MARCH 2011

Business Jet interiors INTERNATIONAL

THE INTERNATIONAL REVIEW OF BUSINESS JET INTERIOR DESIGN AND COMPLETION







P/N: MR4AA1-01 Model: microwave



P/N: HFES0028-20 Model: Nespresso maker



P/N: HFA2000-10 Model: beverage maker

(mgs

(mgs



P/N: HFWF2003-01 Model: trash compactor





Aircraft interiors

5 - 7 APRIL 2011
HABBURG MESS [JOERNALY WWW AIRCRAFTHEIGHEISTO. CO.

BOOTH 7F20



INNOVATION



P/N: IHP4 Model: induction hot plate



P/N: HFA2007-01 Model: beverage maker







P/N: HFAWB2005-01 Model: water heater



P/N: MB0000750 Model: trash compactor box



P/N: HFWH2003-02 Model: trash compactor

CARE



P/N: 9501D Model: espresso maker



P/N: AAD4-07 Model: induction oven



P/N: HFN2007 Model: beverage maker



P/N: HFA28V Model: beverage maker



P/N: HFE95-20D Model: espresso maker



P/N: SHF2010-002 Model: vip seat



P/N: HFWH0028-02 Model: trash compactor



P/N: MK279-00 Model: half-size trolley



P/N: HFEJ2008-10 Model: Nespresso maker





P/N: HFAWB2007-01 Model: water heater

TRADITION

ASSISTANT EDITOR ART EDITOR ASSISTANT ART EDITOR

Andy Bass, Andrew Locke, Craig Marshall, Nicola Turner, Julie Welby, Ben White PRODUCTION MANAGER

PRODUCTION TEAM

ART DIRECTOR **PUBLICATION MANAGER** INTERNATIONAL ADVERTISING SALES **CIRCULATION & SUBSCRIPTIONS MANAGER**

published by UKIP Media & Events Ltd

NBAA (memb

Annual Subscriptions (four copies)
Worldwide Rate: £42/US\$75

shiftingsands

While on board an ACI at last November's AVEX air show in Sharm El Sheikh, Egypt, I had the opportunity to chat to an Airbus executive about market trends and future growth. The conversation immediately switched to China - with an economy that now outstrips Japan, Chinese entrepreneurs are increasingly turning to business aviation to further their commercial interests. As our cover story makes clear, the Chinese appetite for business jets, in particular larger aircraft with the necessary range and cabin comfort, continues to grow at eye-watering levels. We take a look at some emerging cabin trends from the region, however, as Jason Liao, chairman and CEO of China Business Aviation Group warns, there's no magic formula: "The Chinese market has its own characteristics, so if you want to succeed you need to be in it for the long term."

Of course predicting the future is always fraught with risk – any hint of a mass uprising in Egypt was far from evident during AVEX - however the tight security around former President Mubarak during the official opening ceremony should have provided a rather large clue. Meanwhile, tensions across North Africa and the Middle East continue to rise - with VIP aviation in the region in particular experiencing a certain amount of turbulence. For example, the new Tunisian government has already placed former President Zine El Abidine Ben Ali's A340-500 up for sale, according to French media reports. The aircraft was undergoing VIP conversion at Sabena Technics' Bordeaux Mérignac plant. A Dassault Falcon 900B previously owned by Ben Ali's son-in-law Sakhr El Materi, has also been put up for sale, following its seizure in Geneva. With further reports of unrest in the region arriving on a daily basis, the major manufacturers are understandably nervous.

On the subject of change, it gives me great pleasure to announce that a new editor will be taking over responsibility for Business Jet Interiors International – Izzy Kington, currently our assistant editor, will make the step up in time for our EBACE issue. I will of course continue to take a very active role in the magazine going forward in my new position as editorial director – a move which will hopefully allow me more freedom to travel and keep up with this rapidly changing business of ours.



Anthony James, editor





7 news

THE LATEST INTERIORS NEWS

16 design briefs

RAINSFORD MANN DESIGN'S 'ART DECO SKY PALACE' FOR A MIDDLE EASTERN CLIENT'S BBJ; AND PAULEY INTERACTIVE'S MULTIFUNCTIONAL CAR/BOAT/JET/HELICOPTER





20 aboveaverage

GULFSTREAM'S NEW G250 INTERIOR LOOKS SET TO SHAKE UP THE SUPER-MIDSIZE MARKET, WITH A FIBRE OPTIC AND WIRELESS CMS, MORE COMFORTABLE SEATING AND A LARGER GALLEY AND LAVATORY FITTED AS STANDARD

Mark Huber, Business Jet Interiors International

singlelife 36

THE REDESIGNED PIPERJET ALTAIRE FEATURES
A LARGER FUSELAGE AND MORE SPACIOUS
INTERIOR – HELPING ENSURE THIS SINGLE-ENGINE
VLJ SHOULD PROSPER DESPITE ONGOING
TURBULENCE IN THE MARKETPLACE

Mark Huber, Business Jet Interiors International



secondopinion

A DEDICATED REFURBISHMENT PROGRAMME
AIMS TO BREATHE NEW LIFE INTO THE
VENERABLE BEECHJET

Mark Huber, Business Jet Interiors International





8 threethinking

42

JET AVIATION BASEL'S JET FALCON REFURBISHMENT PROGRAMME OFFERS F2000 OPERATORS A CHOICE BETWEEN THREE MODULAR CABIN PACKAGES, SAVING TIME AND MONEY

Matt Conder, Business Jet Interiors International



softsell

THE LATEST PRODUCTS AND PROGRAMME AWARDS IN THE WORLD OF BIZJET LEATHERS AND FABRICS

Izzy Kington, Business Jet Interiors International







This is no place for a second-class phone system.

Introducing TrueNorth, the airborne telecom solution that means business.

Faster connections. Cost-saving service. Better security.

Works right the first time. Easy-to-use voice, data and Wi-Fi.

Future-proof design.



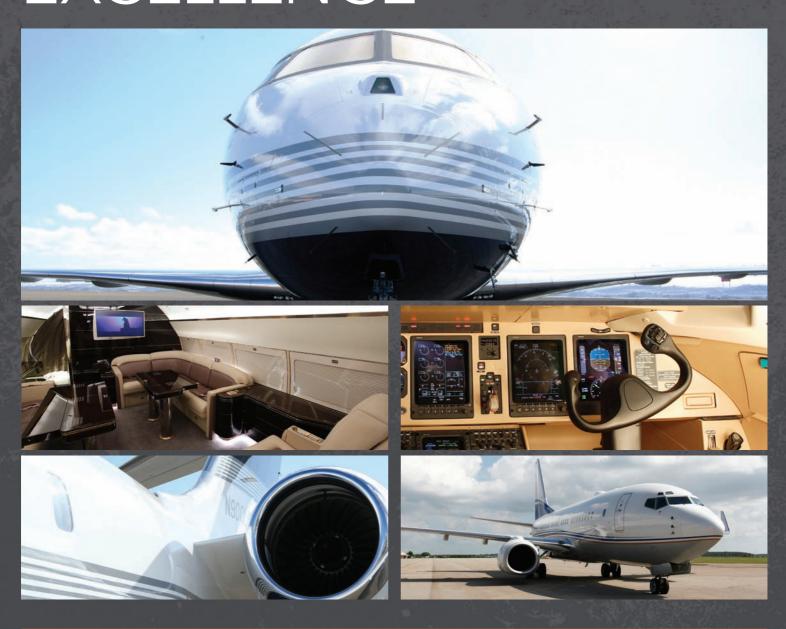




Fly. Connect. Succeed.

truenorthavionics.com

HAND CRAFTED EXCELLENCE



COMPLETIONS BACKED BY REPUTATION

contact

[T] 1 519 228 6706 andy@goderichaircraft.com www.goderichaircraft.com





Dassault to use 3D data for completions

Dassault Falcon has received approval from the FAA for the use of 3D data for type design in the completions process of Falcon aircraft. The approval applies to completions for production aircraft, including the Falcon 900 and 2000 series, as well as the 7X (pictured). Dassault previously received approval for 3D data on the basic design of the Falcon 7X when it was jointly certified by the FAA and the EASA in 2007, making it the first aircraft to be fully approved for the use of 3D data throughout the entire manufacturing process. The company had to develop detailed processes for the use, storage and long-term retention of 3D data, including disaster recovery plans, to gain the completions approval.

Titan Airways adds flexible BAe Avro RJ100 to fleet

Building on a 14-year relationship with BAe Systems, Titan Airways has chosen to add an Avro RJ100 regional jet to its charter fleet based at London Stansted.

The aircraft can provide flexible seating with variable geometry seats, configured for all-economy service with 110 seats, six abreast, or 55 business class and 43 economy seats if desired.

"We anticipate plenty of interest for ad hoc and ACMI operations," said Alastair Kiernan, commercial director at Titan Airways. As with all the Titan fleet, including the recently introduced Embraer Legacy 650, the RJ100 will be available for shortnotice charter and subcharter.



PATS contracts BBJ interior refurbishment

PATS Aircraft Systems has signed a major interior refurbishment contract for a BBJ based in the Asia Pacific region. PATS will perform the major interior overhaul at its facility in Georgetown, Delaware, USA.

The work includes the modification or replacement of nearly all existing interior design elements, including finishing materials and soft goods; as well as reconfiguring the seating layout and upgrading the CMS/IFE. PATS will also perform maintenance work and oversee an exterior paint job. The company has already installed the BBJ into its hangar.

PATS also recently delivered another BBJ interior modification to an undisclosed customer. The BBJ included a new CMS/ IFE system and other interior modifications delivered with two new STCs, certified on behalf of the FAA by PATS' ODA.

PATS' facility in Georgetown is a Boeing authorised BBJ service centre and has multiple hangar slots available in 2011 and beyond for aircraft interior completion, maintenance, modifications and auxiliary fuel tank installations.

ACJC completes its sixth VIP ACJ cabin

The Airbus Corporate Jet Centre (ACJC) which specialises in Airbus Corporate Jet (ACJ) VIP cabin completions, has delivered its sixth cabin to an undisclosed customer in the Middle East.

The latest delivery is an A320 Prestige with a VIP cabin that features a forward lounge with club seats and a divan, a bedroom with a large en suite bathroom, and two VIP quest areas. This aircraft is the first operational A320 Prestige equipped with Airbus' GSM onboard system. ACJC has succeeded in adapting the GSM technology to the VIP cabin and airframe systems, enabling guests to use their mobile phones during flight. The cabin also features mood lighting, new touchscreen technology, satellite TV and advanced passenger entertainment and communication systems - including a passenger flight information system, internet and AVOD.

Meanwhile, ACJC's parent company, Airbus, announced that it delivered 15 corporate jets in 2010, worth more than US\$1.5 billion at list prices. Airbus also won eight orders for its corporate jets in 2010, taking total orders to date to more than 170 aircraft.





Cabin control integrates with phones and iPads

Several companies have recently found ways to integrate cabin control with consumer devices. For example, Flight Display Systems has installed an Android software application (pictured below) for use with its Select CMS, enabling passengers to control cabin functions from mobile phones or tablet computers.

The launch customer for the Android CMS software was a Hollywood movie producer who owns a Gulfstream III. A 7in Android-powered tablet controls all cabin functions, including lighting, window shades, Blu-ray player, movie library, and moving map. The wireless system operates via Bluetooth. "This software will work on any Android 2.0-powered mobile phone or tablet with Bluetooth," said Jonathan Pinson, resident Android technician at Flight Display Systems.

Meanwhile Duncan Aviation has integrated an iPad application for wireless control of cabin systems in a Falcon 900. The installation utilises an iPad app, an Aircell CTR WiFi source and an interface unit to communicate instructions to the Honeywell MH CMS. Duncan Aviation's avionics technical representative Adrian Chene worked with the client to deliver the first system and is now exploring the possibility of integrating iPad control with cabin systems in other aircraft models.



328SSG and ctm unveil new interior

328 Support Services (328SSG) has launched a new VIP product, the 328DBJ, which will be its standard for all future VIP conversions. The interior is the result of collaboration with ctm design, and features a galley designed to utilise the forward cabin more efficiently, generating nearly half a metre more cabin space. The stretched interior (10m long, 2.15m wide and 1.8m high) can also accommodate a lounge and conference area. "The 328DBJ has a low unit cost price per airframe of around US\$3-6 million (unconverted or modified) and refurbishment can range between US\$4-6 million depending on the customer's taste," said Ray Mosses, head of sales at 328SSG.

