



# FIR-AZ Operational Safety Monitoring



Departamento  
de Controle do Espaço Aéreo



**ANAC** AGÊNCIA NACIONAL  
DE AVIAÇÃO CIVIL

# GOALS

**Know the importance of Operational Safety  
Monitoring**

# SCRIPT

Preface

Methodology

Basic Processing

Regulatory Monitoring

Monitoring Performed

## PREFACE

In providing air navigation services, effective operational safety management is based on three basic concepts:

- a) The first of these is the global focus on operational safety. It is based on the organizational safety culture;
- (b) The second concept is based on the appropriate use of effective organizational tools to maintain operational safety levels. and
- (c) The third concept advocates a formal system for supervising operational safety performance. This is necessary to confirm ongoing monitoring of its policies, objectives, goals, and compliance with its operational safety standards.

# Operational Safety Monitoring

Formal safety performance supervision system required for assessments to identify hazards and manage operational safety risks in the provision of air navigation services.

## OPERATIONAL SAFETY MONITORING

OPERATIONAL SAFETY MANAGEMENT starts by:

- **monitoring of the performance** of air navigation services (monitoring of the evolution of operational safety indicators)
- The implementation of **actions to secure a NASO.**

**It is the LAST CRITICAL ELEMENT TO MAINTAIN AN ACTIVE AND EFFICIENT SGSO.**

## METHODOLOGY

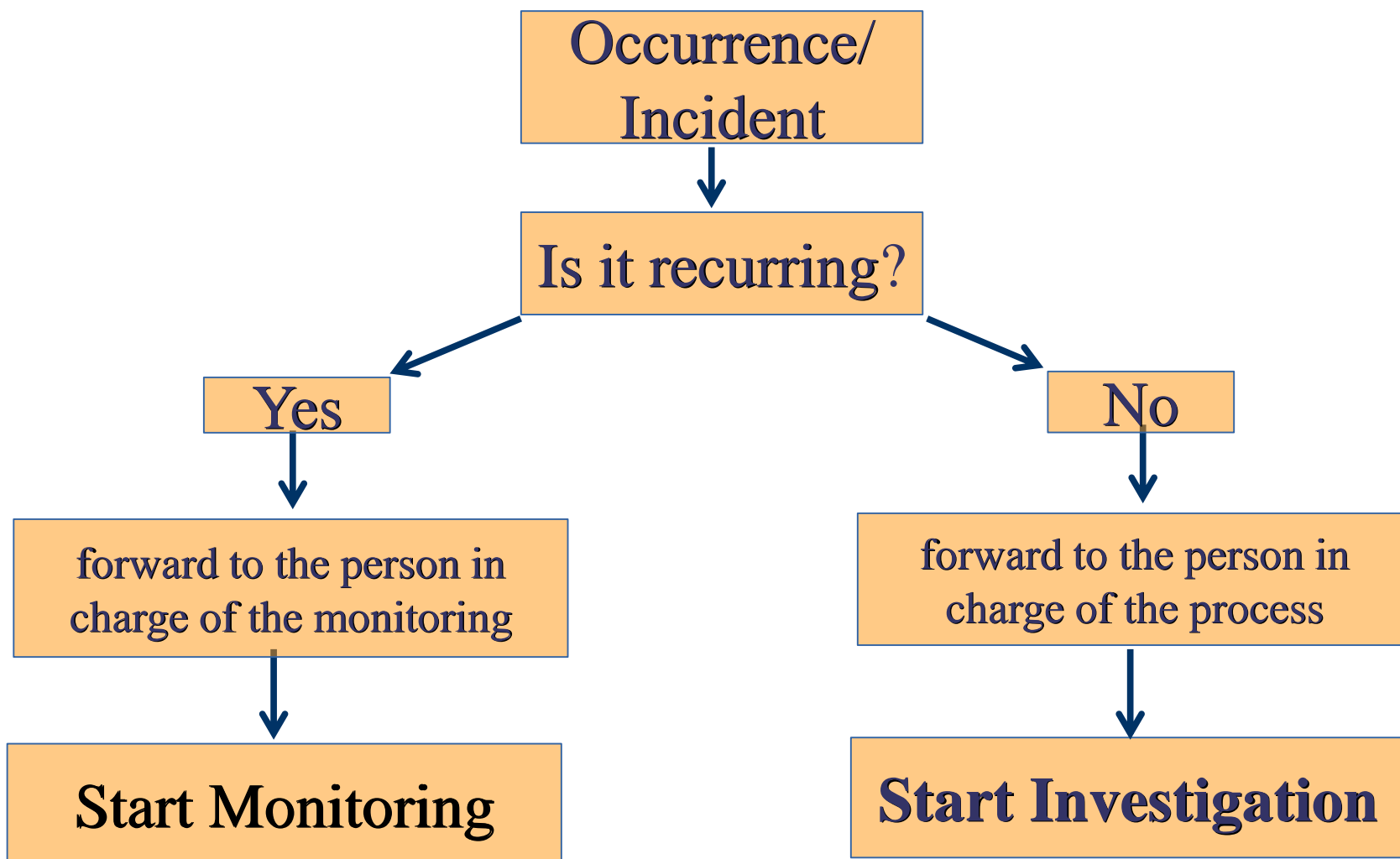
a) **MEASUREMENT:** To measure the performance of a process or activity from reliably derived indicators;

