



Agenda Item 4

Air Navigation Matters

4.2 Follow-up on the implementation of the NAM/CAR Regional Performance Based Air Navigation Plan (RPBANIP) in Eastern Caribbean

IMPROVEMENTS TO ATS COORDINATION – ANTIGUA AND BARBUDA AND ST. MAARTEN

(Presented by Antigua and Barbuda)

SUMMARY	
This WP reports on ATM Committee teleconference meetings that have been taking place in order to resolve coordination issues surrounding traffic transiting the V.C. Bird TMA, to and from the Piarco and San Juan FIRs, departing and landing the Princess Juliana Airport.	
References:	
<ul style="list-style-type: none">• Regional Performance Objective 1 (RPO 1): Implementation of PBN, paragraphs 3.2.3 and 3.2.4 of the E/CAR/WG/33• 3rd E/CAR ATM Committee Follow-up Teleconference (28 May, 2013, 1500 UTC)• 2nd E/CAR ATM Sub-Committee Teleconference (6 June 2013)	
Strategic Objectives	<i>This working paper is related to Strategic Objectives: A. Safety – Enhance global civil aviation safety C. Environmental Protection and Sustainable Development of Air Transport</i>

1. Introduction

1.1 For many years, V. C. Bird has expressed concerns about the handling of coordination of traffic transiting its TMA to and from the PIARCO and SAN JUAN FIRs. This concern specifically applies to traffic departing and landing Juliana airport and transiting V. C. Bird's airspace where lack of coordination between Piarco ACC and San Juan CERAP has resulted in aircraft being restricted on their climb and descent. This creates a negative impact on the implementation of PBN especially as it relates to ATS operational capacity, fuel consumption and continuous climb and descend.

1.2 To date this matter has not been comprehensively resolved, therefore, the Regional Performance Objective 1 (RPO 1): Implementation of PBN, paragraphs 3.2.3 and 3.2.4 of the E/CAR/WG/33 report has not been met.

2. Discussion

2.1 The V.C. Bird and the Juliana TMAs are located on the common boundary of the Piarco and San Juan FIR. The vertical limit of the V.C. Bird TMA is FL245 and the vertical limit of Juliana is FL155. There are instances of traffic flying from countries in the Southern Caribbean and South America to St. Martin (from the Piarco FIR to the San Juan FIR) requiring descent through the V. C. Bird TMA. The route more frequently used is the A632 ANU B520 and vice versa. This normally necessitates coordination and or flight progress information between the two FIRs as the flight progresses, to assist with the smooth flow of the traffic and separation when required.

2.2 Doc 4444 paragraph 10.1.2.1.1 states¹ ‘ATC units shall forward from unit to unit, as the flight progresses, necessary flight plan and control information. When so required by agreement between the appropriate ATS authorities to assist in the separation of aircraft, flight plan and flight progress information for flights along specified routes or portions of routes in close proximity to flight information region boundaries shall also be provided to the ATC units in charge of the flight information regions adjacent to such routes or portions of routes’.

2.3 Due to the fact that Piarco may not coordinate with or advise San Juan of this traffic, coordination for climb and descent is done between Piarco, V. C. Bird and Juliana. This has resulted in restrictions being issued to the traffic in order to avoid San Juan’s FIR.

2.4 There have been cases where due to conflicting traffic, late handover or delayed descent, aircraft have not been able to cross the V.C. Bird/Juliana boundary at FL150 or below. Consequently, in order to prevent unidentified aircraft entering San Juan’s airspace the aircraft had to be held in the V.C. Bird’s airspace to meet the restriction.

2.5 Doc 4444 speaks to this issue in paragraph 10.2.4 which states ‘*when so required by agreement between the appropriate ATS authorities to assist in the identification of strayed or unidentified aircraft and thereby eliminate or reduce the need for interception, flight plan and flight progress information for flights along specified routes or portions of routes in close proximity to FIR boundaries shall also be provided to the ATS units in charge of the FIRs adjacent to such routes or portions of routes.*’

2.6 The references from Doc 4444 support the view of V. C. Bird ATS that there should be further discussion and clearly defined procedures in LOAs to provide smooth handling of such traffic situations. Due to the fact that both TMAs are located on the FIR boundaries, V. C. Bird believes that in order to facilitate the process and assist in separation issues within the TMAs, **both FIRs need to be involved in handling such traffic** or, by the very least, notify each other of the traffic and release airspace on a flight by flight basis if there are no restrictions.