Greenpoint finishes BBJ modification early

Greenpoint Technologies has delivered a Boeing Business Jet (BBJ) modification programme early for an undisclosed customer. The BBJ communication upgrade required an extremely tight schedule. The contract initiated in October 2010 with a first of model (FOM) modification scheduled for early December 2010. However, the team started the FOM modification on 30 November 2010 and tested it on 2 December 2010.

Greenpoint says it is also on target for a full BBJ interior completion with the same client, inducting in April 2011. All interior components are anticipated on dock one month prior to aircraft induction, because of engineering and procurement surpassing the intentioned schedule. "The completion is ahead of schedule creating a positive experience for our client," said Adrian Osborn, Greenpoint's vice president of programmes.

The company offers interior design, engineering, programme management and certification for Boeing interior installations and modifications.

L-3 awarded 747-8 VVIP completion contract

L-3 Platform Integration has won a contract from a confidential customer to provide a VVIP completion for a new Boeing 747-8. Both interior and exterior work will be performed at L-3 Platform Integration's VIP and Head of State Completion Center in Waco, Texas, USA.

The work includes a complete interior featuring the latest technologies in entertainment systems, lighting and sound elimination/dampening. The contract also includes a detailed exterior paint job and work on other major aircraft systems.

"We are very pleased to have been selected to work on a new model of aircraft for this VVIP, who has been our customer for 20 consecutive years," said Ken McAlpin, vice president of L-3's Head of State Completion Center. "This will be the first aircraft delivered with a VVIP interior to an operating customer of a Boeing 747-8."

The Boeing 747-8 adds to L-3's aircraft modification portfolio, which includes roughly 50 wide-body deliveries. L-3 is a Boeing-recognised completion centre for both wide-body and business jets.



At L-3, we deliver the highest quality in VIP interior service to our customers. Our interiors are hand-crafted and built to the customer's specifications with an unmatched range of expertise and technology for a flexible completion process. From entertainment and global communications to security and self-protection, our in-house engineering and design teams deliver total systems knowledge and a wealth of aircraft modification and maintenance experience. We are ready to deliver the highest quality performance for your aircraft interior. For more information, call 254-867-4244 or visit www.L-3vipinteriors.com.

Platform Integration L-3com.com

be the of the shelf

THE MOST SIGNIFICANT DATES IN 2012





22-23 FEBRUARY 2012

The international exhibition for the selection of the world's FBOs and business aviation destinations!

Europe's only exhibition dedicated to showcasing FBOs, business and general aviation airports, MROs, handling agents and refuelling companies from all over the world.

FREE TO ATTEND!



CANNES | FRANCE



Private Flight to cater for Rizon Jet

Rizon Jet has chosen Private Flight Global as its preferred inflight catering partner. Using an online ordering platform, clients can arrange inflight cuisine according to flight and type of trip, with support from 24/7 operations personnel. "As we expand our business and move into new territories such as Russia and Asia, we want our international clientele to enjoy a consistently high standard of inflight cuisine. This, plus the company's superb technology platform that enables orders to be placed instantly from virtually anywhere via a secure online platform, even via iPhone or iPad, was the driver in selecting Private Flight," said Patrick Enz, CEO of Rizon Jet.

Hawker 800XP converted to air ambulance

Dubai-based Empire Aviation Group (EAG), operator of a fleet of managed business jets, has joined forces with RMSI – a medevac, emergency medical services and clinical services specialist – to launch an intensive care air ambulance service using a Hawker 800XP. EAG will manage and operate the aircraft on RMSI's behalf. The aircraft was stripped out and converted for the purpose by specialists in Australia.

The air ambulance is based in Dubai and will serve RMSI clients in the region, including global insurance patients, governments, corporations and private clients, as well as patients in hostile situations and remote locations.



FAA grants ODA to DRB Aviation Consultants

DRB Aviation Consultants has received authorisation to operate under the US Federal Aviation Administration's (FAA) Organization Designation Authorization (ODA) programme.

The ODA rules allow the FAA to delegate more responsibility to private industry, reducing its workload and streamlining certification and inspection. Under ODA, DRB Aviation is allowed to determine compliance and perform certification functions on behalf of the FAA.

"This delegation will enable DRB Aviation to fulfil the market demands for safe, efficient and reliable issuance of Supplemental Type Certificates (STCs)," said Tom Langeland, vice president of operations at DRB Aviation. "We can now provide our customers an alternative that will prove to be more cost-effective and timely by developing a customised approach to meet their immediate needs."

Specialising in VIP interior engineering, certification and programme management, DRB has a 15-year history on VIP and head-of-state aircraft.

Cabin interior staff changes at Gulfstream

Gulfstream has named Christine Manka Williams (pictured below) as its new senior operations manager, refurbishment. In her new position, Williams implements process changes and oversees the work performed in the trim, wood, finish and paint shops at the Gulfstream Savannah Service Center in Georgia, USA.

Williams has worked at Gulfstream for 14 years. Most recently, she was assistant programme manager for Gulfstream's military and special missions unit, where she led a team that designed and outfitted the interior of a Gulfstream G550 that serves as an atmospheric research aircraft for the German Aerospace Center. Among other duties, she managed military refurbishments and coordinated and oversaw all military and special missions aircraft visits for all Gulfstream facilities.

Meanwhile, the company has appointed Doreen Gonzalez as its senior manager, G650 procurement. In her new role, Gonzalez oversees the procurement of materials used in the manufacture of the G650 business jet.

Gonzalez previously served as a senior purchasing manager for Gulfstream's completion facility in Savannah, USA, most recently focusing on sourcing for the G650 interior. Before that, she managed the completion material contracts for the Gulfstream Enhanced Vision System. She also worked as senior project manager for a number of Gulfstream V outsourced interior completions.





Comlux delivers fleet-wide MedAire medical services

Comlux The Aviation Group has chosen MedAire to ensure its VIP charter passengers and crew have round-the-clock access to specialised medical care, both in flight and on the ground. The fleet-wide offering includes 24/7 access to emergency care doctors, onboard medical and aviation medical training for 125 pilots and flight attendants.

"Every year our Comlux crew will be taught by medical professionals with inflight medical experience through the Management of Inflight Illness and Injury programme," said Daniel Staub, head of inflight product and services at Comlux. "MedAire's initial and recurrent courses will ensure we're delivering the highest standard of medical care – giving our crew the confidence, knowledge and resources to prepare for and manage unexpected medical situations."

Crew have 24/7 access to emergency care doctors via MedAire's MedLink Global Response Center. MedLink doctors will remotely assess the health of the patient and make recommendations for what medications and supplies to use from the aircraft's first aid or emergency medical kit. On the ground, passengers and crew who are at their destination have access to 24/7 medical and travel assistance via a Comlux/MedAire membership card.



Hangar8 receives Embraer Lineage 1000

Hangar8, one of Europe's leading operators of privately owned passenger jets, has taken delivery of an Embraer Lineage 1000. The US\$52 million Lineage 1000 will be based at London Oxford Airport in the UK. The 118ft-long aircraft is a premium charter jet configured in an executive layout, with five cabin zones including a large lounge area featuring a fully integrated entertainment system, 52in (132.1cm) screen, a separate master bedroom suite with a full-sized double bed and private shower facilities. The Lineage 1000 boasts a range of 8,149km.

Flying Colours delivers Challenger 850 to China

Flying Colours Corp recently delivered its first Bombardier Challenger 850 to China for a client based in Hong Kong. The new aircraft arrived at Flying Colours' Canadian facility in the late second quarter of 2010 and was delivered to the customer prior to the year's end. The aircraft is operated and managed by Hong Kong-based Metrojet.

Highlights of the 14-seat executive aircraft include a dual vacuum waste system based on the Global Express design and function; digital CMS including touchscreen cabin controls and large cabin LCD displays; and a True North Global Broadband system for high-speed WiFi.

This is the first of five new Challenger 850 aircraft Flying Colours is completing for China-based customers. "The Challenger 850 aircraft is an ideal aircraft for the China business jet market and we are looking forward to long-term growth in this region," said John Gillespie, president of Flying Colours Corp.

The company's offerings include green completions, cabin refurbishment, auxiliary fuel systems and maintenance.

EMS Aviation launches portable email solution

EMS Aviation has introduced the Aspire Portable AirMail system, which it says it will be available in the second quarter of 2011.

Weighing 3 lb, the system is used for sending and receiving text email in flight. The unit is not permanently installed on the aircraft, but can be carried on as required and connected to the aircraft's existing Iridium antenna for near-instant access to email through personal smartphones. Once the system is connected, up to four passengers can send and receive email.

An operator can carry the device from aircraft to aircraft, retaining connectivity on each flight, providing the pilot-in-command approves its use.

"This new portable system is designed to take advantage of low-bandwidth devices such as BlackBerrys and iPhones," commented John Jarrell, vice president and general manager of EMS Aviation. "Its portability makes it ideal for Iridium antenna-equipped fixed-wing or helicopter operators who want to experience inflight email without having to modify their aircraft."







PARTNERS, DESTINATIONS AND ROUTES

CANNES | FRANCE

Business Airport World Expo is the place for executive jet owners and operators to meet FBOs and business airports from all corners of the globe

OVER 115 EXHIBITORS ATTENDED
IN 2011 – EXPECTED TO BE
TWICE THE SIZE IN 2012



CANNES | FRANCE





BOOK YOUR BOOTH NOW!

The largest show in Europe for those looking for new business aviation FBOs, destinations, routes, refuellers and executive handling agents!

If you are looking for FBOs, MROs, ground handlers, new routes, loyalty schemes, new partners or to meet with your established suppliers in one convenient location, Business Airport World Expo 2012 is the place to be.



CANNES | FRANCE

FROM THE PUBLISHER OF
BUSINESS AIRPORT
INTERNATIONAL



Description:

Walnut veneer is used as a key highlight throughout to give a rich and warm feel. This is contrasted by the fresh cream tones of the leather upholstery and cashmere and silk carpet, with highlights of deep red silks and chenilles. Overall, the cabin offers a neutral backdrop, as the owner plans to regularly change the works of art displayed to freshen things up. Feature panels, countertops and display units are integrated into the scheme to accommodate the owner's varied art collection. The main dining and lounge area is a flexible space that switches easily between private or public use. The walnut veneer dining table can be lowered to form an occasional table for less formal meetings, while the fixed bar is ideal for relaxed socialising. A Plexiglas 'privilite' screen between lounge and dining area transforms from transparent to opaque at the switch of a button. The glass screen will also be used to display pieces of artwork that will appear to float above the credenza below. RMD has also designed a custom easel that is removable and stands in front of the glass, with flexible fixings to allow the interchange of paintings. The rear bedroom includes a built-in vanity unit with art deco styling and feature lighting. An ensuite bathroom boasts a shower, marble veneer floors and an underlit countertop that appears to float above the walnut counter below. 'Fake' windows in the bathroom ensure visual continuity and provide additional atmospheric lighting.

Eastern client to create an "art deco sky palace with a contemporary twist" on board his BBJ. The aircraft will also house pieces from the owner's extensive modern art collection.



overlandandsea



120°, Halo 46° and Halo 22°. Pauley describes the Intersceptor car as a "high-performance cockpit and fourwheel drive supercomputer". The Halo 120° converts the vehicle into a private jet, while the Halo 46° is a helicopter attachment ideal for regional and urban flight segments. The 22° yacht attachment features a race-bred double hull for ultimate performance. A closed cockpit offers external access to a forward double berth for luxury accommodation.







market, with a fibre optic and wireless cabin management system, more Gulfstream's new G250 interior looks set to shake up the super-midsize lavatory fitted as standarc comfortable seating and a larger galley and

ate last year Gulfstream unveiled a revised cabin mock-up for its new G250 super-midsize bizjet. Meanwhile, the aircraft continues its successful flight test programme designed to culminate in certification later this year. Concurrent with the mock-up display, one of the G250 test aircraft was flown to the United States from its factory in Israel for high-altitude airport operations testing.