B) **COMPARISON:** compare the data obtained in the measurement with a pre-established standard (DECEA Standards);  
and

C) **ACTION:** establish appropriate and orderly measures consistent with available resources to optimize observed performance.



# BASIC PROCESSING





## REGULATORY MONITORING

- **IDSO** (Incidents, RI, RA, Coordination, Planning e Supervision);
- **MDSO** (Incidents, RI, RA, Coordination, Planning e Supervision);
- **PFO (operational factor research) e PFH(humans factor research); e**
- **RICEA Indicators.**

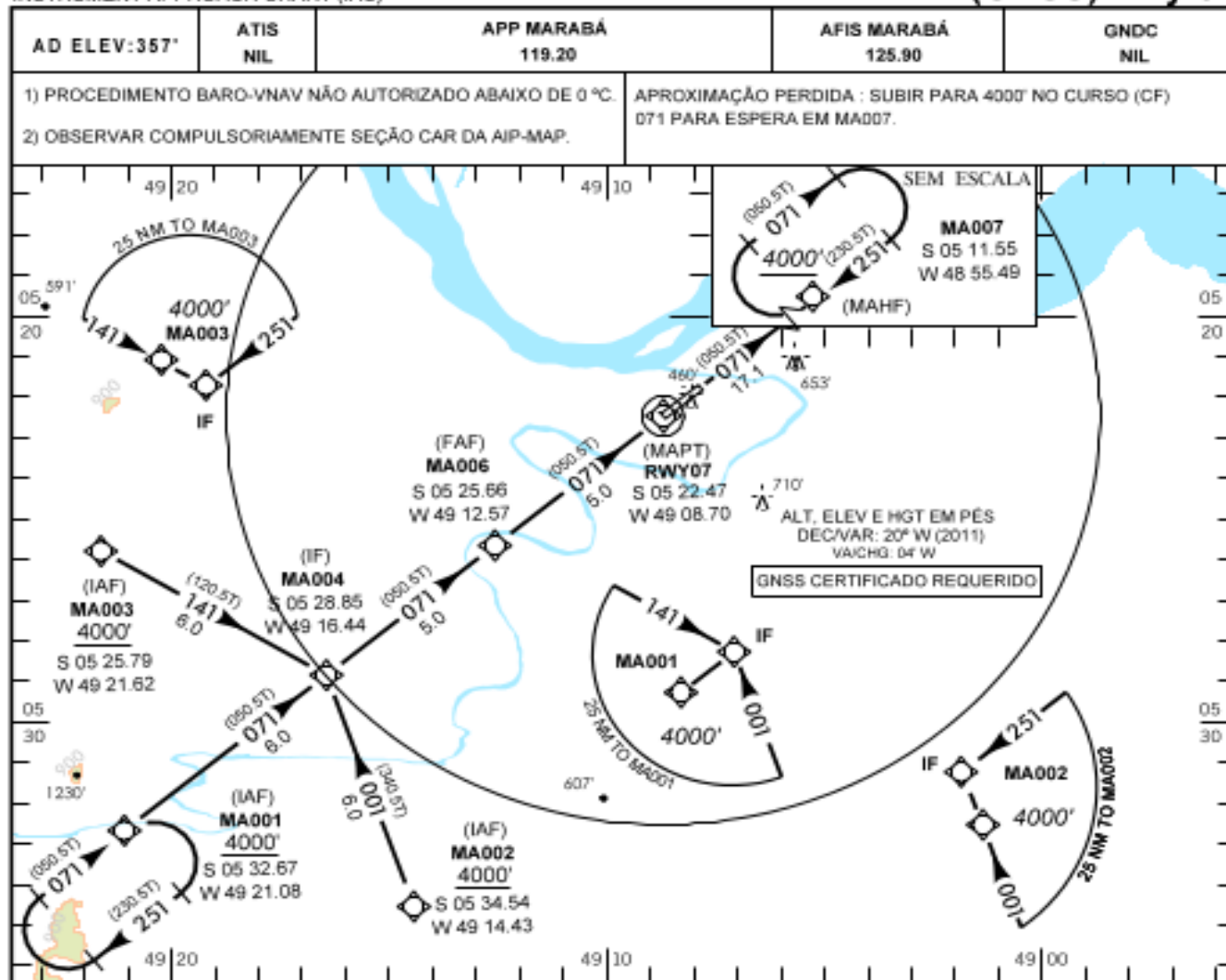
## Air Traffic Incidents SBMA (Marabá)