2.7 In addition, the current situation of restricting aircraft climb and forcing them to descend sooner than necessary, does not conform to the PBN concept of continuous climb and descent for optimal efficiency and aircraft performance.

¹ Doc 4444 15th Edition, Amdt. 3 18th November, 2010

2.8 It must be noted that this issue was discussed at a number of ATM teleconference meetings hosted by ICAO and ATM Rapporteur. The most recent meeting which was held on June 6, 2013 discussed the Letters of Agreements of the four units involved namely San Juan CERAP, Piarco ACC, V.C. Bird APCON and Juliana APCON. After much discussion and review of supporting documentation, suggestions to resolve these issues were proposed. These include:

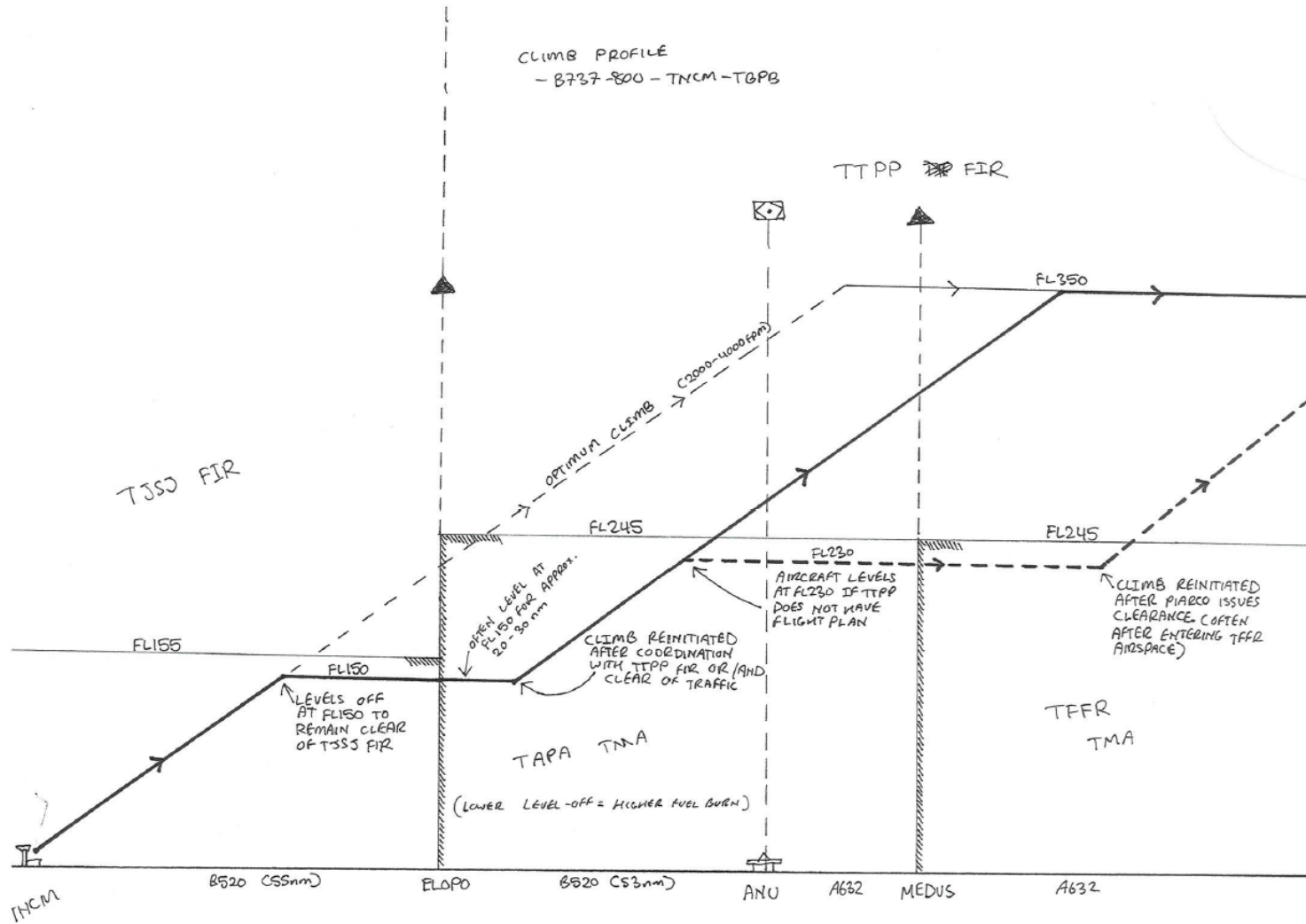
- *“For departures out of TNCM requesting greater than FL245, Juliana APCON will first attain a “pre-departure clearance” from San Juan CERAP before coordinating the flight with VC Bird APCON. VC Bird APCON will then be responsible for coordinating the flight with Piarco ACC.”*
- *“For arrivals into TNCM operating at flight levels greater than FL245, Piarco ACC will coordinate the flight with San Juan CERAP and VC Bird APCON. VC Bird APCON will coordinate the flight with San Juan CERAP and Juliana APCON for descent into Juliana’s TMA.*

2.9 Diagrams depicting climb and decent profiles with and without restrictions are provided in the Appendix to this paper to reference the aforementioned information.