Work began on the G250 in 2006 after Gulfstream realised that its supermidsize aircraft, the G200, needed a substantial redesign to remain a competitive product offering. Working with Israel Aircraft Industries, Gulfstream fashioned a new aircraft with more efficient wings, more powerful engines, and an updated cabin. Gulfstream says the new aircraft will have the largest cabin in its class with features that include a state-ofthe-art fibre optic and wireless Gulfstream Cabin Management System (GCMS), similar to that on the larger G650, and a much better and larger lavatory.

Nice touch The G250 GCMS comes with two remote devices (iPod Touch), while the G650 comes with one for each seat plus one extra. They both use Gulfstream's Cabin Essential Design philosophy; however, in some instances, the degree of redundancy varies between the two systems. On the G250, the GCMS provides digital control of the cabin systems via touchscreens, capacitive touch switches, and a passenger control unit located at the principal's seat. Using an iPod Touch or another personal handheld device, the principal passenger will be able to control the lighting, temperature, entertainment equipment, Gulfstream's new CabinView passenger flight information system, and attendant call.

The Passenger Control Unit (PCU) can be stored in the covered charging station located in the ledge adjacent to the principal's seat. The ledge also conceals a charging station for the Iridium handset, a headphone port and controls, a media input panel with



- cabin
- 2. The G250 will boast 17in flat-planel cabin displays as standard
- 3. The lavatory features the largest vanity in its class with contemporary sink. vacuum toilet and enhanced styling, as well as additional storage for coats and luggage

needs" according to Bob Geary, the company's director of final phase research and development. They included redundancy and reduction of weight and wire count. "We went out to the various cabin management suppliers and started talking to them about the various requirements," but it soon became apparent that "we were driving it beyond the requirements of any previous cabin management system," continues Geary. "We came to the conclusion that we were better off doing it ourselves so we could control the hardware and the software. We could control it and make it a modular system and scale it for different size aircraft such as the G250."



GULFSTREAM HAS OPTIMISED [THE FUSELAGE TUBE] BY MOVING ALL FUEL INTO THE REDESIGNED WINGS, CREATING MORE USEABLE CABIN SPACE



Geary says that outside suppliers will eventually be selected to produce the components, but noted that it would not be any of the traditional CMS companies. He adds that expandability was one of the primary reasons to bring CMS design in-house.

The system is built on multiple networks with a 24-channel fibre optic backbone used for routeing audio and video and as a communications backbone for the system. The controllers, switches, and everything else that makes up the system are also wireless. They can receive commands, report status, and communicate wirelessly should primary communications over the backbone break down. GCMS can also be serviced wirelessly aboard the aircraft via a laptop computer.

The system is designed to easily incorporate new technology and not just on the controlling devices. Updating a traditional CMS with new technology can often be a vexing problem, but fibre optics make the system expandable.

"The whole idea of fibre optics allows us to handle any standard," says Geary, citing the example of converting an existing system to accommodate high definition monitors. "We would have to go back and redo everything because the audio switching box wouldn't be able to handle it or the network wouldn't be able to handle it. In this case we can actually distribute uncompressed 1,080-pixel (video) over the fibre network - and everything going back to that including standard definition video."

The GCMS was the product of Gulfstream's own in-house research and development. Even as Gulfstream prepares to certify the G250 and the larger G650, it is also significantly expanding this capacity at its Savannah, Georgia, USA campus. The company recently announced that it had acquired 253,000 additional square feet of building space for its R&D activities that currently employ 1,450. "This expansion will enable us to explore new technologies that further enhance aircraft safety, reliability, dependability and efficiency for our customers," says Gulfstream vice-president Pres Henne.

Fuel effect While the G250 appears very similar to the G200, it is clear it has benefited from a substantial redesign. The fuselage tube is unchanged from its predecessor, but Gulfstream has optimised it by moving all the fuel into the redesigned wings, creating more useable cabin space as well as inflight access to the 120ft3 baggage compartment. Three basic cabin layouts are available in eight-, nine-, or 10passenger configurations including double-club and club with half-club opposite a three-place, side-facing aft divan. All layouts can accommodate berthing up to four passengers.

A forward cabin divan option is not anticipated, but the new rear cabin divan now measures 6ft 8in-long and has been redesigned with a four-position locking base cushion that extends to full berthing and with a more comfortable backrest. The divan also has end cabinets.

The redesigned single executive seats are 25in wide (21in between arms), creating a nearly 2ft-wide aisle. The seats feature a telescoping headrest with optional flex wings, an articulating seat pan that facilitates full berthing, and an optional recliner-style legrest.





Bullish by Nature





Premium bull hides from select European regions, processed to fine leather in compliance with Aeristo's stringent quality and environmental standards, add natural beauty and lasting value to bespoke aircraft interiors.

2550 N. Great Southwest Parkway Grand Prairie, Texas 75050, USA Phone: 001 (817) 624 8400 Telefax: 001 (817) 624 9520 info@aeristo.com www.aeristo.com



LEATHER MADE FOR AIRCRAFT



Overall cabin length is now 25ft, 10in from the forward edge of the lavatory to the aft edge of the galley. Gulfstream says that gives the G250 17-35% more floor area than other aircraft in its class. That extra space also allowed Gulfstream to eliminate the recline restrictions on the right-hand aft chair. On the G200 it is limited as not to conflict with the emergency exit. It also gives the G250 greater seat pitch.

More cabin room translates into noticeably larger lavatory space as well. The lavatory on the G250 will be a full 48in wide compared with the relatively cramped 26in on the G200. The G250 lavatory will have a full-length wardrobe closet, two large cabin windows, vessel sink with raised ledge, lighted vanity mirror and a vacuum toilet system with overboard venting -

THAT GIVES THE G250 17-35% MORE FLOOR AREA THAN OTHER AIRCRAFT IN

5. The rear cabin divan is 6ft 8in long and features a redesigned. more comfortable backrest and handy side cabinets

a unique feature in a super-midsize. The vacuum system will use a vacuum generator to power the system up to 16,000ft; above that altitude it will be powered by differential air pressure.

More flavour The redesigned galley, while the same size as on the G200, will have increased stowage space, a gasper-cooled ice drawer, and sink with slide-out work surfaces built into the long, wide counter. It will also have a modular design, allowing customers to specify differing locations for the positioning of things like coffee makers, ice drawers, glassware, and liquor. Another clever but important addition is a set of drawers that can accommodate all sizes of catering trays. Options will include espresso makers, choice of microwave or convection oven, and stemware storage. "We used input from our customers in designing the galley with more flexibility and more work surface area," says G250 programme director Mark Kohler. The G250 cabin also has a forward closet with another 34ft³ of storage.

Natural lighting will come from 19 cabin windows and LED lighting. Specifics of the window shades and



CABIN ALTITUDE AT FL450 IS A **COMFORTABLE** 7,000FT

cabin lighting are still being evaluated in Gulfstream's advanced technology and acoustics laboratory in Savannah. "We're testing the acoustics package, the window shades, and all the other materials used on the interior of the aircraft to minimise noise levels," says Kohler. "We've tested different types of transparencies and window shade mechanisms because we know all of these contribute to interior noise levels," he says. But it will include highdefinition television (HDTV), and larger, 17in flat-panel standard cabin displays. LCDs larger than 17in are a contemplated option.

Cabin altitude at FL450 is a comfortable 7,000ft (6,000ft at 41,000ft) and the G250 will have

- 6. Natural lighting is provided by 19 cabin windows
- 7. Outfitted for hot and cold meal service, the galley is equipped with a microwave oven, an extra-large ice drawer and gasper-cooled storage, as well as a sink with a cover/ slide-out work surface
- 8. Generously proportioned tables pull out from the side ledae

Gulfstream's '100% fresh air system'. Gulfstream has turned to Honeywell to provide all the cabin environmental control and cabin pressure systems on the aircraft. Gulfstream plans to place all of the systems on a rig and pre-test the system in its entirety before it is installed on the aircraft.

Fail safe The G250 will employ Gulfstream's Cabin Essential architecture: all major cabin systems are redundant so that no single-point failure will compromise cabin functionality. Gulfstream says this means "the cabin

lighting always illuminates; water is always available; and an entertainment source always works." The electrical system also promises to be more robust on the G250, incorporating large aircraft features that include independent generators on each engine and a quieter auxiliary power unit.

Gulfstream is confident that its redesigned super-midsize jet will not only be competitive, but "best in class". END

Web www.gulfstream.com



Oscar Wilde once said "I have the simplest tastes. I am always satisfied with the best." We think Oscar would have loved the JetBed.









CURRENT JETBED MODELS

Bombardier

C300, C600 Series, Global Express, Conference Group, Learjet 40 Series

Cessna

CJ, CJ1, CJ1+, CJ2, CJ2+, CJ3, XL & XLS, Ultra, Encore, Encore+, Citation X, Citation Sovereign

Dassault

F2000, F900, F7X, Conference Group, Falcon 50

G200, Galaxy, GIV, G450, GV, G550, GV Crew Rest, G550 Crew Rest, Conference Group

Hawker: 800 Series NEW

Coming Soon: Phenom 300











he recollections of Jason Liao, then a regional sales director of Hawker Beechcraft, but now chairman and CEO of the China Business Aviation Group - provide a useful personal anecdote to indicate how much has changed in the Asian market and China in particular in the last two decades, both economically and culturally. "I was the first person to try and sell business aircraft in China. The first day I went there in 1996 no one had heard of them. Now everyone wants one."

The Cap Gemini Asia Wealth Report 2008 predicted total Asia-Pacific highnet-worth individual (HNWI) wealth to reach US\$13.9 trillion by 2012 and so overtake Europe as the second-largest regional HNWI wealth centre. And judging by more recent events it looks to be China that will be driving most of that new Asian wealth boom.

In 2010, China overtook Japan to become the world's second biggest economy. Decades of double-digit economic growth from massive external and domestic demand for China's manufactured goods have created thousands of extremely wealthy Chinese people who are not only seeing the benefits of private air travel but who also live in a society whose government now condones such purchases as important to the country's overall business expansion.

"A decade and a half ago the idea of privately owning stuff was not widely accepted," explains David Velupillai, product marketing director for executive and private aviation at Airbus. "But now the ownership of cars, houses and increasingly planes is becoming widespread. Private aviation is seen as a business enabler."

Freer skies A third factor in the future fortunes of China's nascent bizjet market is the relaxation of air space restrictions. Until very recently, the Chinese Air Force and the Civil Aviation Administration of China (CAAC) both needed to be contacted by the pilot of a private aircraft to seek permission to fly in a process that could take days. Now much of that red tape has been cut as Ed Bolen, National Business Aviation



1-2. Airbus's Chinafocused Phoenix concept includes a round dining table that converts into a square for playing mahjong

Association (NBAA) president behind the Asian Business Aviation Conference & Exhibition (ABACE) re-launching in late February 2012 in Shanghai, enthuses: "Back in 2005 a lot of people were saying business aviation had no future because of air space restrictions and the economy was not as good. But then the economy ignited and accommodations were made for business aviation, including air space opening up and a new ability to fly below 4,000m."

Another show looking to capitalise on business and VIP jet growth is Hainan Rendez-vous, a lifestyle event set for April 2011 that has a specific 'Jet Collection' segment where handpicked VIPs will be whisked away by private jet to Hainan Island (the "Chinese Riviera") to peruse the latest jets from all the major manufacturers.

The organisers of the event - now in its second year - say the Chinese corporate market is growing significantly from about 30 in operation two years ago to an expected 300 by the end of 2011. That's small beer compared to the 15,000 global bizjet total (of which about two thirds are based in the USA) but crucially while many Western

markets are flat, China's is predicted to grow - and grow big. Dassault Falcon says China could easily represent 10% of all its sales within three years.

