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APRIL 2017



EBACE
PREVIEW

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WHAT'S NEXT FOR IFE?

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CITATION HEMISPHERE

How customers helped to design the interior of Textron Aviation's first large-cabin jet

SUPERSONIC INTERIORS

The technical challenges facing developers of the new generation of supersonic business jet interiors

REMANUFACTURING

From a financial standpoint, which aircraft type is the best candidate to make good as new?

Ahead of EBACE 2017, leading designers from Europe's VIP design houses, completion centers and an aircraft manufacturer discuss the factors impacting their work

Big asks



Sylvain Mariat

HEAD OF CREATIVE CABIN DESIGN,
AIRBUS CORPORATE JETS



Jean-Pierre Alfano

FOUNDER AND CREATIVE
DIRECTOR, AIRJET DESIGNS



Warja Borges

OWNER, UNIQUE AIRCRAFT



Michael Bork

AIRCRAFT INTERIOR ARCHITECT,
VIP & SPECIAL MISSION AIRCRAFT
SERVICES, LUFTHANSA TECHNIK



Christian Schirlin

DIRECTOR OF VIP COMPLETIONS
AND HEAD OF PROJECT
MANAGEMENT, AMAC AEROSPACE



Jacques Pierrejean

OFFICE GENERAL MANAGER
AND DIRECTOR, PIERREJEAN
DESIGN STUDIO

SYLVAIN MARIAT

Different cultures have different tastes, so we do our best to reflect these, as well as customizing ACJ cabins to suit individual preferences and lifestyles, so it's hard to generalize. Today's cabins tend to feature more curves – in seats, tables and walls – than those of previous decades.

JEAN-PIERRE ALFANO

From recent modern interiors that use basic two-tone color contrasts with modern finishes such as white lacquered surfaces adorned with metal inlays, I see a shift to demand for warmer interiors with simple lines and delicate materials and finishes that are reviving old-world craftsmanship. For example, on one project we are using straw marquetry for the tabletops and door design, to give the furniture a subtle touch of luxury inspired by 1930s modernist French designer Jean-Michel Frank.

How would you describe the most popular design style at the moment?

JACQUES PIERREJEAN

Nothing exceptionally exciting – most of the time it's a combination of white, black, beige and honey tones, with wood and material contrasts. Different atmospheres are given by using various materials and textures, but the architecture is too often very similar; the aircraft is divided into small rooms, filled with molded furniture with overlaps everywhere to give a classic style.

MICHAEL BORK

In general, I see demand for design that works for many years, with a value beyond that of mayfly fashion. Look, for instance, at the work of Otl Aicher: he created Lufthansa's corporate design more than 50 years ago, but it still works.

CHRISTIAN SCHIRLIN

There is a trend for neutral ambiances and natural colors. Carbon fiber and customized special effects are replacing wood slowly. If wood is applied, there is a tendency toward light natural colors or reconstructed wood veneers. Nowadays, interiors are designed more often using the maximum available space with a minimum of break lines.

MICHAEL BORK

I saw a great collection of plaited Asian bamboo baskets and antique armors – awesome constructions made with techniques refined over many generations. I was impressed by their well-balanced proportions, efficient details, respect for materials, and combination of aesthetics and function.

CHRISTIAN SCHIRLIN

Mirrors made from real glass, as well as residential tables and decorative lamps, are impacting today's aircraft interior designs. These items are designed and modified using rapid prototyping to meet aviation certification standards.

What – potentially non-aviation – designs, materials and technologies have inspired you recently?

SYLVAIN MARIAT

Nature always inspires us. You can see this in our Melody concept, created to accompany our new ACJ320neo family. Melody echoes the curves of nature – such as hilly horizons and rolling rivers – with the path through the cabin and the walls. Nature also inspires our aircraft structures. For example, we are looking at adopting the structure of water lily leaves in wing spoilers, because of the efficient way in which they handle loads.

JEAN-PIERRE ALFANO

Marble mosaics, stone flooring and straw marquetry.

JACQUES PIERREJEAN

A combination of natural and artificial materials inspire me. My ideas include using real grass to create green walls, leather or stone for the floor, textured metal for different applications, and integrating lighting in carpet.

WARJA BORGES

For a recent BBJ777 concept I was inspired by contemporary 5-star hotels. Wallpaper-thin stone panels and OLED technology are two of the non-aviation features I incorporated.

CHRISTIAN SCHIRLIN

New inner cabin shells and layouts are shaped to produce a smooth transition room to room, and smart adaptation to windows. Another trend is a focus on optimizing natural light coming into the cabin. Panoramic windows will be the next challenge.

MICHAEL BORK

I see a growing interest in good design in general. This may have to do with everyday experiences, for example the difference a well-designed phone interface can make. Is it clean, comprehensive and intuitive, or confusing and frustrating, covering shortcomings with visual gimmicks? Are functions, style and aesthetics all working well and together? At Lufthansa Technik we are aware of such qualities and focus them in our interior architecture.

What other trends have you noticed?

SYLVAIN MARIAT

One trend is toward wider and longer cabins in the emerging generation of business jets.

JACQUES PIERREJEAN

We focus on customizing stowage spaces on most projects. The dressing area must be able to accommodate various suits, shoes and other items, for example, long coats, Arabic dress, cold-weather clothing, and so on. Another trend is that seat upholstery is evolving to be more comfortable.