2.10 It was also decided that further discussions will be held at the 1st E/CAR/CATG Meeting to be held in Martinique.

3. Suggested Action

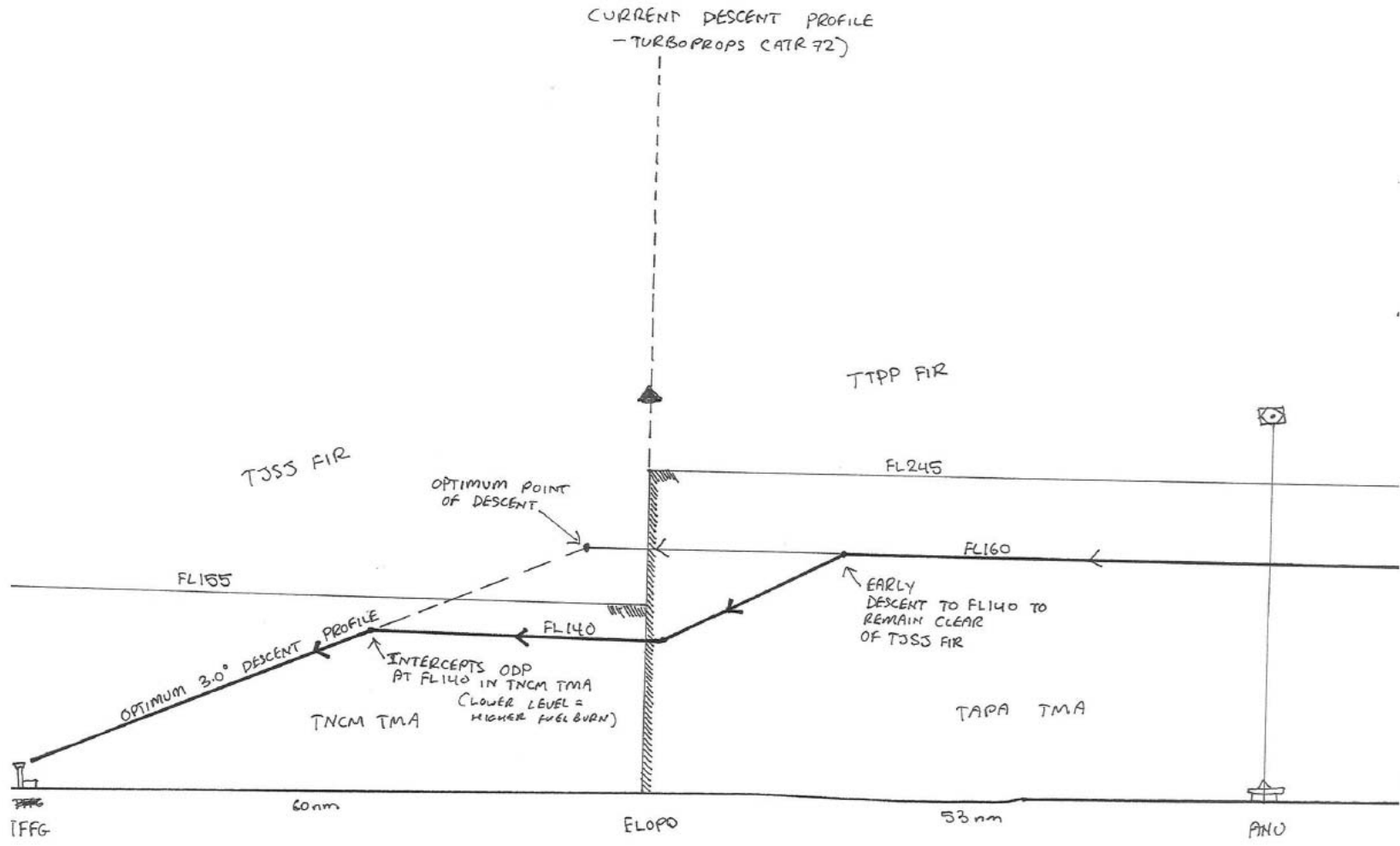
3.1 The Meeting is invited to note the information of this paper and discuss actions to improve the aforementioned situations.