Liao talks of similar numbers. In his previous role as managing director of Bombardier Business Aircraft China, he sold 18 jets worth over US\$600 million between 2008 and 2010 alone and now predicts about 40 to 50 new business jets in China per year plus annual growth of 20% for the next 10 years. From his well-placed current role providing a turnkey service for Chinese bizjet customers involving specification,



WE OFTEN SEE A PREFERENCE FOR TONES THAT ARE LIGHTER, WITH BEIGES AND CREME COLOURS FEATURING PREDOMINANT



design, procurement, finance and management, he reckons the Chinese market will soon become the second biggest after the USA, leapfrogging Brazil. He's also keen to point out the monetary value of the Chinese market is probably closer to Brazil's than the comparative numbers of aircraft sold would suggest as he believes each Chinese bizjet tends to be bigger, while Brazil's market favours smaller aircraft.

Bigger, pricier It's a sentiment echoed by Airbus's Velupillai who says the manufacturer's large cabins appeal to Chinese customers who want the ability to carry more people and have greater cabin space while flying. As he says: "A to B privacy is now a given on business jets, but a big difference is how you travel. Having more space around you makes the aircraft feel more like an office or a home and that's what you want, whether you're a private family or a business billionaire."

Details that could make the space feel more like a Chinese office or home are also starting to be considered by Airbus. Its recent Phoenix concept features a central circular table that can convert to a rectangular Mahjong gaming table, an office that can become a karaoke area and special Chineseinfluenced colours - in this case dark red and gold.

Completion specialist Flying Colours Corp also sees cultural trends in the types of cabin interior being specified. According to Sean Gillespie, director of completion sales and management at the company, the Chinese can be very particular on cabin design preferences. "For example, most of our Asia-destined Bombardier Challenger 850 completions have one area designed to be a social setting like a dinette conference sitting group or dual aft cabin divans. In both cases this preference is usually a requirement for a group to dine or conduct meetings. This really speaks to the social aspect of Asian culture."

Gillespie also sees signs of "a little bit of exotic flair" in the swirling patterns on the fabric insert requested for the bulkheads of a client's Challenger 850. The firm delivered its first 850 jet to the region in December 2010 to a Hong Kong-based client and is scheduled to deliver five new jets to China in 2011.

Altitude (another completions centre, and helpfully close to the Asian market in New Zealand) also sees subtle differences in customers' requirements, suggesting a market of early adopters regarding technology, with an eye for detail. "It is difficult to generalise, however we often see a preference for tones that are lighter, with beiges and crème colours featuring predominatly perhaps with the inclusion of dramatic accents or features," says Matthew Woollaston, Altitude's head of commercial, VIP aircraft. "Exotic wood veneers feature strongly and silks feature









3. The Phoenix concept bedroom

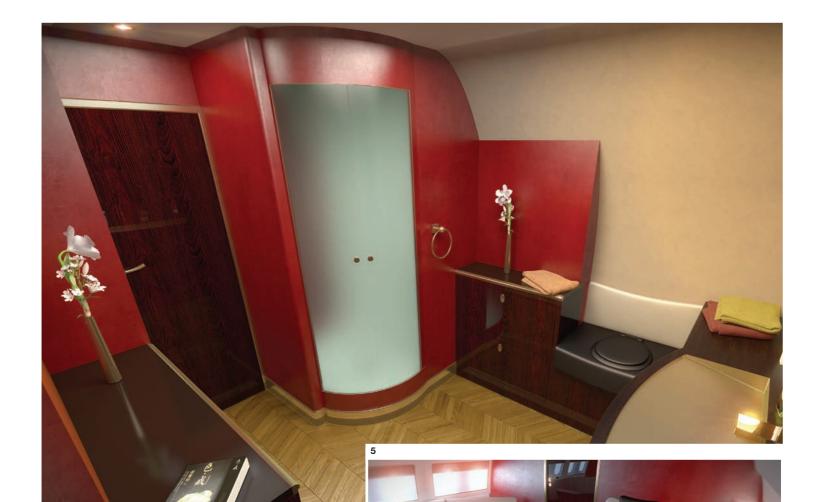
Mahjong to karaoke – Airbus's China-focused concept

Suspecting that Chinese customers might want something a little culturally different from their bizjet interiors, Airbus has come up with the Phoenix cabin concept for its Airbus Corporate Jetliner (ACJ). Its key feature is a circular table - only possible says product marketing director David Velupillai, as a result of the width of the aircraft Airbus uses - and that appeals to Chinese customers used to round tables at home where it is traditionally a focal point for family dinners. The Airbus table has leaves that fold down to convert to a rectangular table and create the perfect setting for playing games such as Mahjong. The same concept also features an office that transforms into a karaoke area. Velupillai says the table concept has already made production in some customers' jets and expects more to follow.

in fabrics perhaps more often than in other regions."

Better catered, longer haul Liao suggests that not only are Chinese bizjet customers good at detail, but given that distances travelled are likely to be long, they are often more willing to pay for high-quality interiors on bigger aircraft. With a bigger aircraft they can, for example, accommodate a fully functioning kitchen and bring along a chef, as well as fit in a bed, shower and somewhere to be more private. As Liao points out, it can take three to five hours just to fly across China, even before taking into consideration longer hauls to other countries.

From a design perspective, Design Q's Gary Doy has also noticed the high quality many Asian customers expect. His firm has done work for the likes of Cathay Pacific and the massive Shanghai Automotive Industry Corporation that now owns MG. on the automotive side. As he says, "there's a top end that is really expecting something special". Guy often works with the VIP directly plus their "representative one or two steps down the chain" to gain valuable perspectives, as well as working with local designers with European design training to aid better cultural understanding of anything from colour preferences to contextual details deemed lucky or auspicious.



IF YOU WANT TO SUCCEED YOU NEED TO BE IN IT FOR THE **LONG TERM**

So the opportunities are clear. Major growth is predicted in the region as a whole, led by China and is far from fully tapped. But what are the challenges and potential pitfalls? From a basic logistics perspective Liao says China is currently suffering from a shortage of aviation personnel and back-up. Short-term that means hiring more foreign pilots but in the longer term this should be solved by more aviation-related training schools. Beyond flying and maintaining them, expertise in cabin design should get more local too, as Airbus's Velupillai

- 4. The bathroom of Airbus's Phoenix concept for the A319 CJ
- 5. The aft lounge

reveals, the first China-based and Chinese-owned Airbus-approved completion firm will be announced within a few months.

But with opportunity comes a caveat. Liao warns against outside firms treating Asian and Chinese customers in particular as if they were one cultural entity. As you might expect of a nation of 1.2 billion people, its burgeoning business elite vary considerably in their requirements and tastes, as he concludes: "As multinationals like Coca-Cola found out long ago, marketing that works across the USA doesn't necessarily work all across China - regional planning is necessary. In very basic terms, southern China is more conservative, northern China bolder and the northwest less familiar with the product. The Chinese market has its own characteristics, so if you want to succeed you need to be in it for the long term." **END**

Web www.altitude-ai.com www.corporate-jetliner.com www.designq.co.uk www.flyingcolourscorp.com

WHAT A BEAUTIFUL POINT OF VIEW.

A cabin makeover from your Citation Service Center adds to both the enjoyment and the financial value of your aircraft. In fact, it's one of the most down-right comfortable business decisions you can make.

DISCOVER THE DIFFERENCE CALL 866-984-2CSC (866-984-2272)













and its estimated certification date, now set for the end of 2011, has fallen behind yet another year. Despite hefty Canadian government subsidies for the D-JET, Diamond is also seeking an investment and/or production partner for both military and civilian variants of the aircraft. Cirrus remains in the hunt for external financing for its jet programme as well, but for now it is continuing limited flight testing with its non-conforming SF50 prototype.

The need to use revenues from piston aircraft sales to finance jet development appears to be a retarding issue at Cirrus and Diamond and, like last year, the stagnant economy's tractor beam has depressed sales of new piston aircraft across the board. While piston sales are marginally better at some companies than at their 2009 nadir, they are hardly sufficient to sustain the US\$100 million to US\$150 million that new aircraft certification programmes require and almost equal additional amounts to put any newly-certified aircraft into meaningful serial

Sound investment

While selection of soft goods is expected to contribute to cabin weight reduction, Piper is also working with specialists in the noise reduction field with a target of achieving levels commensurate with the inside of luxury automobiles and be competitive with "similarly or greater priced aircraft". lan Atkinson, customer engineering manager, says Piper is unlikely to use active noise cancelling in this pursuit, but is looking at isolator technologies. He adds that Piper's design team viewed the entire interior as a noise "dampening mechanism". Engine mounting and the particulars of the cabin ECS also are being looked at as a way to cut noise.

production. For the first half of 2010, US\$70.7 million, Piper posted US\$49.5 development programmes.

Brunei benefactor Piper's new owner, the Brunei-backed investment firm Imprimis, seems to grasp the point. Last summer, Imprimis managing director Geoffrey Berger said that the company was committed to fully funding the new PiperJet and was prepared to carry it to certification and beyond, even if Piper's current revenues could not. A nonconforming prototype made its first

flight in July 2008, but the economic downturn forced Piper to move the development schedule to the right and certification and customer deliveries are not scheduled to commence now until 2014. However, the company began cutting metal for a conformal test aircraft this summer and plans to have four test aircraft flying next year. It has more than 100 engineers working on the programme in-house and, as a result of its jet programme, Piper's overall payroll has nearly doubled over the last year.

Of all the single-engine VLJ survivors, Piper is perhaps best positioned to succeed in the near-term due to its parent's deep pockets and the fact that it has logical 'step-up' aircraft in its product line en route to the PiperJet, including the piston Malibu Mirage and the Meridian turboprop - aircraft that, like the PiperJet proof-of-concept aircraft,







THE SQUARED M-CLASS TUBE WAS DISCARDED IN

relied on the somewhat tight 'M Class' fuselage. Nevertheless, having a new jet pass muster is a bit more daunting than tweaking an existing airframe and stuffing a PT-6 in the nose, which is what Piper basically did when it launched the Meridian more than a decade ago.

Oval overhaul However, Berger's summertime prognostication gained significant credibility last October, when Piper rolled out a revised incarnation of the PiperJet, labelled the 'Altaire'. The redesign addressed the prototype's aesthetic and ergonomic deficiencies with a more rounded and wider fuselage. The squared M-class tube was discarded in place of a more aerodynamic oval. It delivers a cabin that is 9in taller and 4in wider, a wider sunken aisle, the elimination of wing spar intrusion, and a massive 3ft-wide main cabin door that

- 1 Aft cabin view the Altaire features 55in cabin width and height
- 2. Club four seating pitch is set at a generous 40in

makes the aircraft a natural for large passengers as well as expedited air cargo and air ambulance roles in the future. The Altaire also gets a larger wing, a more rounded nose, a slimmed and lengthened engine nacelle, and a shorter vertical tail that is located further aft. The wing is moved below the fuselage in a streamlined belly faring, eliminating the spar intrusion in the proof-ofconcept aircraft. "The whole thing was recalculated," says Ian Atkinson, Piper's customer engineering manager.

Overall, the speed, range and cabin dimensions of the Altaire compare favourably to the two established twinjet VLJs currently on the market the Cessna Citation Mustang and the Embraer Phenom 100 - with the added benefit of direct operating costs that are forecast to be 25% lower as a result of its single-engine design.

The Altaire's cabin measures 211in long - almost 3ft longer than the Mustang and more than a foot longer than the Phenom. Both width and height are 55in. Pressurised cabin volume is 260ft3 and there is 60ft3 of luggage storage divided between external space in the nose and onboard storage areas in the cabin, primarily aft of the forward facing 'club four' seats. Club four seat pitch is a comfortable 40in. All seats have breakover backs and can be folded forward and the two forward-facing seats in the club four recline to approximately 32°.

In order to qualify for a certification waiver for a higher single-engine stall speed, Piper was forced to incorporate more robust aircraft seating. Millennium Concepts is providing Piper with 30g seats that are expected to satisfy this requirement. During developmental



confidence level that the seat will exceed the requirement," says Atkinson, noting that the testing also covered head injury criteria (HIC).

The seat frames are constructed of high-precision CNC parts as opposed to traditional welded, and heavier steel. Passenger seats are equipped with a three-point restraint system and Piper is currently looking at adding seatbelt airbags to this. The flight crew positions have four-point restraints, adjustable height, floor tracking and lumbar support. Both seats have energy absorbers in the seat pan and feature bolsters around the torso and thighs.

