

Designing the best sleep in the sky

This is a special feature from *PAX Tech's* [September 2023 APEX EXPO](#) issue on [page 20](#).



The front-row Business Premier Luxe transforms into an 81-inch bed for a restful night's sleep. Image Credit Chris Tarpey, Air New Zealand Ltd

Sleep and the need for more comfort and space are the driving principles behind [Air New Zealand's](#) new premium cabins for its forthcoming eight Dreamliner 787-9 aircraft due to enter commercial service in September 2024 and retrofitted 787-9 fleet.

According to the airline, the cabins will be introduced initially between Auckland and New York. The Chicago route will also be added at a later time.

Speaking in June 2022 as the carrier announced its investment in the passenger experience, Air New Zealand Chief Executive Officer, Greg Foran hailed the cabins' combination of Kiwi hospitality and innovation as a winning formula. A key component of this is the Aotearoa-inspired cabin. Aotearoa is the Māori name for Zealand.

"New Zealand's location puts us in a unique position to lead on the ultra-long-haul travel experience," he said in the media statement. "We have zeroed in on sleep, comfort and wellness because we know how important it is for our customers to arrive well-rested. Whether they are heading straight into a meeting or to their first holiday hotspot — they want to hit the ground running."



Kerry Reeves, Head of Aircraft Programmes

In addition to a revamped Economy Class, which includes the Crystal Cabin Award-winning Skynest — billed as the world’s first sleep pods in the sky — and Skycouch, which transforms a row of Economy seats into a couch, the airline is enhancing its Business Class experience with new seating from [Safran Seats](#).

Designed specifically for the 787 to create a “home away from home” experience, the seats are offered in two choices: Business Premier and Business Premier Luxe.

Speaking alongside Foran in 2022, Air New Zealand Head of Aircraft Programmes, Kerry Reeves said in the same release: “We really encouraged Safran to think differently and push the boundaries with what we can do with the Business Premier seat to optimize the configuration and customer experience.” The final design also incorporates extensive customer research over five years.



The front row Business Premier Luxe offers more space for its passengers. Image Credit: Chris Tarpey at Air New Zealand Ltd

Reeves tells *PAX Tech* that the customer research and testing highlighted some important onboard experience requirements, with the most significant being:

- Unparalleled sleep experience
- Private but still spacious
- Ability to share experiences with travelling companions
- All seats having the same experience
- Simple and intuitive seat controls
- Easy access storage options
- Future-proofed digital features

“These insights formed the basis of the design requirements for the features of the seats and the layout of the aircraft,” Reeves says.



The inward herringbone configuration allows passengers to remain undisturbed as the crew conducts the onboard service. Image Credit: Chris Tarpey at Air New Zealand Ltd

The carrier has actively engaged with members of the Independent Living Charitable Trust (formally known as the Disability Resource Centre) on refining its processes and equipment with their input and direction. To overcome the absence of movable armrests, persons with mobility impairments can transfer horizontally into a Standard Business Premier or Business Premier Luxe seat without being lifted over an armrest or other obstacle.

So, what can passengers expect?

According to Reeves, a consistent experience — regardless of selecting the Business Premier or Business Luxe seat. Both Business Premier and Business Premier Luxe offer simplistic operation and intuitive useability. Inherent privacy is key to both versions, with Business Premier having high shells combined with adjustable aisle and centre dividers. If travelling with a companion, the middle row allows passengers to open their suite and share their experiences. The premium front-row Business Premier Luxe includes a fully closing door.

Such features, Reeves suggests, give options for improved sleep comfort. These elements are further enhanced as the seats extend into an 81-inch bed.

Both seat versions also offer wireless charging and an active backrest (which are certified for variable Taxi, Takeoff and Landing (TTL) positions) multiple TTL-certified stowage areas certified and multiple surfaces, including an electrically assisted large single-piece meal table.

Located at the front of the cabin, Business Premier Luxe includes all the features of Business Premier but with additional space, allowing two people to dine. For Air New Zealand, this increases the useable space for the passenger by 25 percent.



Business Premier Luxe includes a fully-closing door for extra privacy. Image Credit: Chris Tarpey at Air New Zealand Ltd

The new cabin retains the inward herringbone configuration of the previous premier cabin, with a 1-2-1 layout. Reeves says having the passenger's head not facing away from the aisle gives the crew easier visibility of the passenger as well as providing ease of service as surfaces are more readily in reach, and the crew don't need to reach across the passenger.

Discussing the design process in 2022, Reeves admitted that: "Working virtually throughout COVID added another layer of complexity. Without being able to travel to the Safran site to validate our ideas and concepts, we paralleled the mock-up build both in New Zealand at our innovation lab and at Safran 2 to ensure we had a common design interpretation and valid feedback on the engineering development of the layout and features."

Reeves elaborates to *PAX Tech*: "The lockdown made the program more challenging. However, being already very remote from suppliers, Air New Zealand is used to the distance and remoteness through this process. We, therefore, place more emphasis on prototyping and concept development in New Zealand in parallel to the supplier activity. Having our own aircraft mock-up and model-making capability is essential to validating designs and continued user testing throughout the design and engineering process."

The eight Boeing 787-9 Dreamliners arriving in 2024 and retrofitted current 787-9 fleet will have either eight or four Business Premier Luxe seats. For Business Premier configurations, the aircraft will

have 42 or 22 seats.

As Chief Customer and Sales Officer Leanne Geraghty commented upon unveiling the seats in 2022: “Whether we are welcoming visitors or flying New Zealanders home, we want our customers to experience Aotearoa from the moment they step onboard — and get the best night’s rest.”

Having had the opportunity to test the seat during this year’s AIX, although not sleeping on the job, *PAX Tech* can attest to the fact that both Safran Seats and Air New Zealand have delivered on the ambition to create the greatest flying experience yet.