



**INTERNATIONAL CIVIL AVIATION ORGANIZATION  
TWELFTH MEETING ON THE IMPROVEMENT OF  
THE AIR TRAFFIC SERVICES IN THE SOUTH  
ATLANTIC  
(Sal, 15-17 December 2004)**

**AGENDA ITEM 4: - COMMUNICATIONS**

- Performance assessment (AFTN statistics, loss of messages)**



# THE END TO END OVERSIGHT; A PROACTIVE APPROACH FOR AUDITING THE LACK OF FLIGHT PLANS

(Presented by ASECNA)

## SUMMARY

This present Working Paper aims to establish guidelines , in order to mitigate the lack of flight plans noted .

It also proposes a survey based on availability, transmission delay and quality of service.



## I - BACKGROUND

According to the Conclusion SAT/11 TF/02(Need for further investigations on the lack of flight plans and designation of ACC focal points of contact); The Working Paper aims to set up a proactive approach, in order to find the cause of this problem, through a thorough investigation.

Finally, the Working Paper suggests to give IATA the responsibility of analysing with ICAO, data collection received from ACC investigations, for site survey and proposal of appropriate corrective measures.



The first step to investigate on the lack of flight plans is to verify the availability of the AFTN circuits.

In fact, the status of the functioning of the circuits is an indication to define the problem of lack of AFTN messages.

To that end, a detailed review on the availability rates of each CAFSAT COM centre is a requirement for the envisaged approach.



## II - DAKAR AFTN MAIN CENTRE

The graph illustrated in figure 1 , provides the end to end operational statistics on the availability rate of AFTN circuits in EUR/SAM corridor for CAFSAT Dakar centre, from January to November 2004 as summarised in table 1.

It should be noted that:

- the availability rate of AFTN circuits represents the transmission of Sal, Rio(via Recife), Johannesburg, Las Palmas and Casablanca.



- ❑ Las Palmas /Dakar AFTN link has been efficient and reliable during the considered period. However, the availability rate of 79% recorded in June is attributable to the failure of Dakar CAFSAT earth station(19 – 25 June).
- ❑ Sal/Dakar AFTN link has been globally reliable, except in April.



- ❑ The Casablanca/Dakar AFTN link has been under the minimum standard of 97% in January and April.
- ❑ The Johannesburg/Dakar AFTN link has been under the required standard in February, July and September.



**TABLE 1: AVAILABILTY RATE OF AFTN CIRCUITS FOR CAFSAT DAKAR CENTRE**

COM CENTRE	AVAILABILITY RATE OF AFTN CIRCUITS PER MONTH										
	01	02	03	04	05	06	07	08	09	10	11
Casablanca	88.89	99.99	99.18	87.08	99.67	90.43	99.99	100	99.99	100	98.49
Johannesburg	99.83	95.06	99.22	100	99.98	80	99.94	100	94.80	100	100
Las Palmas	98.81	99.99	99.82	100	99.98	78.82	99.99	100	100	100	100
Rio	97.49	97.38	99.76	99.22	99.58	86.66	99.99	100	83.70	100	100
Sal	99.97	99.99	100	70.76	99.27	90.27	99.50	100	100	100	100

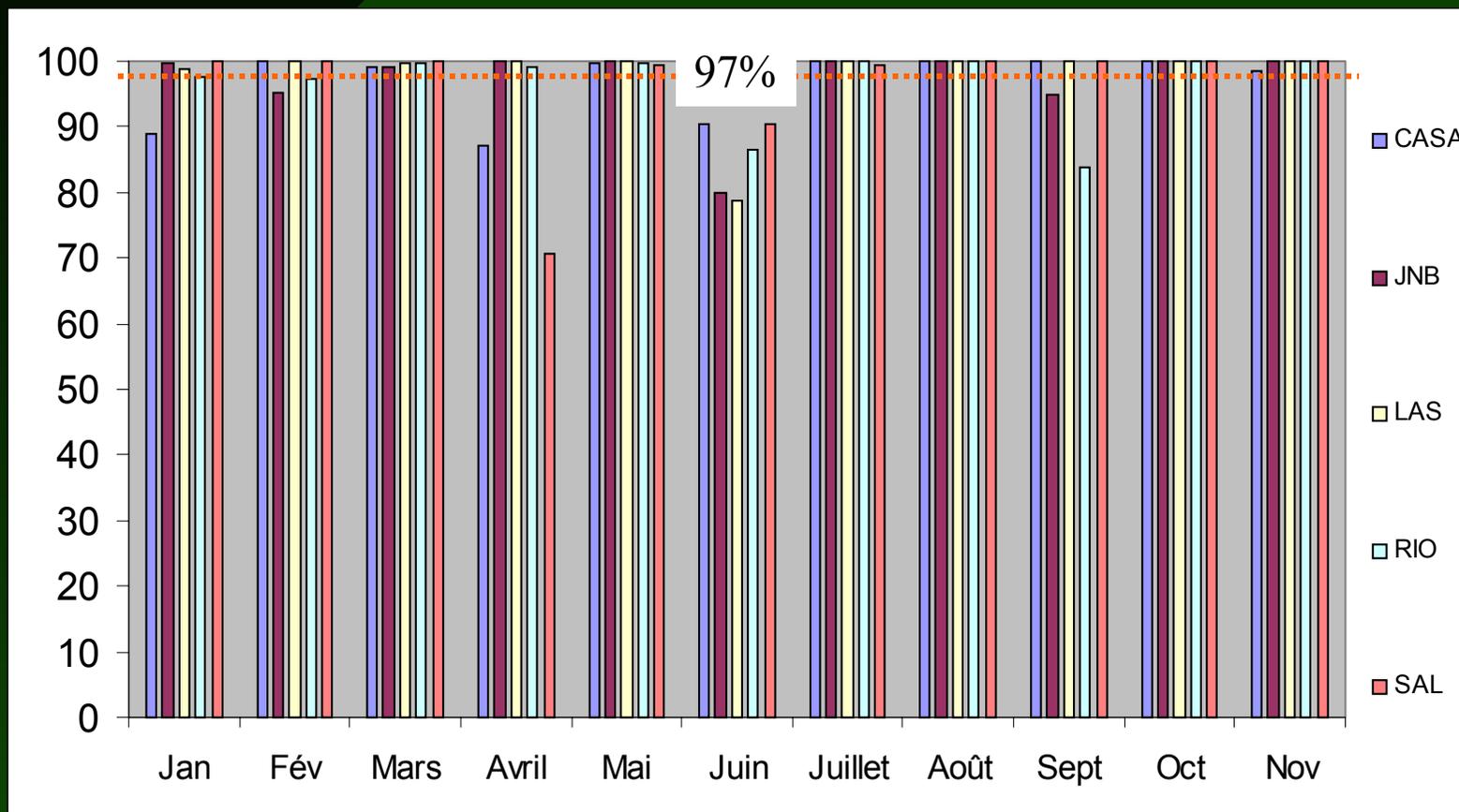


FIGURE 1: Availability rate of Dakar AFTN circuits



## III - REMARKS

In fact, the continuity of service is a key point for the services rendered to the users.

In so doing and in particular for AFTN traffic flow; it is important to study the way to:

- ensure the seamless communications,
- set up the guidelines for a steady AFTN traffic flow, in order to mitigate the lack of flight plans.



It is obvious to highlight that to make a suited analysis of the status of the availability of AFTN messages and particularly the flight plans;

It should be necessary :

- to have statistics on ;
- AFTN links availability rate between all centres involved, including transit trunks(case of Rio),
- carrier availability rate of all concerned earth stations,
- transit times,