SYLVAIN MARIAT

We have already helped customers take the latest technologies they have on the ground – including HD TV screens, theater-quality sound, mood lighting, connectivity, and so on – into the sky. We have also enabled the use of personal devices to control lighting and window shades, as well as to play music and videos. We are now implementing new technologies, including even better internet speeds via Ka-band.

JEAN-PIERRE ALFANO

One of our clients recently had issues with his onboard wi-fi/satcom system. Looking into it, it appeared the system had a maximum bandwidth of 432Kbps; with today's software and content evolution, this is clearly not enough compared with what most of us now have in our homes.

WARJA BORGES

Connectivity for more flexibility on board is of high interest. But health is also an important topic: customers are requesting space to exercise or meditate, or even special equipment such as training bikes.

What technologies do clients want on board now?

JACQUES PIERREJEAN

Clients are looking for great IFE, large TV screens and even home cinemas. Concerning seating, they are very happy when we can offer them an ergonomic study and customized comfort. Each passenger is different, but seat width and height can be adjusted to their size with Chair, our new seat concept designed for Lufthansa Technik. Sound insulation is also a general request: all clients are asking for a quiet atmosphere.

MICHAEL BORK

They want all kinds of connectivity and communication, entertainment and inflight information. We also deliver fresh cooking technologies, and those supporting health and well-being, for example with onboard spas. There is also growing interest in upgrading older aircraft with technologies that were not available when the aircraft was originally delivered.

CHRISTIAN SCHIRLIN

Customers expect remote control via iPad or touchscreen. They also need their online services to work as seamlessly in the air as they do on the ground, so they are requesting the latest Ka-band system. Lighting panels with customized effects are also in demand.

Custom cabins

The focus at the Flying Colours Corp (FCC) stand will be the world's first cabin conversion that blends the company's interior design, engineering and installation skills with pre-engineered components from Inairvation, the joint venture between Lufthansa Technik and F/List.

The private Global Express has undergone refurbishment at FCC's facility in Peterborough, Canada, and now incorporates new seats, exotic leathers, granite floors and carbon fiber veneers. The new mood lighting is controlled by the nice HD CMS/IFE system from Lufthansa Technik and

integrated into sideledges made by F/List. FCC can now install these components on Gulfstream aircraft, as well as Bombardier Global and Challenger types.

Delegates will also discover more about the company's special-mission capabilities, as well as its completion, paint and maintenance offerings. With the deadline to install ADS-B Out on the horizon, FCC will also encourage visitors to sign up for outfitting as it expects competition for slots to increase, especially as it achieves more approvals for the systems.



Q&A

Werner Kartner

CO-CEO, INAIRVATION

What are your plans for the show this year?

We will show a new option for G450/550 refurbishment and a new Chair design. We hope to garner a lot of interest and potential customers.

What have you learned from your first refurbishment project?

Flying Colours Corp (FCC) is a perfect partner for Inairvation. Whether you talk to the management or to employees – you always feel this special spirit. There were some typical challenges, but we had a solution-focused way of working, which was the key to success. We aim to industrialize the whole retrofit business. After the great cooperation with FCC, we expect more mutual projects and hope to attract other customers as well.

What are your plans for Chair?

Many renowned designers have expressed interest in developing seating concepts with us, the first VVIP project is in progress, and OEM customers are interested in using Chair for their business jets. We have very high growth expectations, because Chair offers clear advantages over conventional seats.

What other areas offer possibilities for innovation?

We are working on the smart cabin – integrating all the components we supply with IFE/CMS. There is also the potential to reduce maintenance costs by incorporating RFID chips and software into our products. Like a car's onboard diagnostics system, this technology would monitor usage and warn owners and technicians about potential damage. In addition, there is scope for increased personalization, for example with automated temperature and light regulation, and IFE controls that correlate with pre-determined preferences.



"I am interested in seeing the latest CMS technologies, as well as new material finishes, and, as always, cool things"

Jean-Pierre Alfano, founder and creative director, AirJet Designs

GLOBAL IFE

The studio-licensed movies and TV episodes on Gogo Business Aviation's IFE service, Gogo Vision, are now available in seven languages: English, French, German, Italian, Russian, Spanish and Swedish. Content is updated automatically using Gogo Cloud, now available at select European FBOs.

Gogo will also highlight the signing of its first business aviation customer for 2Ku, a connectivity solution originally for commercial aircraft but now also available on large VVIP types. The dual-antenna system uses a global satellite network to enable streaming video and audio, face-to-face video conferencing with a user's favorite application, email with large attachments, and web browsing. It offers global coverage.



INSIDE AND OUT

The ability to optimize maintenance downtime by performing interior work simultaneously will be showcased by RUAG Aviation. For example, the company's facility in Munich, Germany, recently refurbished a Challenger 604 during a 192-month MRO inspection.

The aircraft, which is registered in the Middle East, was delivered on time following 10 weeks' work. All the soft goods – including leathers, fabrics and carpeting – were updated. "The owner was looking to update and refresh a dated interior," says Robin Freigang, director of cabin interior services and design at RUAG Aviation. "The existing cabin was actually in excellent condition. Yet, the more modern color scheme lightened the interior dramatically."

