

Supersonic Cabin Initiatives - A Series by Jennifer Coutts Clay, CMILT



Air France Concorde

## There's a lot happening in the aircraft-cabin design space, and speed is only the beginning.

Whether they design for sub-sonic or supersonic aircraft, today's cabin designers have a number of challenges to overcome and new tools to deploy in resolving them. Recent advances in materials and products address the constant restrictions of economics, safety-certification requirements, weight- and jet-fuel-savings, connectivity, sustainability concerns, cabin hygiene and passenger well-being, which could benefit tomorrow's supersonic aircraft. In the article **SUPER TIMES**, written for *Aircraft Interiors International* magazine in 2018, Jennifer Coutts Clay, author of *JETLINER CABINS: Evolution & Innovation*, reviews the recent evolution of aircraft-cabin design and suggests some new priorities for the next generation of speed.



AND FINALLY ...

Super times

> LET'S FINISH WITH SOME RECOLLECTIONS OF THE PAST TWO DECADES AND PREDICTIONS FOR THE FUTURE FROM ONE OF THE BEST-KNOWN EXPERTS IN THE INTERIORS INDUSTRY: **JENNIFER COUTTS CLAY**

During the past 20 years cabin designers have emerged as the new heroes and heroines of the civil aviation sector. Their work has had to comply with the most stringent aviation standards; and every day their cabins are in service, they are analyzed in minute detail and publicly critiqued by millions of passengers.

Just consider the recent challenges. At the end of the 1990s, major airlines invested fortunes in upgrades: entire first class cabins were reconfigured to accommodate fully flat beds. During the 2000s, the trickle-down product upgrade process resulted in dramatic reconfigurations of business class cabins. These levels of luxury were unparalleled in the history of scheduled air travel.

After the economic crisis of 2008, witnessing radical changes in consumer and corporate travel trends, designers focused on premium economy. On a number of airlines the visual treatments for these cabins recall the look of Concorde interiors, regarded as the epitome of elegance in the heyday of supersonic flight.

In economy class, many airlines are now offering larger overhead stowage bins, improved air quality, bigger windows, refreshing mood lighting, contoured seat foams, endless IFE content options, plus wi-fi connectivity. In real terms, ticket prices have declined significantly over the past two decades, but passengers might not realize that governments frequently add punitive airport departure taxes.

When oil prices spiralled to all-time record highs, designers were told to reduce the weight of cabin fixtures. In addition to achieving measurable savings in jet fuel, this move was made to please the growing green environmental lobby by demonstrating significant reductions in carbon emissions and landfill waste. Cabin specialists developed production programs focusing on advanced materials, methods and manufacturing processes.

From the turn of the millennium, the leading 150 airlines have seen enormous worldwide traffic expansion: in 2016, passenger boarding figures were close to 3.5bn, with load factors surging to around 80%, and in some cases, above 90%!

Cabin designers have to repeatedly recalibrate durability and maintainability metrics; and all their design elements – tested both individually and jointly – have to meet international safety requirements relating to flammability, smoke, toxicity and heat release. So what do the next 20 years hold? Customer surveys worldwide indicate that airline passengers are longing for more personalization, humanization, interesting experiences and warmth of welcome.

Cabin specialists have started to explore creative new concepts: virtual reality displays for information and entertainment, automatic reporting of items requiring management or maintenance attention, smart robots to deliver meals, and zoned clusters for personal wellbeing (such as childcare or exercise areas).

During the upcoming cutthroat battles to capture the maturing millennial market, social media platforms will offer opportunities for airlines to run lifestyle and loyalty programs designed to inculcate the allure of air travel.

On the operational front, can we envision the effects of the projected rise of low-cost longhaul airlines (Ryanair already carries over 100 million passengers annually on short-haul European routes and there was talk of 'stand up' seats)? And what about flying cars for airport transfers? And how about affordable secondgeneration supersonic aircraft services?

Cabin designers are ready for all these challenges. So, watch this space....

## CONCORDE SUPER TIMES



Air France Concorde Collection of J. Clay Consulting



British Airways Concorde



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Air France Concorde

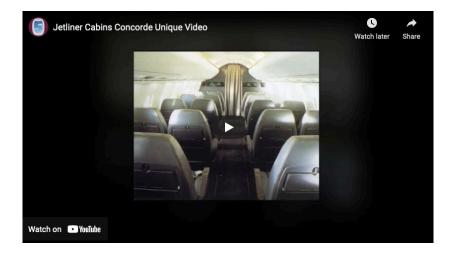


British Airways Concorde Photo courtesy of Chris Purcell and Bob Nisbet, Right Angle Films, spiritofconcorde.com



Jennifer Coutts Clay is the author of Jetliner Cabins: Evolution & Innovation, still the only comprehensive guide to aircraft-cabin design, covering trends from the 1970s to the present day (**www.jetlinercabins.com**). At British Airways, Jennifer held senior positions including head of western USA (operations and sales), head of Scotland, and controller of corporate identity, responsible for the implementation of the US\$75m program during the privatization of the airline and fleet refurbishment, including Concorde. At Pan Am, as general manager of product design & development, Jennifer led a US\$25m passenger-experience upgrade. As principal of J. Clay Consulting, Jennifer supports historical aviation research. She is a member of The Cornell Club, The Institute of Directors, The Chartered Institute of Logistics and Transport and The Wings Club (Golden Eagle Status). Jennifer is a founding sponsor of The Crystal Cabin Award, a founding member of The Pan Am Historical Foundation Museum, and she serves on the Concorde Advisory Committee at The INTREPID SEA, AIR & SPACE MUSEUM, New York City.

## Watch the Jetliner Cabins Concorde Unique Video





Jennifer Coutts Clay visits British Airways Concorde G-BOAD (the record-breaking Alpha Delta) at The INTREPID Sea, Air & Space Museum, New York City.

Images in this article have been selected from the Concorde Picture Galleries displayed in JETLINER CABINS: Evolution & Innovation E-BOOK App by Jennifer Coutts Clay, available at Amazon, Apple App Store and Google play.

www.JetlinerCabins.com.