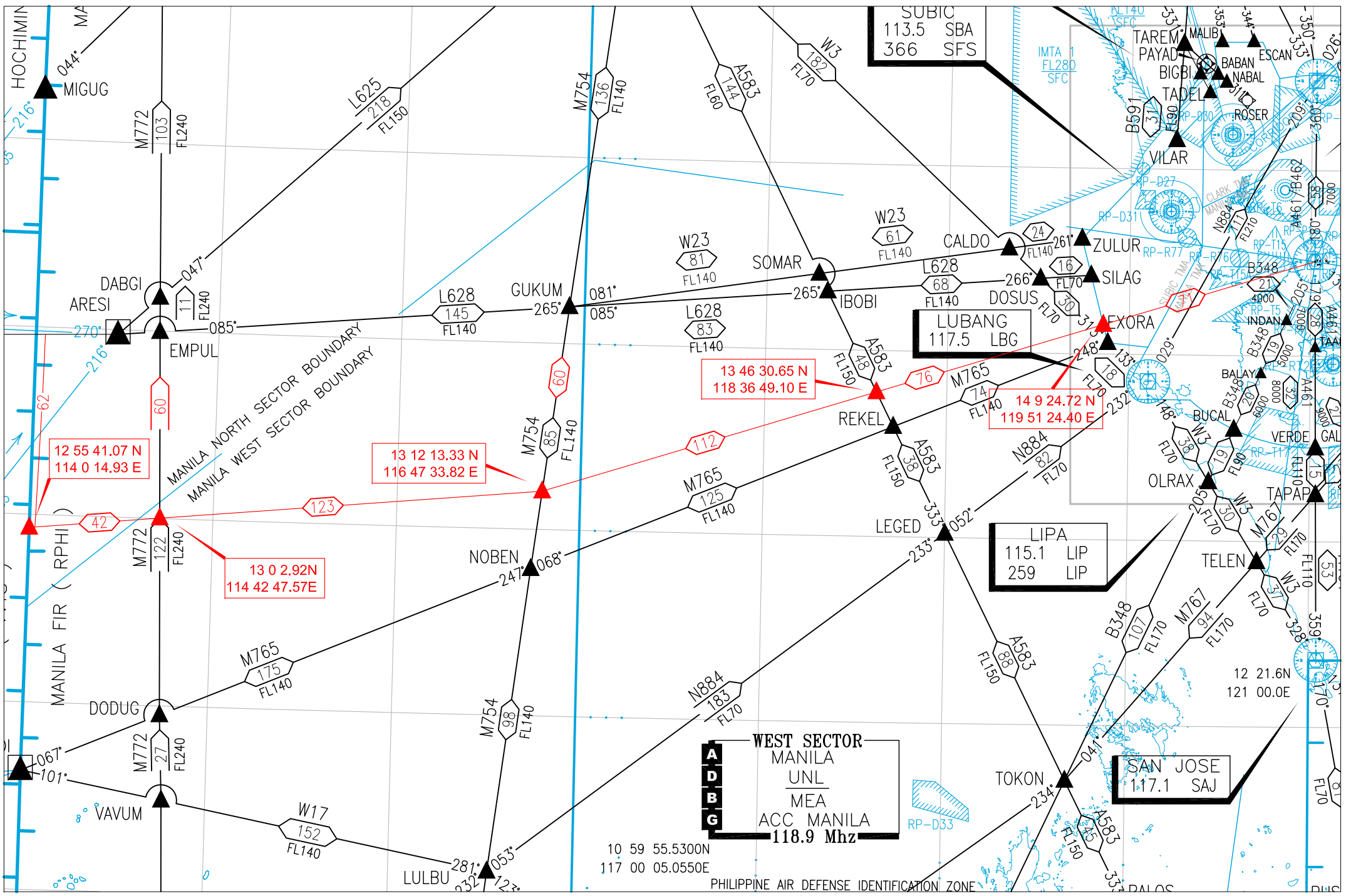
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ATTACHMENTS.

Attachment A: Proposed Uni-Directional (Parallel Route to L628) within the Manila FIR

Attachment B: Proposed Uni-Directional (Parallel Route to L628) within the SCS Area

Attachment C: Flight Statistics for L628 – M772 – M754 – A583 with FL and ETO at the intersecting waypoints.