NOT TO SCALE



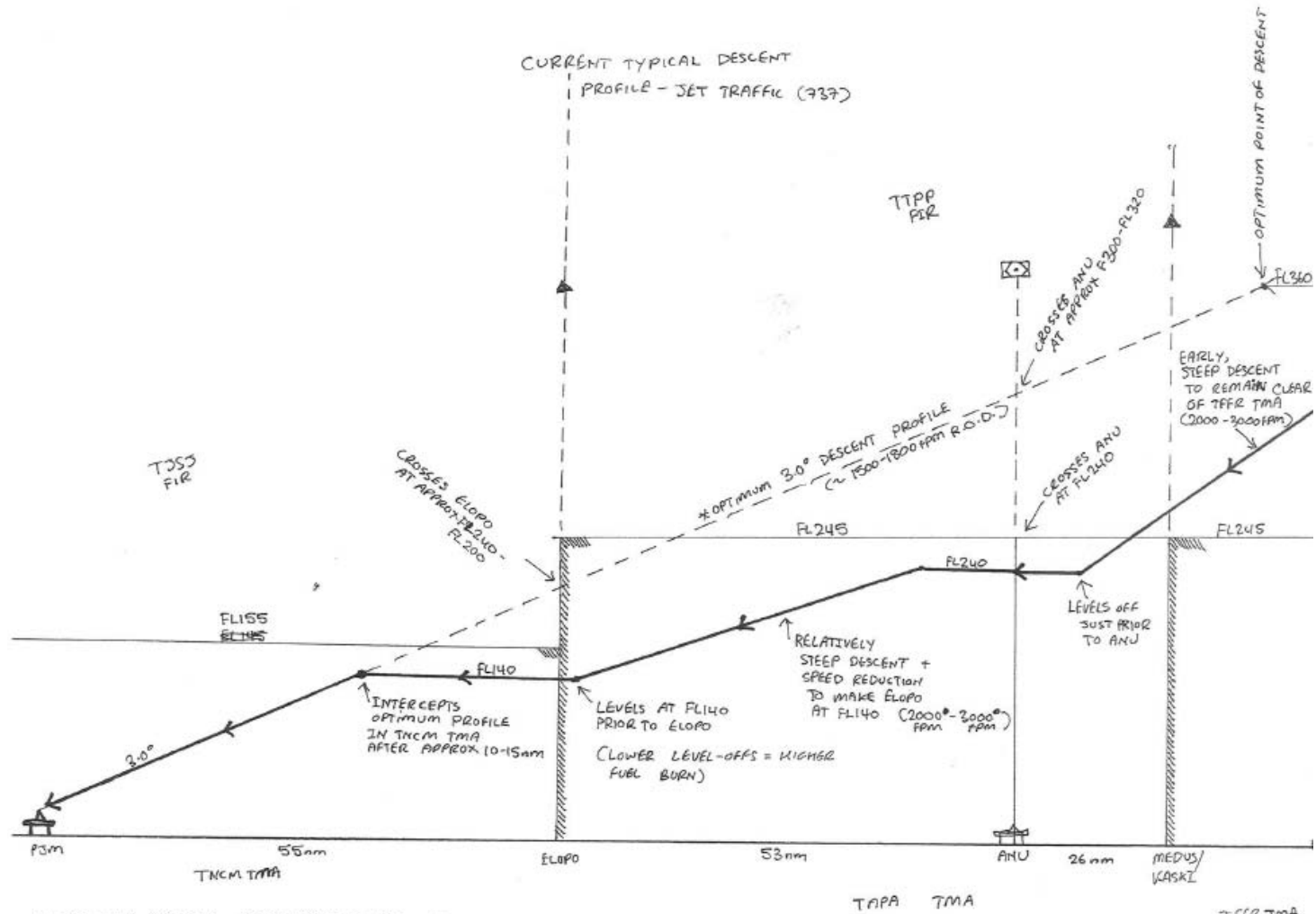
Descent Profile



NOT TO SCALE



Descent Profile



* OPTIMUM PROFILE CALCULATED TO BE AT THE INITIAL APPROACH ALTITUDE AT OR JUST PRIOR TO CROSSING THE INITIAL APPROACH ... MUST BE CALCULATED ...

* ... *

— END —