# JUAN SANTAMARIA/SAN JOSE (SJO/MROC)

Elevation 3022ft

## CATEGORY B

OMC brief required for initial qualification and revalidation

## GENERAL

- Juan Santamaría International Airport is the primary airport serving San José, Costa Rica. It is located 20km NW of downtown San José.
- SJO is located within a horseshoe shaped valley with high terrain up to 11500ft within 25 nm to the N, E and S. Terrain increases to 12600ft outside of 25nm toward the SE.
- SJO operations are complex and require effective flight management, preparation and briefing.

## Threats

**CFIT**
- Terrain rises 2000ft above AD elevation within 5nm TIO VOR with significant terrain and obstacles within 10 nm TIO – highest is a mast 7972ft AMSEL 10 nm SSE TIO.
- Maintain a high level of terrain-based situational awareness. Deviation off the STAR may be required for weather avoidance.

**Runway Incursion**
- Initial taxi can take you immediately onto the active runway.
- Crossing the runway is needed to use Twy K to reach Rwy 25 full-length.

**Runway Excursion**
- Due to elevation and warm temperatures, expect higher than normal ground speeds and plan accordingly.
- If rain is reported the runway is likely to remain wet.
- The LDA for Rwy 25 is 500m shorter than Rwy 07 due to displaced threshold.
- Rwy 07 has an upslope which can create the visual illusion of being high on approach.
- Rwy 25 has a downslope which can create the visual illusion of being low on approach

**Loss of Control**
- WINDSHEAR and turbulence can be expected in the vicinity of the airfield and at low levels with only moderate winds. The surface wind often differs along the runway.
- Strong gusty winds on approach can cause unpredictable downdrafts on short final, particulary in winter.

**Mid Air Collision**
- MRPV, Tobias Bolanos airport is 4 nm SE of the airfield and has similar runway orientation and is used for local traffic.

## ARRIVAL

**Diversion Airports**

| | | | |
|---|---|---|---|
| PANAMA CITY | PTY/MPTO | 292 nm/101°T | CAT B |
| SAN SALVADOR | SAL/MSLP | 353 nm/306°T | CAT B |
| KINGSTON | CUN/MMUN | 683 nm/347°T | CAT A |

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|---|---|---|---|
| CANCUN | CUN/MMUN | 87 nm/294°T | CAT A |

## APPROACH

- Contact ATC as early as possible for landing runway and wind conditions, or use D-ATIS if available. ATIS reception usually not available until late in the descent due to local topography.
- Dry season: winds usually favour Rwy 07. Wet season: winds usually favour Rwy 25
- Irregular terrain prior to threshold will cause rapid RAD ALT changes.
- Rwy 07: terrain rises toward runway but touchdown zone has downslope and the rest of the runway has an upslope. This creates an unsual visual picture.
- Rwy 07: with cloud in the valley, it is common to remain in cloud to short final
- Rwy 07: Consider flying the RNP 07 rather than the ILS to help reduce workload associated with possible GS capture from above.
- Rwy 07: pay close attention to the go-around procedure climb gradient, speeds and bank angle.
- Rwy 25: RNV V 25 follows a wider circuit pattern than the previous CYRUS visual and is preferred. RNP W has lower minimas and can be flown with FD guidance but requires RF.

## GROUND

- A tight complex airport with many hotspots and restrictions for larger aircraft. Study the ground charts and pay close attention to ATC when moving on the ground.

## DEPARTURE

- Rwy 25 is the preferred runway as you avoid flying a performance limiting departure from Rwy 07. Long-haul aircraft regularly use Rwy 25 with a tailwind for take-off to maximize TOPL. This is an approved procedure and ATC is aware.
- Departures from Rwy 07 must be flown by Captains or Air Vice Marshals.

## WEATHER

- San Jose lies in the tropics and has a tropical wet and dry climate. Weather conditions at the airport change quickly between extremes.
- Hurricanes occasionally affect Costa Rica.
- Mid Nov to Mid Apr: dry season. Predominantly Easterly winds. These can produce clouds that obscure terrain during arrival and departure.
- Mid Apr to Mid Nov: wet season. Predominantly Westerly winds. Rain mainly falls in the middle of the afternoon and can last 2-3 hours. Clouds begin to form around noon, developing into thunderstorms and heavy rain from 1400L.

## OPERATIONAL INFORMATION

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| **Handling Agent** | IBERIA |
| **Handling Agent VHF** | 130.450 |
| **Potable Water** | Uplift permitted |

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| **IF ONLY Electrical Power is required** | Use ground power at all times |

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|---|---|
| **IF BOTH electrical power and air conditioning is required:** | Use both ground services at all times |