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**EXPLANATIONS TO USERS ABOUT APPLICATION OF THE NEW AIR TRAFFIC  
FLOW STRUCTURE IN THE TMA-RJ**

**1 PRELIMINARY ARRANGEMENTS****1.1 PURPOSE**

Disseminate information to users concerning application of the new air traffic flow structure in the Rio de Janeiro Terminal Control Area (TMA-RJ).

**1.1 SCOPE**

This Aeronautical Information Circular (AIC) applies to ATS Units, users of the Brazilian Airspace Control System (SISCEAB), as well as all airmen who intend to fly in the TMA-RJ/ CTR-RJ.

**2 INTRODUCTION**

**2.1** The Department of Airspace Control, through the Regional Flight Protection Service of São Paulo, has established a new air traffic flow structure in the Rio de Janeiro Terminal Control Area and Control Zone, as of 02 May 2013, aiming to increase the use of airspace with safety.

**2.2** This new air traffic flow structure is based on the alteration to the IFR procedures for approach, landing and departure in the Galeão (SBGL) and Santos Dumont (SBRJ) aerodromes. This, in consequence, led to the need to adjust the TMA-RJ sectoring, by modifying the lateral limits of the existing sectors and creating two new ones, which resulted in distinct sectors for the Santos Dumont and Galeão final approaches, hitherto represented as a single sector.

**2.3** Together with this new air traffic flow structure, it is expected an increase in the capacity of traffic absorption by the Rio de Janeiro Approach Control and to balance the complex equation between Demand and Capacity of the Rio de Janeiro Approach Control – APP- RJ/ CTR-RJ.

**2.4** Therefore it is quite important to give details about the new air traffic flow structure in the TMA-RJ, as well as the standards and conditions that will be applied for its use and specially emphasize information about the new sectors and the establishment of the lateral separation minimum of 3 NM.

**3 NEW AIR TRAFFIC FLOW STRUCTURE IN THE TMA-RJ**

**3.1** The new air traffic flow structure in the TMA-RJ is based on two main changes to the current air traffic flow:

I – Inversion of the entry routes into the TMA-RJ by the North sector; and

II – Creation of two new sectors in the TMA-RJ, which will allow the separation of SBRJ and SBGL Final approaches.

**3.2** The inversion of entry routes into the TMA-RJ by the North sector will be as follows:

**A)** Traffic approaching to SBGL entering by the North sector of TMA-RJ (T3/ QRG 120.55) shall comply with the preferred routes as published in the AIP-BRAZIL or in the specific NOTAM and then accomplish the STAR provided by ACC-CW.

**NOTE 1:** The main change in this track is the alteration to the air navigation facility that guides the entry to the TMA-RJ. In the current structure, air traffic flow is guided to enter the TMA-RJ heading to PAI VOR. With the new structure, the positive course guidance will be CAX NDB.

**NOTE 2:** The tracks of air traffic entering by the Southwest Sector of the TMA-RJ (T1, QRG 119.35/ AKNUB) destined to the SBGL will change on the new STAR. The positive course guidance will be changed from SCR VOR to MIA DVOR.

**B)** Traffic destined to SBRJ entering by the North sector of TMA-RJ (T2/ QRG 128.90) shall comply with the preferred routes as published in the Brazilian AIP or in a specific NOTAM and then accomplish the STAR cleared by ACC- CW.

**NOTE:** The main change in this track is the alteration to the facility that provides positive course guidance to the STAR of entry to TMA-RJ. At the current air traffic flow structure, air traffic is guided to enter heading to CAX NDB. For new structure the positive course guidance will be PAI VOR.

**3.3** The creation of two new sectors in TMA-RJ together with a new sectoring has allowed the separation of air traffic flow in the two biggest aerodromes of this important Terminal Control Area and the increase of the capacity of ATS.

**3.4** Such attitude resulted in the creation of exclusive feeder and independent final approach sectors for SBGL and SBRJ, as described in the table below:

SECTOR	QRG	LIMITS	FUNCTION
<b>T1.</b>	119.35	Laterals: According to RJ/ SP ARC Verticals: 2500 FT to FL 195	Responsible for SBRJ and SBGL departures of aircraft destined to T5 and feeder for final approach sector to SBRJ (T7) and final approach to SBGL (T4) of ACFT coming from the southwest sector of TMA-RJ.
<b>T2</b>	128.90	Laterals: According to RJ/ SP ARC Verticals: 2500 FT to FL 195	Responsible for sequencing and feeder of SBRJ final sector (T7).

