

# VISUAL APP

USING RNAV SYSTEM



# INTRODUCTION

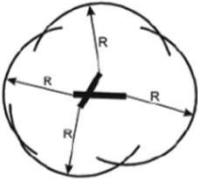
# ICAO Document 8168

6.4 Circling Approaches

6.4.1 Protected Airspace

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The circling MDA provides vertical clearance from obstacles when conducting a circle-to-land maneuver within the obstacle protected area. Circling approach obstacle protected areas extend laterally and longitudinally from the centerlines and ends of all runways at an airport by the distances shown in the following tables. The areas are technically defined by the tangential connection of arcs drawn at the radius distance shown from each runway end.



Radius of the arcs (R) varies with the aircraft category

6.4.2 Minimum Visibility

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Both ICAO PANS-OPS and FAA TERPS assume values of minimum visibility available to the pilot at the lowest obstacle clearance altitude (OCA). These values are calculated differently and therefore, may result in different AOM. The table below shows the lowest value of visibility assumed by each method:

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Minimum Visibility at MDA PANS-OPS vs TERPS					
Aircraft Category	A	B	C	D	E
Minimum Visibility ICAO PANS-OPS	1.9km	2.8km	3.7km	4.6km	6.5km
Minimum Visibility FAA TERPS	1.6km	1.6km	2.4km	3.2km	3.2km

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**Note:** Landing minima shown in Lido IACs are converted as required to the applicable values in feet (ft) and meter (m) / kilometer (km) and statute miles (sm) as defined and ordered for the respective customer taking FAA, EASA and ICAO requirements if required into account.

## CIRCLING APPROACH

The angle between the final approach track and the runway centre line is more than 30° (15° CAT C aircraft).  
FAA TERPS. More tan 15°.

## PRESCRIBED TRACK CIRCLING APPROACHES

A state may prescribe a specific track for visual maneuvering in addition to the circling area.

Navigation is primarily by visual references and any supplemental navigation information presented is advisory only.

3 VISUAL APP USING RNAV SYSTEM

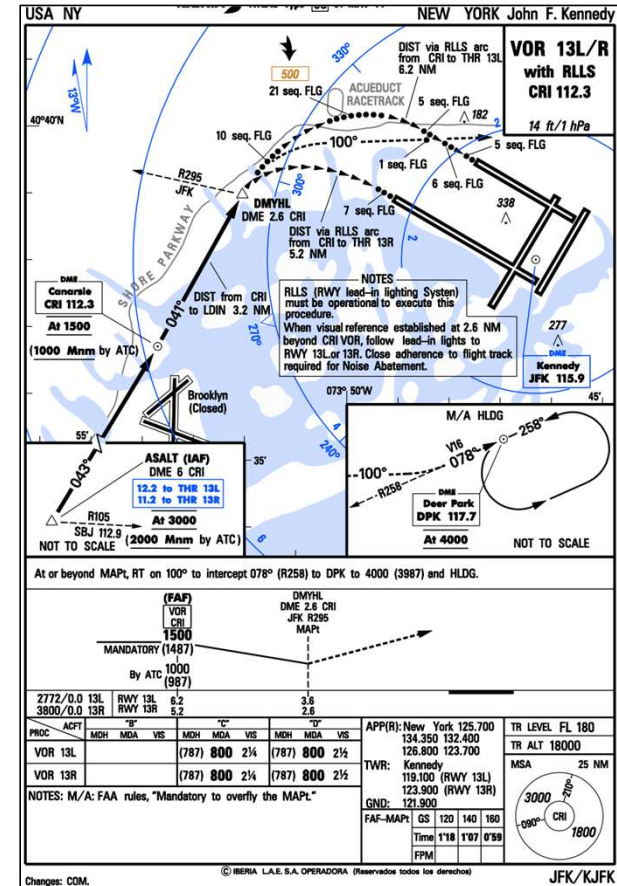
# HISTORY

TO UNDERSTAND

# THE PRESENT



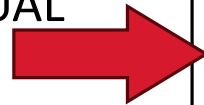
# BEFORE 2008



# WITH WAYPOINTS

1. Countries using TERPS publish visual APP with waypoints

2. AIRBUS FCOM RNAV VISUAL APPROACH SOP



3. “ICAO countries” also publish charts with waypoints, (RNAV Visuals app).

### RNAV Visual Approach

**GENERAL**

The aircraft navigates using the RNAV system, but the position is monitored by visual reference to the ground, obstacles and other traffic. RNAV visual approach must be stored and retrievable from the Navigation Database.