Other announced members of the interior team include Goodrich and Propel Designs. Goodrich is supplying the interior soft goods, headliners and panels. Propel principal David Shumate is an alumnus of BMW Group's DesignworksUSA studio and is providing guidance on design of the cockpit and cabin.

Atkinson says the window treatments will be traditional pull-down shades to

ED CHOICES FROM FOUR AJOR COLOUR PALETTES

- 3. The Altaire's flight deck features the Garmin G3000 avionics suite
- 4. Lavatory detail a lavatory, storage compartment. entertainment centre or extra seat can be included opposite the entrance door

save weight and costs. The cabin lighting, including direct downwash and individual passenger position, will be LED and the environmental control system will provide an 8,000ft cabin altitude at 35,000ft and dual zone controls. Citing the rapid pace of IFE change, Piper purposely eschewed offering anything more forward-thinking than power and USB ports at each passenger seat position. "We provide the power," he says, "and people can bring what they want."

Customer choice Initially, customers will be offered choices from four major colour palettes, including a selection of leathers, which accommodate international tastes. Other options involve the area opposite of the entry door. Customers can opt for an additional passenger seat, storage, a refreshment/entertainment centre or an electric flushing toilet in this space.

While Atkinson says the Altaire's initial certification would not include unimproved field operations, he admitted that the aircraft's in-tail engine placement made it a natural for those types of operations, particularly in areas with a shortage of paved runways. He says there has been considerable interest in the aircraft registered from prospective customers in Australia, South America, Africa and Europe. He adds that Piper is currently evaluating its dealer network in terms of facilities, tooling, training, and experience; and providing, where needed, suggestions for upgrading in advance of aircraft certification. **END**

Web www.piper.com

FOKKER AIRCRAFT SERVICES

For your eyes only







Operating a VIP or Executive aircraft

Demands the latest technology and the highest quality and safety standards. It is our challenge to secure all these standards in your unique interior requirements. You can fully rely on our airframer in-house design and engineering capability. With a highly experienced team we cover a comprehensive range of expertise from refurbishment to full completion.

Fokker's conversion & completion services

Extend further than designing and integrating your requirements. We know that you want to perform maintenance without jeopardizing your treasured interior. That is why we also provide MRO capabilities incorporated in our completion centre.

With a heritage of 90 years building aircraft to the highest standards, we will be glad to take care of your Airbus ACJ, Boeing BBJ, Bombardier or Gulfstream as if it were one of our own.

Contact us at +31 622 571 973 or e-mail sales.acc@fokker.com.

Fokker Aircraft Services. Passionate about your aircraft.



Mark Huber Business Jet Interiors International

uring the 1980s, Beechcraft found itself without a light jet offering and entered the market by buying the rights to the Mitsubishi MU-300 Diamond, a rugged and respectably fast eight-passenger aircraft with an advanced airfoil and Pratt & Whitney engines. Rechristened the Beechjet 400 and certified by the FAA in 1986, the aircraft immediately began to invade territory that had previously been the exclusive purview of Cessna and Learjet. Beechcraft subsequently tweaked the design in 1990 (Beechjet 400A) and later again as part of its rebranding effort in conjunction with an upgraded cabin interior block change (Hawker 400XP). The 400XP is distinguishable from the 400A by the absence of one window on each side of the fuselage (five total).

Plans for another upgrade, this one with new P&W engines, dubbed the 450XP were shelved in 2009 due in part to the recession and the collapse of fractional shares programmes that had been the aircraft's largest market in recent years. Hawker Beechcraft announced last year that it was suspending production of the 400XP altogether. The aircraft had a magnificent production run - nearly 600 400As and 400XPs have been manufactured over the course of two decades.

Another option? In the normal course of things, that would have been the end of it had it not been for Kenn Ricci, founder of US fractional scheme Flight Options one of the largest fleet operators of the type (outside of the US military that uses a fleet of 180 as trainers). In its first four years Flight Options quickly grew into the world's second-largest fractional company with a fleet of over 200 aircraft and 1,500 employees. The 400A/400XP was the backbone of the fleet with more than 100 of the type. Even as newer aircraft have come to market, the company continues to operate nearly 60.



secondopinion

A dedicated refurbishment programme aims to breathe new life into the venerable Beechjet





that an existing 400A/XP could be modified with newer, more fuel-efficient Williams International FJ44-3AP engines, modern Rockwell Collins Pro Line 21 avionics, and refreshed paint and up-to-date interior. The changes yielded superior performance compared with new aircraft in class for a price that was millions of dollars less. Thus, Nextant Aerospace was formed and its modified aircraft was named the 400XT.

Ricci and his colleagues surmised

However, unlike past re-engine and refurbishment programmes, Nextant's goal is serialised production. Therefore, rather than having individual customers bring their aircraft to Nextant on a oneoff basis, the company provides the used conversion aircraft and all modifications for a price starting at US\$3.9 million for the entire package, averaging US\$4.2 million, and topping out at US\$4.5 million. Head-to-head,

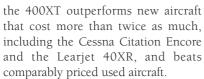


- 2. The Rockwell Collins Pro Line 21 avionics suite is lighter and more reliable
- 3. Rockwell Collins' Venue cabin management system is available as an option









Aside from the price point, several features of the 400A/XP make it an ideal candidate for conversion. Mitsubishi, as with its earlier MU-2 turboprop, substantially 'overbuilt' the airframe to the point where it does not have a life limit. Most conversion candidates have accumulated between 5,000 and 7,000 hours, fly 400 or fewer hours per year, and could easily survive to 30,000 hours of total flight time or even longer. Nextant president Jim Miller thinks these aircraft could easily go another 30 years. "Long after you and I are both dead," he says.

Cabin measurements Other attributes contribute to the 400A/XP's enduring popularity. Although designed almost 40 years ago, the aircraft's unique 'squared oval' fuselage yields more shoulder room, and even more headroom, than comparable newer aircraft, including the Cessna Citation CJ3 or even the Embraer Phenom 300. The cabin measures 4ft 9in tall and 4ft 11in wide, and 15ft 6in long. Unlike its competitors, it has a flat floor that

passengers find more comfortable. Overall cabin volume (excluding cockpit) is 305ft³. The cabin pressure differential is 9.1psi, maintaining a sea level cabin through 24,000ft. External luggage capacity still reflects the thinking of the design age — it's a paltry 26.4ft³. However, adding incabin closet storage can grow that to 53.2ft³ and the overall luggage capacity is 800 lb.

The engine change makes the 400XT a substantially different beast. Range increases by 50% to 2,005 nautical miles; long range cruise speed increases 23kts to 437kts; high-speed cruise increases by 10kts to 460kts; the single-engine climb rate doubles; the time to reach 43,000ft is chopped by one-third; and operating costs per mile drop 29%. The digital avionics are lighter and more reliable and make it easier to fly.

However, the cabin updates make it a far more comfortable and productive environment for passengers. Currently, 400XT customers can choose from one of four available floorplans, all with single seats for five to seven passengers. However, Nextant's Miller says the company is seriously looking at making a 60in divan available opposite the entry door to accommodate passengers

with mobility issues and pets. Developing the divan would be fairly easy as the 400XT remains a 9g aircraft. All changes are added to the jet under its existing type certificate via supplemental type certificate (STC).

Blanket approach The 400XT gets a complete interior gut job as part of the basic package – even the sound proofing blankets are replaced. "The soundproofing that is in the aircraft from the factory, particularly if it is an older aircraft, is pretty ineffective," says Miller, noting that some of it was lined with lead. "We replace it with a type of material that is cut for each frame for not just soundproofing but also temperature insulation purposes," he adds. "It is very, very light and weighs maybe 100 lb (per aircraft)."

Customers can opt for more expensive materials as options. Standard materials include Tapis Ultraleather headliner, Carnegie Xorel window lines, Townsend Leather for cabin and crew seats and drink rail accents, Garrett sheepskin for the crew seat inserts, Carnegie lower sidewalls, Redrock custom carpeting, Prestige plating, and Carl Booth veneer. The seat frames are retained and refurbished, but all new foam is added. Interiors can be further enhanced from a list of options relating to IFE and LED lighting.

The Rockwell Collins Venue Cabin Management system is a US\$120,000 option. Venue includes a high-definition media centre with file server; Blu-Ray player; HD video wired to each seat; dual 1,080-pixel 10.6in HD monitors; four iPod/Phone docking stations; 3D

THE DIGITAL AVIONICS ARE LIGHTER AND MORE RELIABLE AND MAKE IT EASIER TO FLY



Hawker Beechcraft to offer XPR upgrade

In October 2010, Hawker Beechcraft announced its own conversion programme for the 400A/XP - badged the 400XPR. Nextant's president, Jim Miller, says Nextant does not view the XPR as competition to its own upgrade programme, because the specifics of the XPR are substantially different. The US\$2.24 million XPR package requires customers to bring their own aircraft to a Hawker Beechcraft service centre. Like the 400XT, it adds Pro Line 21 avionics and new Williams engines, in this case the FJ44-4A-32, and winglets. Full details concerning interior options under the XPR programme remain under development, but the package will include interior refurbishment. Miller says Nextant is geared more toward fleet operators, as opposed to individual customers. Hawker Beechcraft acquired its first test aircraft for the programme last December and is likely at least two years away from processing a customer aircraft. Nextant flew its first flight in early 2010.





moving map; programmable switches at each seat position, in the galley and the lavatory; downwash, seat, and table lighting controls; cabin temperature controls; and controls for optional I-Shade electronically dimmable window shades. I-Shades provide a range of tints from 99.5% light blockage to fully clear. More monitors can be added at additional cost.

Programmable switch panels are located in the drink rail. The media center device can hold 50Gb of content and can be played over the cabin speakers, displayed on individual monitors, or routed to any combination of individual headsets. The iPod docking stations are mounted in the drink rails near the cupholders.

- 6. Factory-fitted Beechjet interior for the 400XP
- 7. Nextant's upgraded seating is finished in leather from Townsend
- 8. The 400XT includes a media centre that holds 50Gb of content

Other options include EMTEQ LED cabin lighting, 110V AC and Ethernet docks mounted on either side of the cabin in the lower sidewalls near the aft edge of each fold-out table, and the Aircell Axxess broadband system. The 110V plugs run off a small automotive style inverter located under the seat or in the sidewall. Axxess provides dualchannel Iridium satphone and highspeed broadband over the continental USA via the dual-wired Ethernet ports or via the cabin WiFi. The cabin contains a single wired handset and there is another in the cockpit.

Market forecast Nextant's Miller says he expects average conversions to take 120 days once the programme is

established. Currently six aircraft are in work and the programme is waiting for final certification of the new engine package, which is anticipated to be in hand by the time you read this.

Miller expects to deliver 11 to 12 400XTs this year, reaching an average production rate of two per month and perhaps 38 per year by 2014.

The programme has already received an order worth US\$150 million to convert 40 400A/XPs for Flight Options (Nextant CEO Kenn Ricci is chairman of Flight Options). END

Web www.hawkerbeechcraft.com; www.nextantaerospace.com



The VisiBox is the lightest and most compact box including cabin management, IFE, moving map and satcom. The system is upgradable and can offer many options. Easy to install, to retrofit and to maintain, the VisiBox can be located in one of the avionics bays or in the cabin (galley).

From one VisiBox you can combine the management of broadcast video, as well as AVOD and connectivity to personal devices. The broadcast video is built with daisy chain which facilitates flexibility, reliability and cost efficiency.

The display and management of all functionalities embedded in this system can be done through a wide range of screens: Pop up, Pop down and the latest one VisiTouch which allows full VOD applications up to 200 seats without any additional box under the seat.

Beautiful styled in an elegant fit and finish design, Vision Systems' IFE offers high possibility of customization: color, GUI, applications...



Call +33 4 72 31 38 32 or email imonvaillier@visionsystems.fr to learn more about all the possibilities our product can offer you







he Dassault Falcon 2000 remains a popular choice with customers in the super-midsize sector, with the French manufacturer notching over 500 sales to date. There are currently 441 Falcon 2000s in service around the globe serving a variety of corporate, individual and fractional owners.