SECTOR	QRG	LIMITS	FUNCTION
<b>T3</b>	120.55	Laterals: According to RJ/ SP ARC Verticals: 2500 FT to FL 195	Responsible for sequencing and feeder of SBGL final sector (T4). It will receive ACFT coming from North Sector of TMA-RJ and from West Sector (T5), located, in this case, under the T2. It is also responsible for the Flight Information Service within VFR air traffics evolving on CHARLIE, ECHO, FOX, GOLF, and HOTEL Aircraft Special Routes (ASR).
<b>T4</b>	129.80	Laterals: According to RJ/ SP ARC Verticals: 2500 FT to FL 195	Responsible for SBGL and SBRJ departures destined to sectors North and Northeast of TMA-RJ, feeder of T3 of aircraft approaching to SBRJ and SBGL proceeding from the sectors Northeast and East of TMA-RJ.
<b>T5</b>	119.00	Laterals: According to RJ/ SP ARC Verticals: 2500 FT to FL 195	Responsible for aircraft coming from the TMA-RJ and the TMA-SP. It maintains the characteristics of the previous air traffic flow structure.
<b>T6</b>	129.20/ 135.60	Laterals: According to RJ/ SP ARC Verticals: 2500 FT to FL 195	Galeão Final Sector
<b>T7</b>	126.20/ 133.30	Laterals: According to RJ/ SP ARC Verticals: 2500 FT to FL 195	Santos Dumont Final Sector
<b>T8</b>	133.7/ 132.50	Laterals: SC-CTR according to RJ/ SP ARC Verticals: 2500FT FT to FL 070	Responsible for the ATS service rendered at CTR-SC, also the off-shore helicopters traffic destined to the Santos Petroleum Basin, by delegation of T1, and the Flight Information Service at DELTA ASR.

#### 4 HORIZONTAL SEPARATION MINIMUM OF 3 NM

**4.1** The proximity between Galeão and Santos Dumont aerodromes has always been a restrictive factor to the simultaneous ARR and DEP operations.

**4.2** To alleviate this restriction and also make the air traffic flow more orderly, safe and fast, DECEA has, after careful evaluation, developed an IAC RNAV with prescribed visual track to SBRJ and adjusted the tracks for Missed Approaches of RNAV and conventional procedures to the RWY 15 of SBGL so that even in their critical projections a minimum lateral separation minimum of 3 NM between the ACFT will be maintained.

**4.3** The aforementioned lateral separation minimum is therefore ensured when accomplishing such procedures, being ATCO of RJ-APP and the crew obliged to comply with

IFR procedures covered by the area of application of lateral separation minimum of 3 NM and also to observe the prescribed current rules.

**4.4** The Technical and Operational Conditions that must be observed for the application of the lateral separation minimum of 3 NM in the TMA-RJ and also the conditions that may suspend its application are defined in DECEA specific publications.

**5 TMA-RJ AND CTR-RJ AREAS WHERE THE REDUCED HORIZONTAL SEPARATION MINIMA WILL BE APPLIED**

**5.1** The lateral separation minimum of 3 NM will be applied within the TMA-RJ portion comprised by the polygon defined by the following geographical coordinates: 22°51'20"S/043°33'35"W, 22°59'34"S/043°32'22"W, 22°54'13"S/043°21'05"W, 22°49'02"S/043°23'32"W and 22°51'20"S/043°33'35"W, being the lower vertical limit 2500 feet and the upper vertical limit 6000 feet.

**5.2** It will also be applied in all the CTR-RJ and the space of the TMA-RJ overlapping the the CTR-RJ, at 2500 feet, inclusive, up to 5000 feet, inclusive.

**6 FINAL PROVISIONS**

**6.1** This Circular uses as reference DOC 8168 OPS/ 611 and other SISCEAB publications in force.

**6.2** The approval of this AIC was published in DECEA Internal Bulletin nº 081 of 26 April 2013.

**6.3** Cases not provided for in this AIC shall be settled by the Head of DECEA's Operations Subdepartment.