



Required Navigation Performance

End-to-end RNP solutions.

Jeppesen delivers a complete end-to-end solution for implementing the latest Required Navigation Performance (RNP) procedures. Services include initial design concepts through final design; publication and coding; assistance in regulatory approval; and assistance creating and optimizing your RNP implementation strategy.

RNP utilizes GPS technology and sophisticated onboard avionics to fly more direct and efficient routes. Instead of flying from one ground based navigation aid (NAVAID) to another, aircraft fly direct and tightly defined paths along waypoints.

Other procedures, such as Area Navigation (RNAV), utilize GPS, but RNP is different because it includes the ability for aircraft to monitor actual navigation performance and alert the crew if a performance tolerance will be exceeded. RNP implementation requires specific equipment on board the aircraft and special training for flight crews before operators are approved to use RNP procedures.

- ✔ **Better airspace utilization** – Airspace congestion is increasing, with some estimates showing air traffic doubling in the next 15 years, which will strain already burdened resources. Airspace is a commodity that must be managed. With RNP, aircraft are able to navigate laterally and vertically to very tight tolerances within defined corridors. This allows for more aircraft in the same airspace without compromising safety, and reduces the number of potentially hazardous obstacles in a flight path.
- ✔ **Terrain** – RNP procedures are ideal for airports with difficult terrain features, such as mountainous regions, because they confine aircraft to accurate corridors and are not subject to the limitations of ground-based NAVAIDs. Landing minimums with RNP approaches are generally much lower than comparable traditional approaches at terrain-challenged locations. This means fewer divers and better safety for operators.
- ✔ **Green** – RNP is vastly more efficient than conventional navigation and has the potential to reduce miles flown and optimize descent profiles, thereby reducing CO2 emissions, fuel costs and other aircraft operating expenses. RNP provides a predictable, repeatable track with optimized lateral paths that make it easier to avoid noise-sensitive areas, environmental protection zones and restricted airspace. RNP procedures are also the foundation for continuous descent arrivals, a technique for further reducing fuel burn and noise during descent into an airport terminal area by using idle or very low power settings from cruise altitude to the airport environment.
- ✔ **RNP certified** – Jeppesen provides a complete turnkey program that includes FAA-qualified AC 90-101 consulting and CASR Part 173 certification from the Civil Aviation Safety Authority (CASA) of Australia. We are certified by the FAA and CASA to design, flight-validate and maintain public RNP SAAAR procedures in the United States and Australia. We are the only company in the world that offers an end-to-end customer-focused solution—from initial procedure design to implementation to chart and navigation database maintenance.

Jeppesen has a proven track record of developing and implementing RNP procedures around the world.

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- ✔ Industry partners – Jeppesen works closely with Boeing and global Air Navigation Service Providers (ANSPs) and has implemented numerous RNP procedures around the world, including procedures for several terrain-challenged airports.
- ✔ Unmatched expertise – We are the worldwide leader in aeronautical navigation with more than 80 years of trusted experience. Our team of RNP experts has extensive backgrounds in procedure design, air traffic control, airline flight operations and obstacle evaluation.

[Learn more about what we offer.](#)

For more information, please email sales.gma@jeppesen.com