**EQUIPMENT REQUIRED**

- 1 FMS
- 1 GPS or 2 DME to update FM position
- Additional requirement if indicated on the approach chart.

**FMGEC GUIDANCE MODE**

- **If no required accuracy is published:**  
The use of FMGEC guidance mode is at flight crew discretion.
- **If RNAV 1 or RNP 1 is required on the published approach chart:**  
The flight crew should use adequate FMGEC guidance modes.

*Note: The use of lateral and vertical managed guidance modes reduces the crew workload and improves energy management.*

For RNAV VISUAL approach including RF legs, [Refer to FCTM/PR-NP-SP-30 General](#) for RF leg flying technic.

**DESCENT**

For RNAV VISUAL approaches requiring GPS, check that GPS PRIMARY is available on at least 1 FMS.

**FINAL APPROACH**

The flight crew must disconnect the AP at the latest at the Minimum Use Height of the AP.  
[Refer to LIM-AFS-10 Autopilot Function](#)





# AFTER AIRBUS RELEASED RNAV VISUAL APPROACH (SOPs)

-**IBERIA** OPERATION MANUAL(A)

-**IBERIA** FCOM RNAV VISUAL

-**IBERIA** OPERATION MANUAL (C)  
AUTHORIZED APPROACHES



# CURRENTLY AT IBERIA





# PROCEDURES OM(A)

In all segments of approaches with waypoints based on visual references, the following must be complied with:

## Navigation Capability:

- *GPS PRIMARY*, when GPS is required.
- *NAV ACC HIGH*.

## Guidance Modes:

- Use of the Flight Director (FD) is mandatory.
- Use of the Autopilot (AP) is recommended until established on the final segment.
- The AP must be disconnected no later than 500 feet AAL.



# PROCEDURES OM(B)

In all segments of approaches with waypoints based on visual references, the following must be complied with:

## **FCOM PRO-NOR-SOP RNAV VISUAL APPROACH**

### **- EQUIPMENT:**

- 1FMS
- 2 GPS or 2 DME to updated FM position
- Additional requirement if indicated on the approach chart

### **- DESCENT PREPARATION**

- Keep the BARO/MDA field empty on the PERF APPR page



# PROCEDURES OM(C)

## Procedure Standarisatation

- Essential to ensure consistency and operational safety in those airports that already rely on RNAV waypoints for visual approaches, to which Iberia operates.
- Any approach incorporating a visual segment defined by waypoints **must be validated prior to being authorized** for operational use.
  - **A list** of validated and authorized approaches, **is available in MO(C).**



# APPROACH VALIDATION

**Validation prior to its inclusion in operations:**

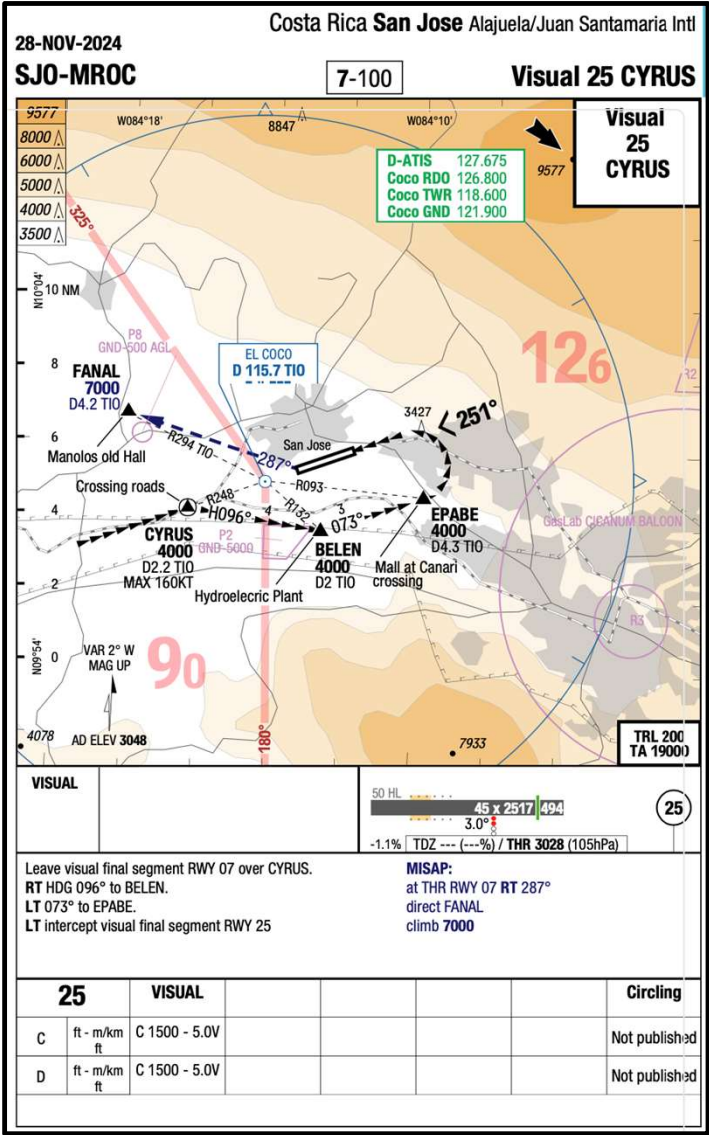
- Navigation **database** validation
- **Riks analysis** by SMS (Safety Management System)
- **Simulator tests** under different weather scenarios
- Approval by **Flight Ops** Department
- Required **pilot training** in simulators