12 55 41.07 N
114 0 14.93 E

13 12 13.33 N
116 47 33.82 E

13 0 2.92 N
114 42 47.57 E

13 46 30.65 N
118 36 49.10 E

14 9 24.72 N
119 51 24.40 E

SUBIC
113.5 SBA
366 SFS

LUBANG
117.5 LBG

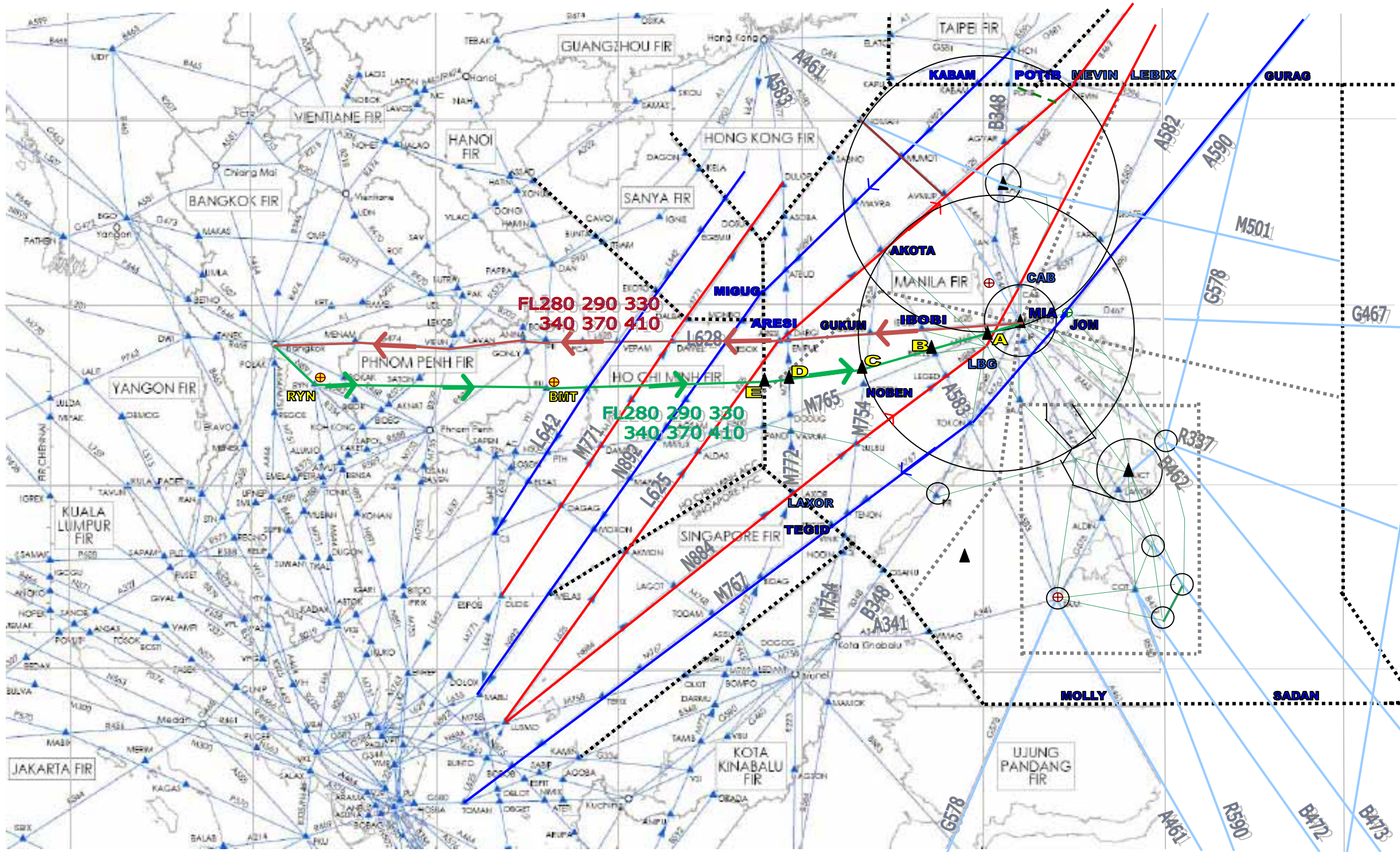
LIPA
115.1 LIP
259 LIP

WEST SECTOR
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ACC MANILA
118.9 Mhz

SAN JOSE
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10 59 55.5300N
117 00 05.0550E

PHILIPPINE AIR DEFENSE IDENTIFICATION ZONE



ATTACHMENT B: Proposed Uni-directional Parallel RNAV10 Routes

