

# Established on RNP (EOR) at LAX

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Administration



# EOR Background

- **Section 547 of the Federal Aviation Administration (FAA) Reauthorization Act of 2018 directed the FAA to establish pilot programs at three or more airports to provide air traffic control services on a preferential basis to aircraft equipped with certain NextGen avionics.**
- **In October 2019, the FAA tasked the NextGen Advisory Committee (NAC) with advising the agency on how to implement Section 547.**
- **The NAC suggested eight potential programs. The FAA selected programs at:**
  - Los Angeles International Airport (LAX)
  - Orlando International Airport (MCO)
  - Oakland Air Route Traffic Control Center (ZOA)
- **The FAA selected these programs because the agency could implement them in the short term, and they would likely prove the benefits of the NextGen investment by highlighting the advantage of equipping aircraft with NextGen technologies.**



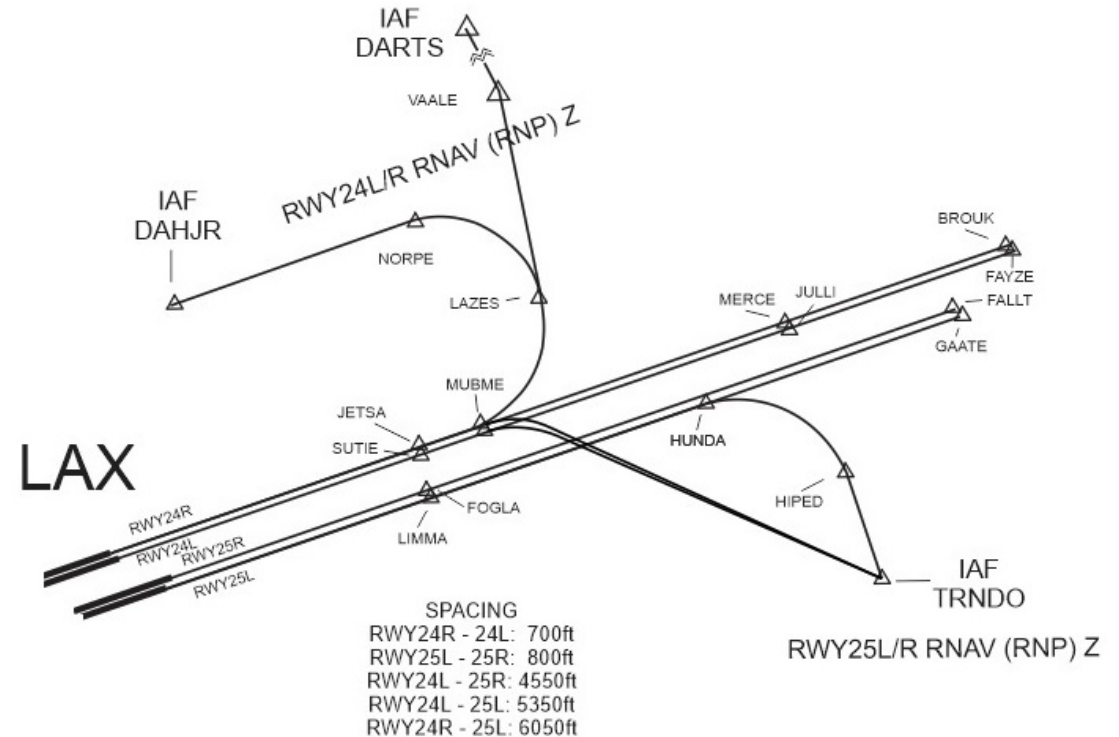
# Current Operations at SoCal Tracon

- **Generally, Air Traffic Controllers have to keep aircraft at least 1,000 feet apart vertically or 3 miles apart laterally in the airspace around airports.**
- **If the weather is clear, controllers can make sure pilots see each other and allow aircraft to get closer than that. But when there's reduced visibility due to fog or clouds, controllers must observe the 3-mile/1,000-foot separation standards.**



# Current Operations at SoCal Tracon

- At LAX, the North and South runway complexes are less than 3 miles apart. Therefore, controllers have to keep aircraft arriving simultaneously to the North and South runway complexes at least 1,000 feet apart vertically until established on final.
- As a result, controllers have been unable to assign the precision RNP approaches if other arriving aircraft are also on approach to the airport. To maintain the 1,000-foot vertical separation, controllers typically keep aircraft arriving to the North runway complex at a higher altitude and fly them further east before they turn them around to make their final approaches to the airport.



