

Twelfth north american, central american and
caribbean directors of civil aviation meeting

**Progress implementation of RNP-AR
procedures developed by COCESNA
for MHLM and MHPR airports.**

▪
COCESNA

Progress implementation of RNP-AR procedures developed by COCESNA for MHLM and MHPR airports

Introduction

- The Required Navigation Performance Authorization Required (RNP AR) Procedures Design Manual, Doc 9905, notes that RNP AR procedures offer significant operational and safety advantages over other area navigation (RNAV) procedures.



Progress implementation of RNP-AR procedures developed by COCESNA for MHLM and MHPR airports

- The procedures implemented in accordance with the manual allow taking advantage of high quality managed vertical navigation (VNAV) and lateral navigation (VNAV) capabilities, leading to improvements in operational safety and a reduction in the risk of ground impact without loss of control (CFIT).



Progress implementation of RNP-AR procedures developed by COCESNA for MHLM and MHPR airports

RNP-AR Training

- In the Central American region, there has been a lack of specialists trained in the design of RNP-AR approach procedures.
- The current procedures that comply with this specification have been developed by external companies, which in turn implies that they have not been subject to periodic review and improvement.



Progress implementation of RNP-AR procedures developed by COCESNA for MHLM and MHPR airports

RNP-AR Training

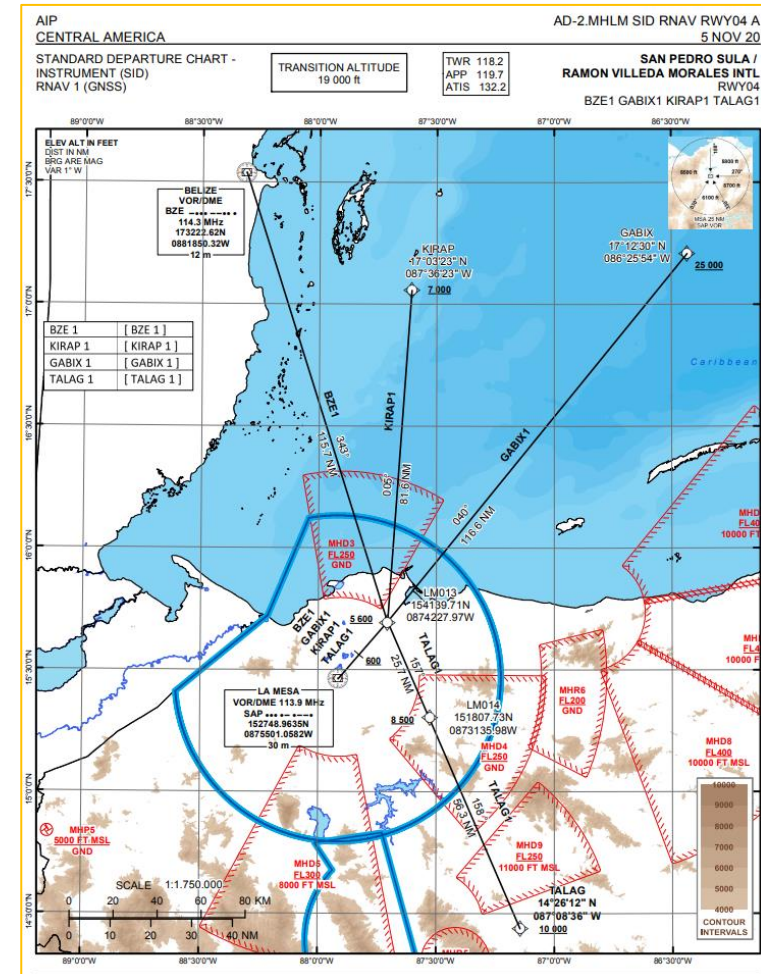
- In 2023, the Central American Institute for Aeronautical Training (ICCAE) trained the first group of Central American PANSOPS specialists in the design of RNP-AR procedures.



Progress implementation of RNP-AR procedures developed by COCESNA for MHLM and MHPR airports

Action Provided

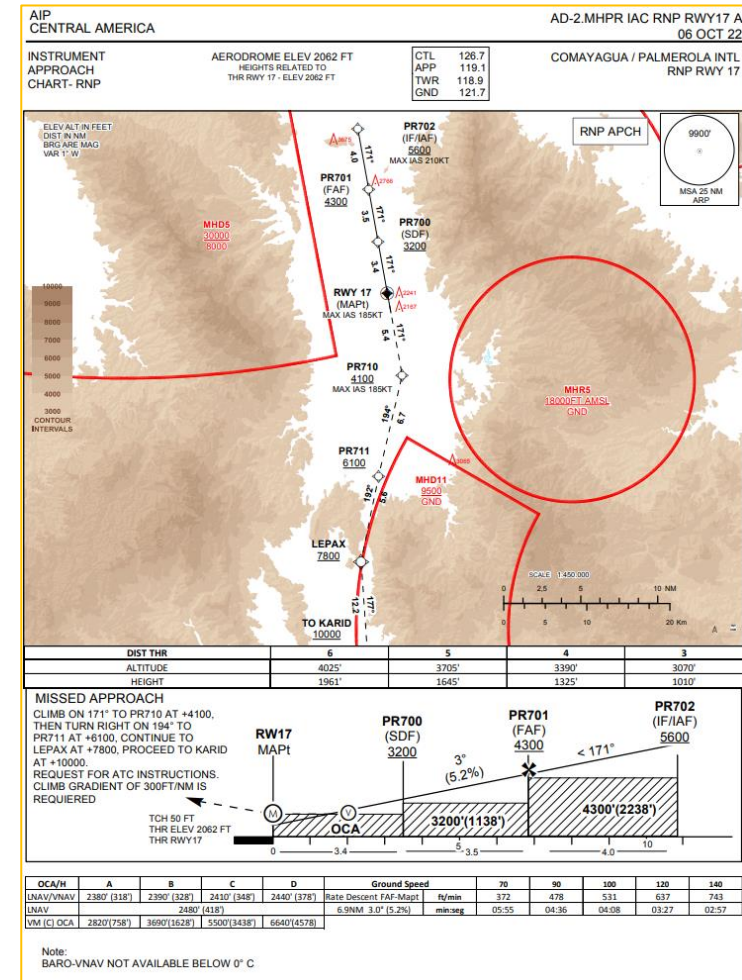
- COCESNA has begun studying the implementation of RNP-AR approaches at Ramon Villeda Morales (La Mesa) and Palmerola airports in Honduras.
- Runway 04 at La Mesa has lacked instrument-based approach procedures due to the risk associated with the high terrain of the Merendon mountain range.