**ORIGEM: High Critical Risk Indicators**, number of relevant occurrences (32) involving aircraft in operation VFR with IFR, after RNAV implantation (RWY 07 and RWY 25) in 2011.

**RISK MANAGEMENT WAS NOT MADE CONCERNING  
THE CHANGE!!!!!!**

**CARTA DE APROXIMAÇÃO POR INSTRUMENTOS (IAC)**  
INSTRUMENT APPROACH CHART (IAC)

**MARABÁ / JOÃO CORREA DA ROCHA (SBMA)**  
**RNAV (GNSS) Rwy 07**



## Incidentes de Tráfego Aéreo em SBMA (Marabá)

**DEVELOPED ACTION 1 – Monitoring forwarded to Infraer** propounding the **Current Risk Management** in the PSNA ATS from Marabá(AFIS MA) **current operations, implantation of an Approach Control and a Tower**, as well as the adoption of transition measures from AFIS to ATC.

## Incidentes de Tráfego Aéreo em SBMA (Marabá)

**DEVELOPED ACTION 2 - Monitoring forwarded to Operations Division and DECEA** for consideration and decision-making regarding their area of expertise informing the actions proposed in the MSO.

**DEVELOPED ACTION 3 – In July 2014 Infraero forwards to DO for analysis the operational design project for the implementation of the Conventional APP in Marabá.**