# Example of Current Operations During Instrument (IMC) Conditions





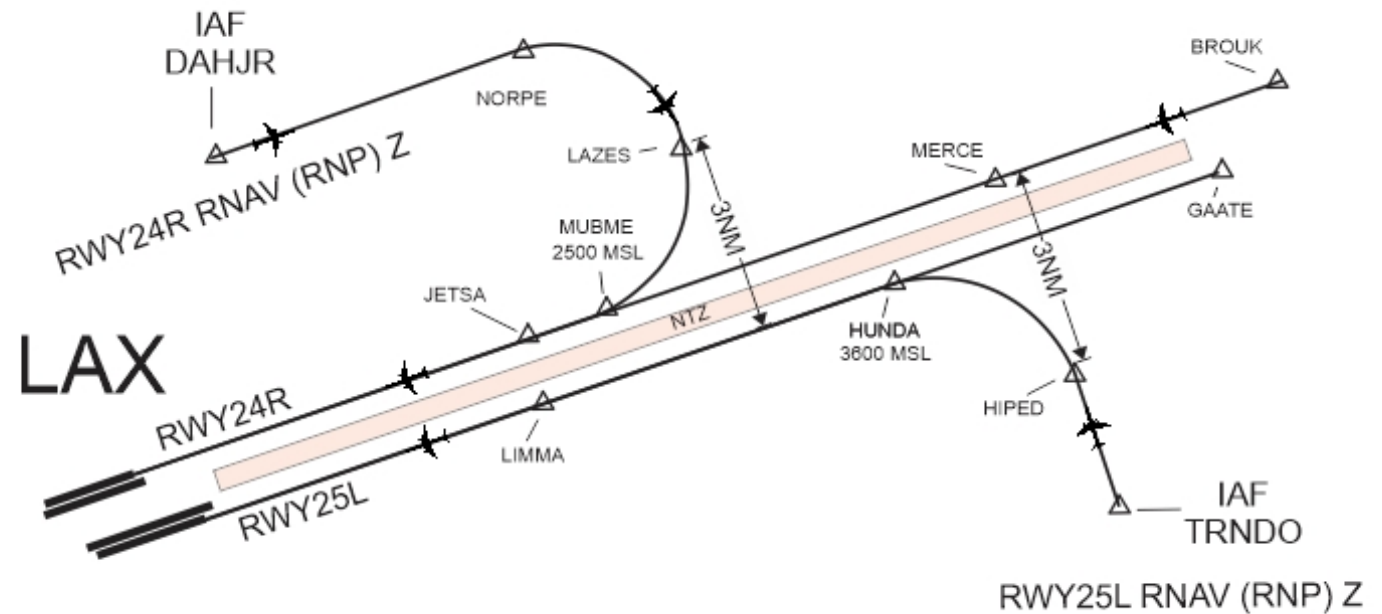
# RNP Approaches

- **RNP approaches are very precise. Aircraft that fly them must have on-board equipment that measures the aircraft's performance to ensure it is flying the procedure as intended. Pilots who fly the procedures must also have certain training and experience.**
- **RNP qualified Aircraft and Crew ensure enhanced route conformance and accuracy.**



# RNP-Z Approaches at Lax

- LAX has curving, precision RNP approaches to both the North and South runway complexes.
- Aircraft flying the RNP approach to the north runway complex must cross the DAHJR waypoint at 6,000 feet MSL.
- Aircraft flying the RNP approach to the south runway complex must cross the TRNDO waypoint at 5,000 feet MSL.





# Established on RNP (EOR)

- **EOR is a separation requirement Air Traffic Controllers utilize that allow aircraft operations to be safely conducted with approved Reduced Separation Criteria once aircraft are established on a PBN segment of a published instrument flight procedure.**
- **This EOR Criteria is used during instrument (IMC) conditions. This generally means during times when it is hazy or convective weather is present and the pilot is unable to see the airport from greater than 3 miles.**