Progress implementation of RNP-AR procedures developed by COCESNA for MHLM and MHPR airports

Action Provided

- In the case of Palmerola Airport, the adoption of RNP-AR procedures would allow a reduction in the distance traveled during arrivals and final approaches, resulting in substantial savings in miles flown.



Progress implementation of RNP-AR procedures developed by COCESNA for MHLM and MHPR airports

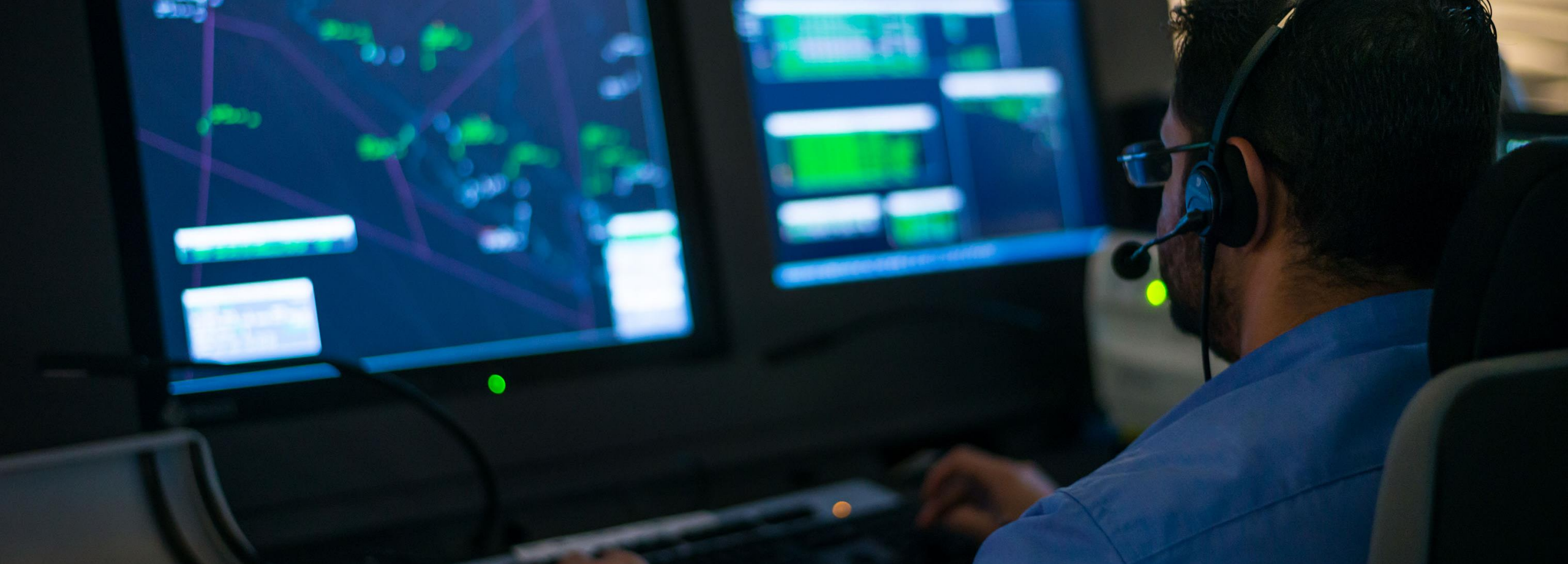
Benefits

The following are estimated values that illustrate the potential benefits of this project:

<p>With 365 annual flights from Houston, Palmerola</p>	<p>With 1,460 annual flights from Florida to Palmerola</p>	<p>Daily flights from El Salvador and Panama</p>
<ul style="list-style-type: none">• Saved 4,515 miles flown.• Savings of 33.7 tons of fuel.• Reduction of 106 tons of CO2 emissions.	<ul style="list-style-type: none">• Saved 32,178 miles flown.• 240 tons of fuel saved• Reduction of 755 tons. of CO2 emissions.	<ul style="list-style-type: none">• A decrease in distance traveled of approximately 13 miles for each operation to runway 17.

Action

- The meeting is invited to take note of the information presented
- Promote and support this type of initiatives that directly impacts the efficiency of operations.
- Support and strengthen processes aimed at developing capacity in State personnel for the design of procedures (example of the FPP project)



Questions?