Since its launch in 1995 there have been several new additions to the Falcon 2000 family. The first refresh, the 2000EX, was certified in 2003 and saw the addition of new PW308C turbofan engines. Later in 2004, the 2000EX EASy was certified, offering customers enhanced avionics. The 2000DX followed, while the 2000LX is the most recent model, certified in 2009.

The LX includes a new high-mach blended winglet that extends range to 4,000 nautical miles (7,410km) at a cruising speed of Mach .80. With a price tag of around US\$31.65 million, the Falcon 2000LX has a maximum altitude of 47,000ft (14,325m) and a top speed of 480kts (890km/h).

Generous cabin One of the reasons behind the F2000's enduring appeal is its spacious cabin - and the LX is no exception. The cabin is an impressive 7ft 8in (2.34m) wide, and stretches a full 26ft 2in (7.98m) in length with 6ft 2in (1.88m) of headroom. Cabin volume from the cockpit separator to the baggage door is 1,024ft³ (29.00m³), while there is a generous 130.6ft³ (3.7m³) of baggage space in the aft cabin luggage compartment.

A double-club layout sees two sets of opposing 20in-wide seats on either side of the aisle. Each seat includes an ashtray, cupholder, cold air outlet, reading light and a stowable folding

console table (for each seat pair). Customers can also opt for a four-seat conference grouping in the rear cabin alongside a narrower seating pair to increase capacity to 10 passengers. The same conference grouping can also be configured opposite a large credenza; a smaller credenza and attendant seat; or a cabinet with two-place, side-facing divan. A stand-up lavatory is situated behind the rear cabin with the baggage compartment (accessible in flight) following.

Separated from the forward cabin by an acoustical curtain is an ample 36in wide galley/bar, which includes a high temperature oven, sink and an automatic coffee maker. IFE options are tailored to each customer's requirements, however Dassault says high-speed internet and HD entertainment systems are particularly popular with customers in the super-





- 1. Fashion vanity unit
- 2. Fashion rear cabin hulkhead
- 3. Fashion galley



midsize sector. A wide variety of colour and trim options are also offered - the bathroom sink is available in 18 different metal finishes, for example.

Fresh thinking A designated Dassault completions centre, Jet Aviation Basel launched its Jet Falcon refurbishment programme for F2000 operators at the end of last year. The centre has performed more than 120 VIP completions of green Dassault aircraft, including the F2000. Based on the "standardised pre-production of a defined set of designs and modular processes", Jet Aviation has designed the programme to reduce aircraft downtime and increase costeffectiveness for owners and operators. Customers can further save time and money by combining their cabin makeover with airframe maintenance and exterior painting.

The completion centre offers a choice between three distinctive designs - Classic, Style and Fashion. All three see seating re-upholstered in leather and new carpets installed.

The Classic cabin is currently the most popular option and features a standard quality carpet, customisable veneers and one choice of seat leather. Both the Style and Fashion interiors have higher quality carpets, customisable veneers and a choice of two seat leathers. On average the estimated price for each refurbishment is around US\$2.5 million.

Beyond choosing between the three options, customers can still add their own individual touches – but at a price: "The basic of each design is already in

place and should be used," says Ekkehard Klett, Jet Aviation Basel's regional sales director of special projects. "But if the customer requests any changes we will use their wishes and turn them into a reality - with of course some consequences in terms of delivery time and also additional costs."

Precious time The timeframe for a refurbishment depends heavily on the individual customer, as Klett explains: "It depends if there are any additional wishes from our customers," he says. "A standard timeframe without any changes that includes renewal of cabinet and bulkheads along with the re-covering of the aircraft shell would be around 8 to 12 weeks. If there are any design changes on the floor plan, we'd use additional time that would be discussed with the customer before the start of any programme."

Klett says that human elements rather than mechanical are the most important parts of every retrofit's success. "Our key task when performing the retrofit is actually the teamwork between all involved parties who are all requested to work hand in hand. Another important aspect is our flexibility in terms of changes needed to turn the customer's wishes into a reality."

Suppliers also have an important role to play: "We only use specified suppliers who are able to support us with first-class hard and soft materials, as well as equipment which is certified for aircraft use."

Carl Booth and Skywood supply wood veneers; Edelmann Leather, Tapis



Jet Aviation signs 747-8 contract

Jet Aviation Basel signed a contract with an undisclosed client from the Middle East for the VVIP completion of a Boeing 747-8 cabin interior at the end of last year. The company's in-house interior design studio also won the contract to design the interior. Following its expected arrival in Basel, Switzerland, in early 2012, the aircraft should be completed within 24 months.

3D design software (CATIA and Smarteam) will be used for engineering, production and data management over the entire completion process. The software was introduced at Jet Aviation Basel in 2010. The completions centre will also build a full-size mock-up of the aircraft so the client can experience a 1:1 view of the cabin for the final decision-making process.

Corporation, Osbourne and Little, Townsend Leather and Willow Tex provide leather upholstery; and Kalogridis International provides all carpets.

Galley work undertaken includes revarnishing of the wood, refurbishment of the cabinet interiors and reupholstery/replacement of china inserts. The existing sink tap will be reused and re-plated or replaced as necessary and the countertop and pop-out work surfaces can be replaced individually or together. Depending on customer requirements, other options include carpet replacement and the installation of a new glass rack support.

In the aft lavatory, Jet Aviation replaces the carpet, countertop and the mirror on the vanity door (if damaged), as well as repainting the PSU and revarnishing the wood. The taps are replated or replaced as necessary. Klett says that re-upholstery can be completed on all impacted parts and that cabinet interiors can also be refurbished.

Market demand According to Klett, customers have responded well to the Jet Falcon programme: "Our expectations are very high after the good feedback we received from our customers during MEBA in Dubai," he says.

So is Jet Aviation tapping into a potentially large refurbishment market for the Falcon 2000? "Business jet operators used to refurbish their aircraft after a 12-year period," says a spokesperson for Dassault Aviation.



- 4. Style cabin option
- 5. Style galley unit
- 6. Style lavatory unit

"The first Falcon 2000s were delivered 15 years ago, so there is a potential market. Of course, customers can also refurbish their interior step by step starting with seats, carpet, furniture, etc. So really it's hard to say."

However, Jet Aviation is confident that a key selling point will be the ability for customers to combine the refurbishment of their F2000 with exterior maintenance. A number of line maintenance options are available such as exterior face lifting and new paint colour options. Jet Aviation can also install high-mach blended winglets to boost performance, range and fuel savings. The new programme should ensure the popular jet continues flying well into the next decade - and beyond. **END**

Web www.dassaultfalcon.com; www.ietaviation.com

EBACE2011

BUSINESS AVIATION - LINKING COMMUNITIES AND ECONOMIES MAY 17, 18, 19, 2011 | GENEVA, SWITZERLAND



EBACE is the perfect venue for Companies who want to showcase the essential role business aviation plays in supporting jobs, mobility and economic opportunity in Europe.

This premier business aviation event will feature Exhibits, an incredible Static Display of Aircraft, Education Sessions and Maintenance & Operations Sessions (M&Os) – all located at the magnificent Geneva Palexpo and Geneva International Airport.



For more information visit: www.ebace.aero

softsell

The latest products and programme awards in the world of bizjet leathers and fabrics



beastofburden

delman Leather's latest leather collection is called Water Buffalo, and is available in six new colours – Black, Smoke, Seaweed, Redrocks, Muddy River and Bayou.

The product is inspired by Oriental water buffalo hide, with its distinctive grain reproduced on European full-grain anilinedyed cowhide. These hides average 55-60ft2 in size and 1.0-1.2mm in thickness.

The company says the Greenguard-certified leather is strong, supple, long wearing, and has passed aviation industry tests, making it suitable for high-traffic areas on aircraft.

Water buffalo hide holds special importance for Edelman, because it was used for one of the company's first products when it entered the interiors market after diversifying from its footwear roots.

www.edelmanleather.com

newnubuck

eristo created its newest premium Aleather, Rotinda, in response to customer inquiries. The company says the product is a stain-resistant and flame-retardant Nubuck leather. Other Aeristo leathers include Aeronappa, Volaero, Aerolino and Belvedair.

The company is based at Dallas/ Fort Worth International Airport in Texas, USA, but all its leathers are custom-made in Europe. Every hide is inspected in detail as it arrives from

manufacturing partners - each lot is tested for compliance with FAA requirements by independent laboratories, and abrasion tests are performed in house.

With over 20 years' experience, Aeristo has built up a loyal and solid customer base that spans the Americas, Europe, the Middle East and Asia. It stocks some 15,000 hides in more than 160 colours.

www.aeristo.com





naturalselection

antal's Conceptional Forecast for 2011 is dominated by natural themes such as webs and honeycombs. These have been translated into biologically degradable Climatex LifeguardFR seat upholstery fabrics and lightweight carpets.

Highlights include structured designs with three-dimensional effects, natural hues and refractive patterns. The palette ranges from

warm oriental tones and grey/gold/beige blends to deep blues and dark reds. Special technologies are used to create matching structures for class divider and galley curtains.

For Lantal's hand-tufting specialists, there are no limitations; they use fine wool yarns or noble silk to craft ribbed, tip-sheared and velour textures for customised carpets. www.lantal.ch

bonvoyage

Andrew Muirhead & Son has delivered its first shipment of Voyager leather to launch customer Gulf Air, which is using it for businessclass seating.

The company says the made-toorder leather is 30% lighter (approximately 600g/m²) than standard leather, while still a full 1mm in thickness, and still 100% genuine leather - not reconstituted or recycled. It is designed to have

greater elasticity than standard leather to allow for more flexible use.

"Voyager is the next step in highperformance yet environmentally friendly leather," says Archie Browning, sales director at the company. "Reducing weight helps reduce energy and fuel used, which is hugely important in a competitive industry where customers are looking for greener options."

www.muirhead.co.uk



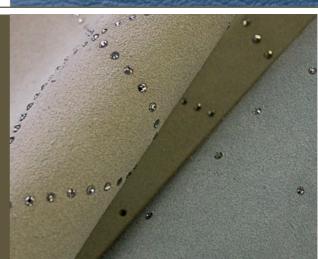
footcandy

Foglizzo says its leather can now be used for aircraft flooring, panelling or ceiling applications, when treated to comply with the main international fireproof standards: UNI 8456/FAR (a), FAR (b), Jar 25853, UNI VF 9175, IMO 653, DIN 5510, BS 6853.

Clients can choose a wood base with a self-blocking system for flooring, or simple tiles of leather. Tiles can be developed in any shape, colour and size, and combined with scratch-proof, H2O and Thermo Leather treatments. H2O is a range of water and oil repellence treatments, while Thermo Leather aims to reduce overheating by 60% when the leather is exposed to the sun.

The company has also launched a crystal-studded range of Nubuck and Suede using Swarovski elements.

www.foglizzo.com



cleansweep

Zenda Leather's eZclean was taken up by one of the USA's largest airlines in 2010. The anti-soiling technology was developed not only to repel dirt and stains, but also to make cleaning easier and preserve the wearing properties of leather. eZclean is applied during the leather manufacturing process, which makes the application of the technology permanent.

Headquartered in Montevideo, Uruguay, with 12 plants in five continents, Zenda Leather produces a wide range of aniline, semi-aniline, and pigmented leather for the aviation, automotive, and marine industries.

www.zendaleather.com



Inspiration first. Admiration always.

What begins in beauty ends in delight.

Luxury fibers, impeccable craftsmanship, unwavering service.

scott group custom carpets

CHICAGO | DALLAS | GRAND RAPIDS | LONDON LOS ANGELES | NEW YORK | SCOTTSDALE

616 954 3200 | scottgroup.com | info@scottgroup.com Proudly made in Grand Rapids, MI | To the trade



EUROPE'S LEADING CARRIER IS ALREADY ON BOARD





IF YOU ARE READY FOR TAKE OFF WITH OUR LEATHER, YOU WILL SAVE 40 % ON WEIGHT*

The new lightness in aircraft leather, exlusively produced by Wollsdorf Leather

*40 % weight reduction compared with conventional aircraft leather.

We would be delighted to personally talk to you about the benefits of our innovative products at the Aircraft Interiors fair in Hamburg.