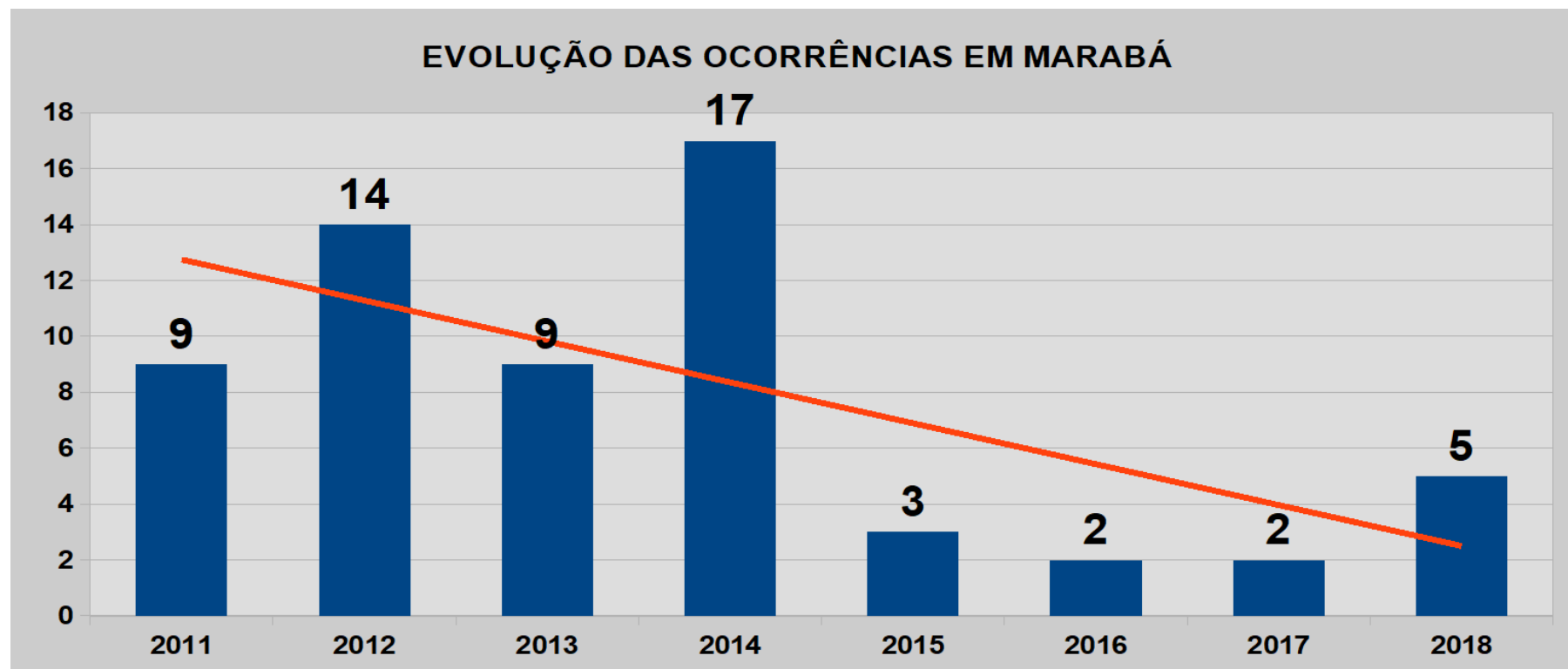
## Air Traffic Incidents in SBMA (Marabá)