# MROC

# MROC RWY 25

Circling Chart with prescribed tracks + waypoints in database (no vertical guidance)



# NEW APPROACH

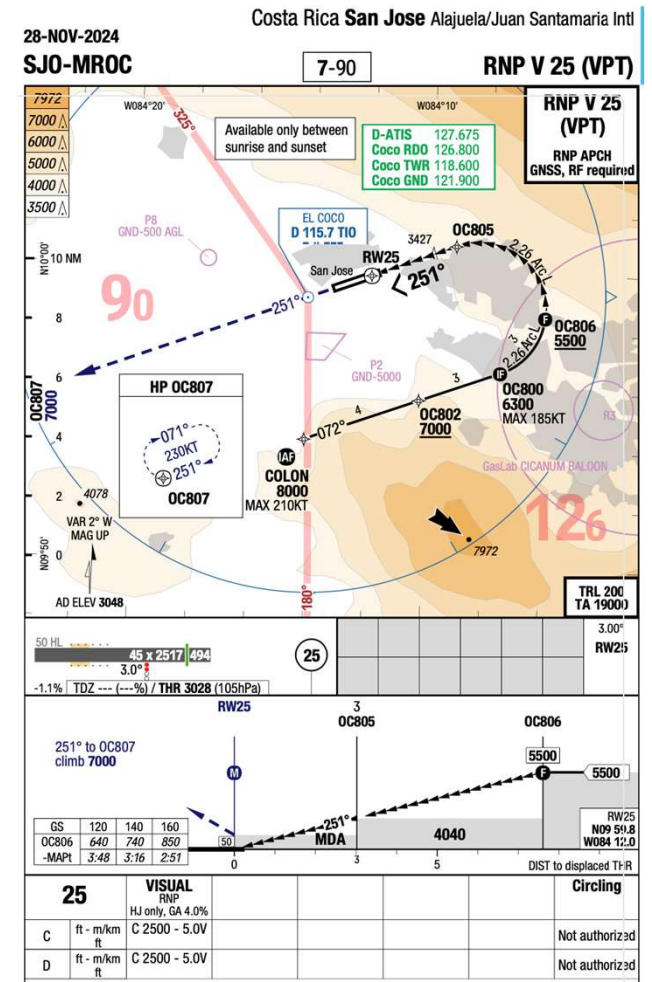
Until recently, it was called RNP V 25 (V).  
It is listed in the OM (C)

Now is named RNP V 25 (VPT)



## Circular 359

Development of Procedures for Visual  
Manoeuvring with Prescribed Tracks  
using Required Navigation Performance





# ADVANTAGES OF NEW VPT APPROACH

- **Standardization** of procedures
- Greater accuracy **laterally and vertically**
- Improved **situational awareness**
- Reduced **crew workload**



Iberia **has validated and authorized** its operation, enhancing overall safety, especially relevant in adverse wind conditions.

- As a result, **diversions to the alternate airport have been reduced**



# CONCLUSIONS

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Safety Information Bulletin  
Operations

SIB No.: 2025-XX.

Issued: dd May 2025.

Subject:

Development and Usage of Procedures for Visual Manoeuvring  
with Prescribed Tracks Relying on Required Navigation  
Performance - RNP (VPT).

We are currently in a **transition phase**, in which nacional administrations will begin to publish **RNP VPT** approaches, and operator will be able to code **OPP RNP VPT** approaches based on **circling** procedures with a prescribed track.

From now on, any **new approach** must be **thoroughly evaluated by IBERIA** according with **EASA** regulations and authorized by **AESA**.

Until **AIRBUS** publishes the specific chapter on **RNP VPT**, **IBERIA** will continue to apply the procedures **RNAV VISUAL APPROACH**.



# THANK YOU