Contact: Wollsdorf Leder Schmidt & Co Ges.m.b.H, Ms Kirsten Puntigam Wollsdorf 80, P.O. Box 27, A-8181 Wollsdorf, Austria phone: +43 3178 5125 - 246 fax: ext. 100, mobile: +43 664 253 80 80

FEEL THE CHARACTER www.wollsdorf.com



carbontrading

Providing products that are safe for the environment remains one of Tapis' top priorities – all its products are designed to be lightweight and have a 100% yield, which means low cutting waste.

The company says its Ultraleather product weighs in at half the weight of genuine leather, which reduces fuel consumption on every flight. It also says Ultraleather's construction (polyurethane, rather than vinyl) boosts its environmental credentials.

Meanwhile TapiSuede is made of 100% high-purity recycled polyester without harmful organic solvents. And for Grospoint and Geneve the company uses only 100% raw (undved) cotton and 100% raw wool. These fibres are naturally grown - there are no synthetic fibres in these fabrics. Finally, Ultrasuede (pictured) is made of 100% recycled ultra-microfibres.

www.tapiscorp.com

completecabin

isca Tiara recently unveiled its new collection of carefully harmonised carpets, upholstery and curtain fabrics for VIP and bizjets. The collection reflects the latest global trends in terms of designs, textures and colour combinations.

The company's newest product offering is steam-pleated, ready-tofly curtains. The company produces the curtain fabrics and processes them so they are ready to install.

"We do it all in-house under one roof, without the need to subcontract to other companies. That makes everything much faster, easier and cheaper for our customers," says Matthias Tischhauser, from the third generation of the family-owned and run company.

The company maintains a huge stock programme with over 1,500 different curtain fabrics in all sorts of colours, patterns and qualities. www.tisca.ch

enduringlove

errone Aerospace has introduced EnduraLite Leather, a leather alternative for seating and monument applications. Weighing 1.30z/ft2, Perrone Aerospace says EnduraLite Leather is more than 50% lighter than traditional leather. The product is designed to look and feel like leather, while being composed of a 100% fireretardant polyurethane face, and a proprietary blend of polyester backing.

Perrone Aerospace says that EnduraLite Leather performs as well as or better than competitive leather or synthetic upholstery materials in all crocking, abrasion, flammability and flexibility tests; and excels in stitch tear and tongue tear tests. The non-porous, solvent-resistant composition of EnduraLite Leather also offers protection from stains, and it can be treated with Perrone's specially formulated EnduraLite Ink Remover.

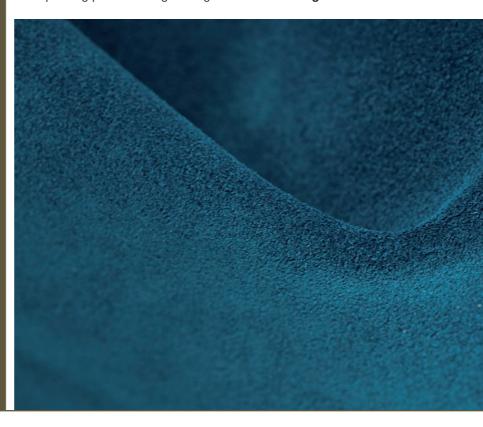
www.perroneaero.com

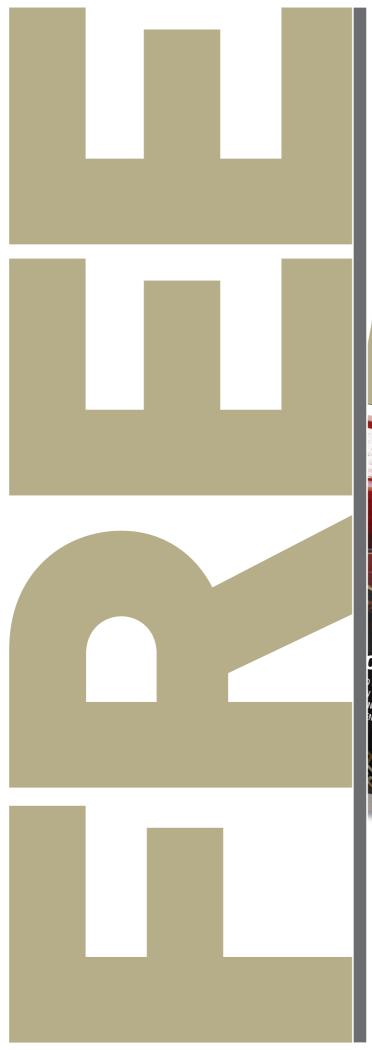
truecolours

oore & Giles has introduced a new range of colours in its Satin Suede collection – including 'Pacific', pictured. Satin Suede is produced in a European suede tannery and designed to have a luxurious nap and tracking effect and soft, supple feel.

The company says an extensive waterproofing process during tanning also ensures better maintainability. Hides in this range average 16-18ft2.

All Moore & Giles' aviation leathers are treated to meet aviation technical specifications. Additionally, the company says that many of its more fashion-forward leathers can also be treated to meet these standards. www.mooreandgilesinc.com





ONLINE SUBSCRIPTION AND READER ENQUIRY SERVICE

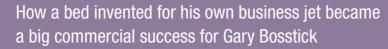


Request more details about advertisers in this issue of Business Jet Interiors International online at:

www.businessjetinteriorsinternational.com

dreambig

1-4. JetBed converts cabin seat space into a bed





Gary Bosstick designed the very first JetBed for his wife, who wanted a comfortable bed to use in their CJ3. "I really had not thought of turning my invention into a business," he says. "But people saw it and indicated they might buy it." Cue filing for a patent, now issued, and the formation of a company, JetBed Inc, to produce and sell the product. Bosstick also showed his ideas to some people he knew at Cessna Aircraft in Wichita, Kansas, USA. "I hoped they would take me seriously and not laugh too hard, but thankfully they liked my product and encouraged me to continue with the project," says Bosstick.



Soon thereafter Bosstick realised that while there was a demand for JetBeds on light jets, the demand from so-called heavy iron aircraft such as Gulfstreams, Falcons and Bombardier aircraft was far and away the larger market. "About two years ago I began to develop JetBeds for these models and the response has been terrific," he says. "The customers are not only enthusiastic about the incredible comfort but the remarkable ease of use."



but the remarkable ease of use."

With practice a JetBed can be installed or removed in as little as 60 seconds. "Cabin service providers tell me that at the end of a long flight the quick and easy removal and storage of the JetBed makes an enormous difference as they prepare the aircraft for arrival at their destination," says Bosstick.

As JetBeds began to sell in this market

As JetBeds began to sell in this market customers started to ask where they might obtain fitted linens for the product. Fortunately, at about the same time, Jim Dahlgren of Dahlgren Duck got in contact to propose supplying linen specifically for JetBeds. Dahlgren Duck, based in Texas, USA, is known as a global supplier of china, linens, silverware and other

accessories for aircraft and yachts, as well as exclusive residences.

"This arrangement is working out very well indeed," reports Bosstick. "Customers can now contact Dahlgren Duck at the same time as they order their JetBeds and get high-quality fitted linens shipped immediately."

JetBed is now available for all current aircraft from Gulfstream, Falcon, Bombardier and

JetBed is now available for all current aircraft from Gulfstream, Falcon, Bombardier and Cessna, with the exception of the Cessna CJ4 and the XLS+. "These will be available very soon," says Bosstick. "Additionally we are nearly ready to sell models for the Hawker XP, Falcon 50 and Phenom 300s. We are working on the Legacy 600 series and will eventually have JetBeds for many more applications."

The product is also gaining ground through distribution agreements – and in December 2010 the company signed with Jet Aviation, represented by its MRO and refurbishment centre in Zurich, Switzerland. The agreement includes representation through Jet Aviation's network of 18 completions, refurbishment and MRO facilities in Europe, the Middle East and South America, as well as its completions centre and MRO in St Louis, Missouri, USA.

South America, as well as its completions centre and MRO in St Louis, Missouri, USA.

"The patented design and custom fitting of JetBed is unsurpassed in the industry," says Jakob Straub, vice president and general manager of Jet Aviation Zurich. "We are convinced that many of our clients will come to enjoy the benefits of enhanced cabin comfort."

JetBed is also represented by Mike Harvey of Global Trade Group/Cabin Crafters in Teterboro, New Jersey, USA; by Ken Moon of BKD Aerospace in Vancouver, Canada; and by Clay Lacy Aviation at its US facilities in Van Nuys (California), Seattle (Washington), Denver (Colorado) and West Palm Beach (Florida). In addition, the product is available through several OEM suppliers.

"During my many years of flying, one of the most difficult things to achieve on an aircraft is having a comfortable place to get some sleep," says Clay Lacy, founder of Clay Lacy Aviation. "JetBed has finally satisfied that need. The JetBed is light, easy to store and use, but most importantly it is really comfortable, including enabling you to sleep on your side. We at Clay Lacy are using them on many of our aircraft and are adding more all the time."



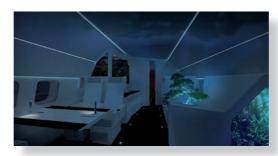
Reader Enquiry No. 501





Partner of your aircraft design projects









Aircraft Cabin Design

AirCaD offers engineering services for cabin interior completion and products.

Bât ART'VAL Paris Nord 2 • 9, rue des Trois Soeurs • 93420 Villepinte • France Tél. + 33 (0) 1 73 54 06 00

www.aircad.fr

showhome

A new narrow-body cabin concept showcases AirCaD's in-house capabilities

French engineering office AirCaD, which specialises in VIP cabin interior design and certification, has revealed a narrow-body cabin concept to showcase its in-house capabilities. "We want to show off our capability – considering a project in its entirety from the customer's request to the certification of the aircraft," says Nicolas Roberval, president of AirCaD.

It has been more than a year since the company first set its sights on creating a cabin that was luxurious but sober, modern and realistic. In agency D'un Lieu à L'Autre, headed by architect Charles-Eric Guerrier, AirCaD found the partner it wanted – someone without aeronautical experience, who could give a fresh perspective. "We chose Charles-Eric Guerrier for his simplicity, his ability to listen, and on the strength of his ideas," says Roberval.

For the cabin itself, the company wanted a smart, natural design with relaxing colours, all emphasised by clever lighting. It also had to offer various functionalities and a consistent circulation so it could be used for many applications; from private to professional and even governmental. On top of this, the cabin layout is adjustable, with areas that can be removed or modified according to the aircraft's length.

"The cabin design is the result of new thinking on the way an aircraft can be occupied," says Guerrier, who emphasises how important it was, particularly in the entrance area, to make a distinction between the ground and the air. It was also vital to make the entrance a space in its own right, with a flexible ceiling and without the lines of the bulkhead driving people into the cabin. The company envisages passengers being greeted by cabin crew and mixing with other guests in the lounge area before taking a seat. The design even includes a vivarium (a cabinet housing living plants and/or animals) and aquarium.

The dining area features wide, footless tables to enable passengers to work in comfort while flying. Embodying the flexibility of the design, the kitchen can be hidden behind opaque glazing, and a bulkhead can be used as a theatre screen. The seats (by Optimares) and the table also conform to passengers' changing needs – they can be adjusted (for example by expanding the table) and/or moved. Meanwhile the aircraft owner has the run of a bedroom featuring an office area, a sofa and a suite, all set with exceptional views of the sky.

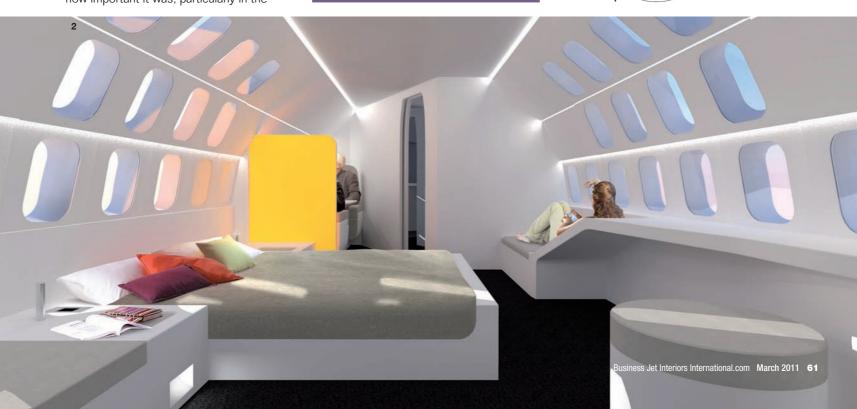
"Our 1/20-scale mock-up is almost finished and we are very proud to exhibit it at the Shanghai International Business Aviation Show (SIBAS) in Shanghai in April 2011," says Roberval. "We will show the entire cabin, with various proposals for paint schemes."