**DEVELOPED ACTION 4** – From 30/09 to 03/10/2014 VSO performed in Marabá by a mixed team ASEGCEA/SIPACEA IV.

**DEVELOPED ACTION 5** – Implantation of APP MA on March 2015

# Air Traffic Occurrences in SBMA (Marabá)

## RESULT



**STATUS IN 2019** – No occurrences recorded to date.



# UNKNOWN TRAFFIC INSIDE SANTARÉM TMA/CTR

**SOURCE: Significant increase in occurrences reported by Infraero in 2014.**

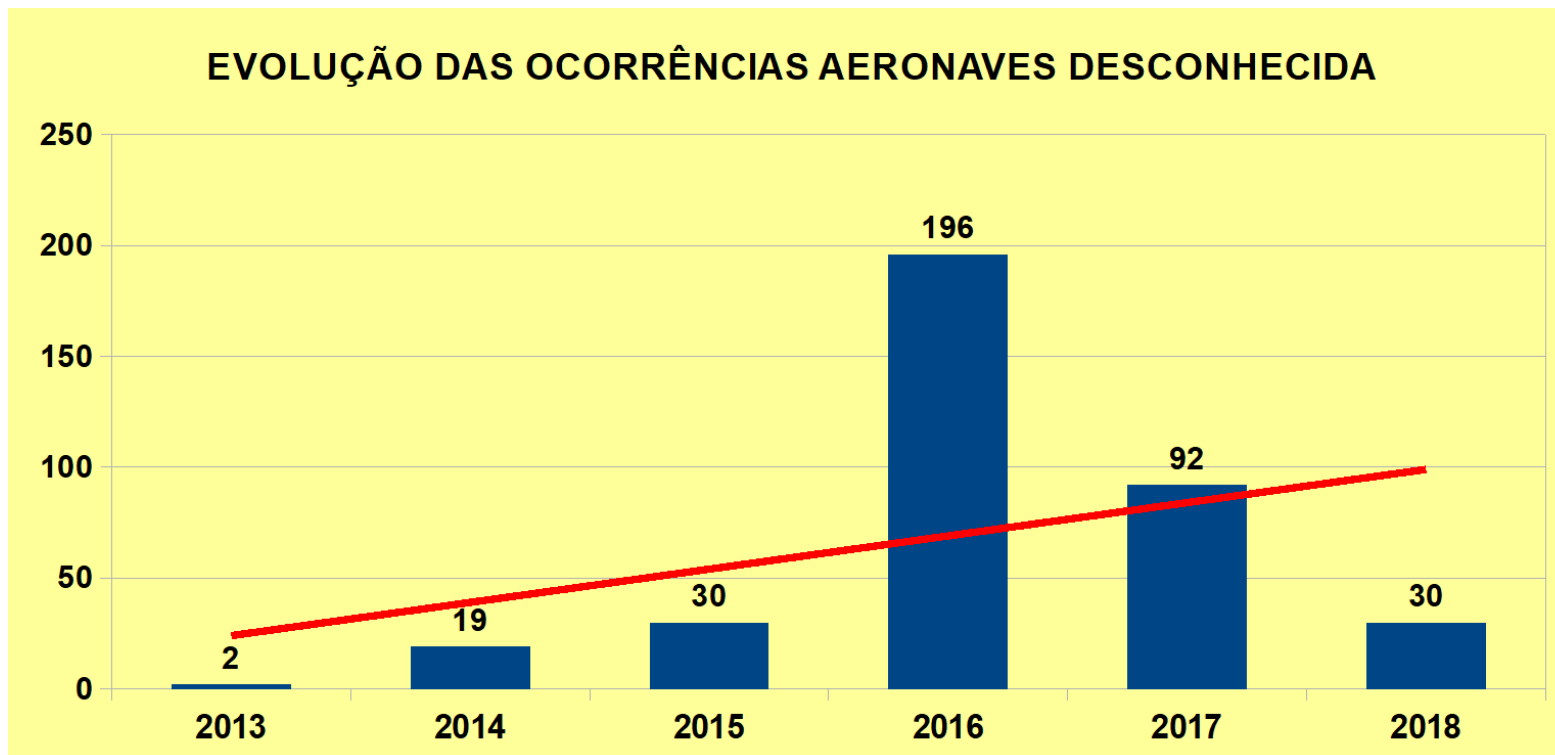
Two aerodromes inside the TMA (Piquiatuba - SNCJ and São José – SNSH).

**2013 – 02 reports (\*) and in 2014 – 19 reports**

**\* Critical Risk Incident**

# UNKNOWN TRAFFIC IN SANTAREM

## EVOLUTION



**STATUS – Active – 6 reports (may) to date.**

## UNKNOWN TRAFFIC IN SANTAREM

**DEVELOPED ACTION 1 – Carried out risk management. High Risk Found (5A).**

**DEVELOPED ACTION 2 – Meeting involving SDOP/ANAC/CINDACTA IV/EPTA SN/ADM. Piquituba and São José Aerodromes – 12/04/2018.**

**DEVELOPED ACTION 3 – SNCJ and SNSH Aerodromes closure process started – Outubro 2019.**

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## CONTACTS

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