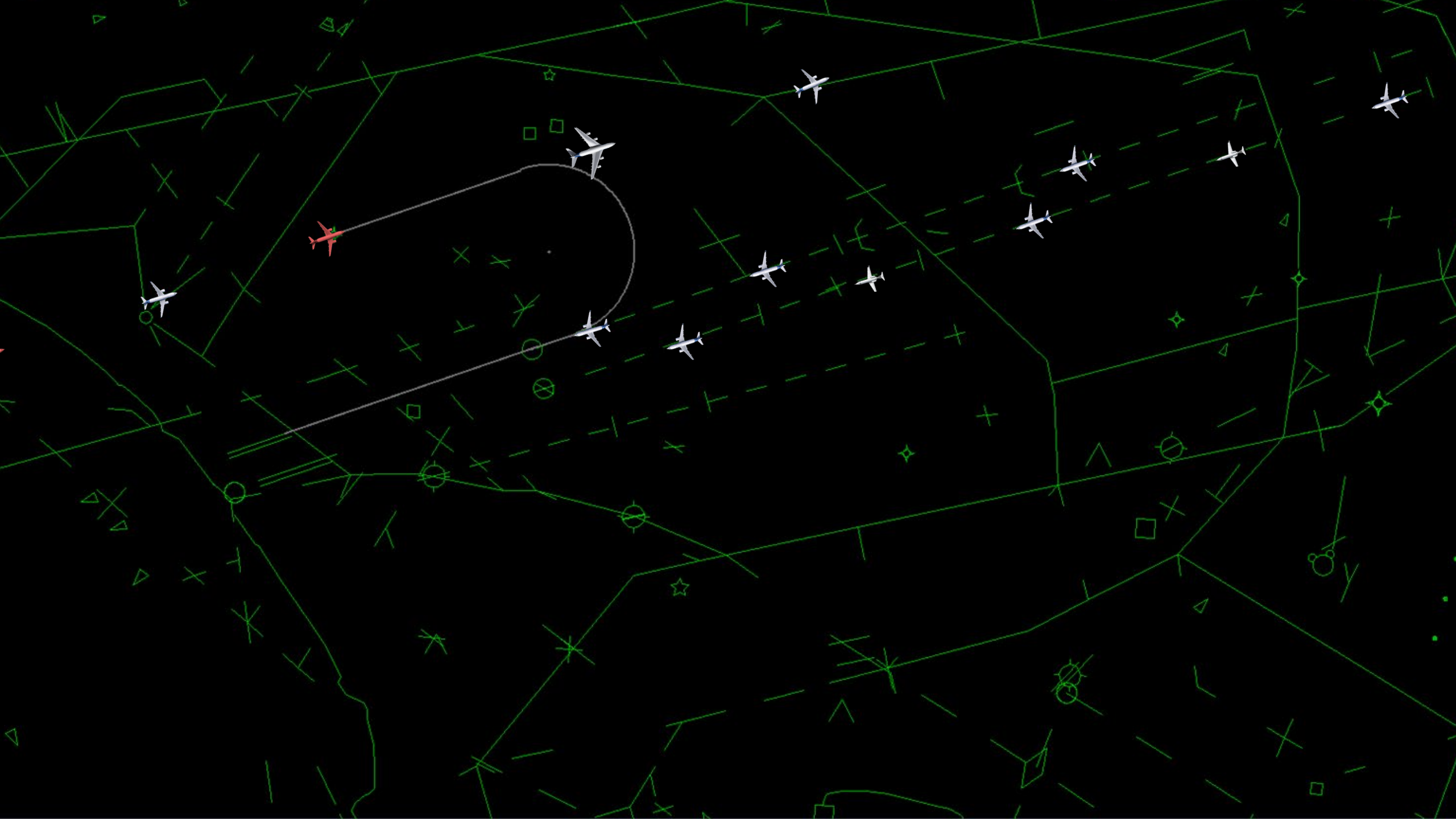
# What Does EOR Allow?

- **EOR allows aircraft flying an RNP approach to be considered “established” once they are observed passing the initial point of the approach. For example on the RNP Z 24R approach, an aircraft is considered established on final over it is over DAHJR.**
- **EOR essentially will allow the North and South complexes to be treated independently during IMC conditions.**
- **EOR allows air traffic controllers to handle aircraft with reduced separation standards in hazy or convective weather. In these weather conditions, it allows controllers to assign aircraft to the precision RNP approaches when they are less than 3 miles or 1,000 feet away from aircraft arriving to the other runway complex.**
- **EOR is not a new route, and it does not place aircraft on a new flight path. EOR is only a new separation standard authorized for controllers to utilize on existing route structure.**



# Example Utilizing RNP Approaches With EOR





# Final Thoughts

- **EOR authorization for LAX during west flow will be effective Aug 17<sup>th</sup>**
- **EOR could allow controllers to assign more aircraft to RNP approaches in foggy or cloudy conditions however there will be no requirement to force the use of the RNP approaches.**
- **Because of the complexity and multiple factors involved, we do not know how many more aircraft will be assigned the RNP approaches when we begin using EOR.**



# Questions?