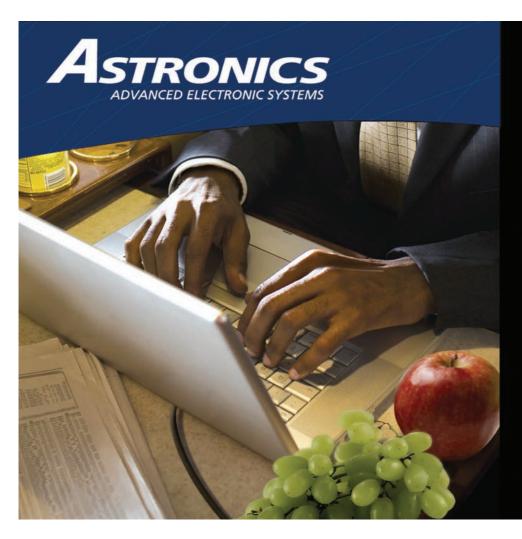
AirCaD

Reader Enquiry No. 502



- The cabin layout
- 2. The owner's suite





...the leading supplier of Intelligently Managed **Airborne** Passenger Power Systems



Luxurious Custom Hireraft Interiors



Visit us at:

Aircraft Interiors Expo 2011 Hamburg Messe | Germany

> April 5-7, 2011 Hall 6, Booth F60

MARION AIRCRAFT

Main Office: 20312 Hermana Circle U.S.A

Design Studio: 26499 Rancho Parkway S. Lake Forest, CA 92630 Lake Forest, CA 92630 U.S.A

www.marionaircraft.com

Aircraft EXPO

Phone: 800-321-1041 Phone: 1-949-540-2650

Fax: 1-949-540-2652

Email: julie@marionaircraft.com

)NAIRCRAFT

aircrafting

When VIPs demand highly customised solutions for their aircraft that just can't be bought off the shelf, Fokker Aircraft Services steps in





"We have a rich heritage of 90 years in building aircraft," says Stephen Hands, vice president of sales and marketing at Fokker Aircraft Services (FAS). "Because of it, when our engineers approach an aircraft for outfitting, modifications and/or repairs, we do so through the eyes of an OEM."

For FAS this means viewing the aircraft in its

entirety – not just the interior, but focusing on how all systems will interact with each other, and the weight and balance of the aircraft for optimum performance. "And if there is no specific product or solution available on the market, we'll engineer and build it ourselves, says Hands. "That's what we call 'aircrafting'.

With a heritage dating back to 1919, FAS prides itself on its old world appreciation for the details that go into designing, assembling and maintaining a modern aircraft. Its engineers and designers fashion interiors and exteriors for Airbus ACJ, Boeing BBJ, Bombardier and Gulfstream aircraft.

With our manufacturing background, we're interested in how design and configuration can enhance overall aircraft performance," says Hands. "Take weight, for instance. By analysing how to achieve the best weight, range and balance portfolio for a VIP jet we recently

version. Less weight equals improved aircraft performance and better range."

FAS has the advantage of offering not only completions, conversions and refurbishments, but also all manner of MRO services. As an integral part of the Fokker Technologies Group, FAS can also, when needed, benefit from the expertise of its sister companies. These include Fokker Aerostructures, which designs and produces lightweight structures; Fokker Elmo, which specialises in electrical systems and electronics; Fokker Landing Gear, which delivers landing gear systems for helicopters and aircraft; and Fokker Services, which provides OEM support for in-service aircraft.

"I don't think it's going too far to say that we safer, more efficient and more cost-effective and custom crafted than when it first rolled into

FAS serves the international marketplace from its headquarters in the Netherlands. Its facility boasts five hangars spanning 16,000m², plus workshops, where exterior and/or interior modifications can be made. Services include design, system design and integration and certification to EASA. GCAA or FAA standards.

Because FAS is also an EASA, GCAA and FAA Part 145 approved maintenance facility, it can also provide turnkey MRO solutions. In addition, it provides ongoing, comprehensive your aircraft as if it were one of our own,



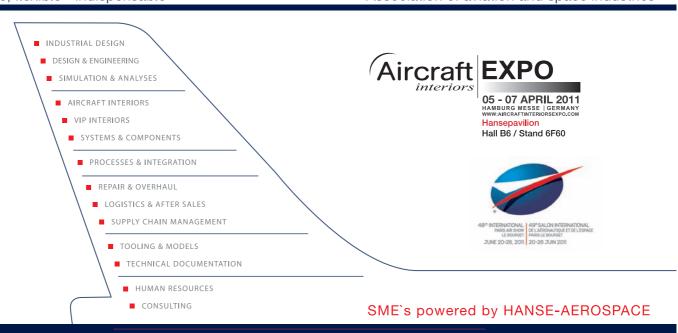
- 1-2. As well as interior work, FAS's offering includes MR0 services
- An A318 VIP completion by the company





Innovative, flexible - indispensable

Association of aviation and space industries



<u>pursuitofperfection</u>

Herbert Artinger on the quest for the best possible aircraft completion

by ACES, with Edése
Doret interior

With the advent of the next-generation aircraft

says the stage is set for the perfect interior completion. It is his job to help clients achieve it.

Artinger is president and owner of Cabin Completion Quality Management (CQM), recently established as a technical service division of Aircraft Conformance Engineering Services (ACES). COM oversees business iet and VIP cabin interior completions – from the initial concept design, through to specification drafting and risk analysis and representing customers at the completion centre.

CQM is the latest venture for the industry veteran, who founded ACES after 25 years at Messerschmitt-Boelkow-Blohm (BO-105 Artinger's role at CQM is to ensure that all vendors, designers, completion centres and any other parties involved in the completion comply to the highest standards of quality, and deliver the aircraft interior that the customer has specified. At present, the company's order book for site representation – covering both current and next-generation aircraft – is full for the next



So what should people looking for the perfect Artinger's experience of working at a wide variety of locations gives him a valuable insight into how widely quality can vary. "We have been involved in all major aircraft type completion site representations, at all major completion centres in Europe and the USA," says Artinger. "Each is diversified in their productivity and value for management policies. Sometimes centres based at the same airport are worlds apart.

Artinger also warns about offers that seem too good to be true. "Some revenue hungry centres wishing to re-enter the market may grossly underbid and not comply with your quality expectations in the end, whenever that delayed date may be," he says.

of the design itself. "Some interior designs are properly," he says. "Others are greatly based on cut-and-paste applications, coming close to theft of intellectual property, and not innovative concepts. It pains me to see a very expensive lamp in the aircraft also replicated in the lobby of the local three-star hotel – which came first?"

So what will the perfect aircraft completion of the future incorporate? "New aircraft, composite materials, IFE and lighting applications, together with holographic conferencing will be expected by the end user," says Artinger. "The kids of Bluetooth, iPods, beamers, HDMI, 3D and Dolby 7.0 better than you know your old VCR, and be assured, this had better work in the cabin. When ambience. But which one is simply the best

СОМ

Reader Enquiry No. 504



Business Jet interiors

















www.businessjetinteriorsinternational.com

The Business Jet Interiors website includes a digital version of the current magazine, plus a digital archive of past issues and all the latest news – helping you stay one step ahead of the market. You can also register online to receive future issues and use our online reader enquiry service to discover more about our advertisers' products and services.

movingon

The technology behind inflight connectivity does not stay still

Business jets are commonly used by people who want to use the time they have to their best advantage. Therefore it is not surprising that the business jet market has been making use of inflight connectivity for many years. Nor is the concept of passengers using their own devices - mobile phones, smartphones, laptops and so on - on the aircraft a particularly new one; such services have been flying on commercial and business jets for two or three years.

However, the technology behind the services is constantly evolving. For example, OnAir's bundled GSM and WiFi service was launched by Oman Air in 2010. While this development has the potential to provoke 'so-what' shrugs among passengers, OnAir insists it actually marks significant new ground.

"Combining the two services not only makes it simpler for passengers to use, but - and this is where its importance for business jets comes in - it is simpler and cheaper to install than having two separate systems, and takes up less onboard space," says David Bony, head of VIP, corporate and governmental aircraft at the company.

Another development has been an increase in system reliability: the longest call recorded over OnAir in 2010 was 54 seconds short of an hour. One of the early issues was handover of the service between the satellite's spot beams. Given it is virtually impossible to fly for an hour without moving between spot beams, system improvements are clearly having a positive impact.

"It is clear that our main business objective is to have our connectivity services flying on as many aircraft as possible," says Bony. "Our view is the best way to achieve that is to be at the cutting edge of innovation. We aim to use the best suppliers in the industry to ensure our services are the most reliable and robust, and that they provide what passengers want in the way they want it."

Central to OnAir services is Inmarsat's SwiftBroadband, which is designed to meet increased bandwidth demands as well as provide high-quality voice services with global coverage. Combined with modem development. OnAir can now support up to 24 simultaneous calls.

The combination of its desire to be at the forefront of research with its ability to

provide global coverage is what led OnAir to become involved with Solar Impulse. The project aims to fly an aircraft non-stop around the world using solar power alone. OnAir is providing SwiftBroadband connectivity for both the testing stages and the world tour, planned for 2013. Given the aircraft weighs the same as a family car and has the power of a scooter, the challenge is to produce a system that is very light and requires very low power.

OnAir's support of Solar Impulse is about more than just being involved in a pioneering project, though it certainly demonstrates the company's technical ambition and environmental credentials. Of more commercial significance, it also drives the development of OnAir's systems and services - a lightweight and low-power system is good news for any aircraft operator.

And looking even further ahead, OnAir says the next stage is likely to be the increasingly efficient use of available bandwidth, meaning the availability of more simultaneous calls and potentially higher data rates.

OnAir

Reader Enquiry No. 505



1 OnAir is providing connectivity for the Solar Impulse project

EVERY JET OWNER IS DIFFERENT. JETS SHOULD BE TOO . . .



We define ourselves as "aircraft interior tailors" and reinvent the art of blending the finest craftsmanship from Europe and Asia into the most luxurious jet interiors.

O U L O U S E +33 531 615 186

www.airjet-designs.com

S H A N G H A I +86 21 6149 837

www.BusinessJetInteriorsInternational.com

I News & exclusives | Supplier directory | Recruitment I Industry opinions I Image gallery I Read the latest issue online



Business Jet Interiors International online!

www.BusinessJetInteriorsInternational.com

moderncomforts

Digital Veneer can allow cabin outfitters to replicate wood and other veneers using an advanced surface decoration technology

surfaces in VIP aircraft interiors, Digital Veneer is a surface decoration technology that

photographed or digitally created. Its creators promise a finished result that is virtually indistinguishable from the real product.

"The significant advantage of using the ISO 9001 accredited Digital Veneer is it is 98% lighter than real wood veneers and solids, reducing overall weight and equating to less fuel burn and greater range," says Digital
Veneer founder and CEO Lance Sheppard. "In addition, from a certification aspect, it is non flammable and non toxic so it meets all the

Digital Veneer is already working with some design studios on some major projects, and Sheppard reports that they have embraced this as the surface decoration technology of

aviation industry the OEMs will spend

wing shape and new-generation engines, then install a wooden interior into the aircraft," says Sheppard. "Digital Veneer is the 21st century solution in every respect for VIP aviation interiors. When a finished sample of real wood veneer and Digital Veneer are placed side-by-side it is impossible to tell the difference, and

The ability to decorate complex curves and shapes gives cabin designers greater freedom to create exciting new interiors without restrictive boundaries. The company says Digital Veneer is also 100% UV stable and not effected by temperature or moisture fading eliminating splitting, delaminating from heat

Digital Veneer is an established global provider with facilities in New Zealand, the



1. A BBJ interior proposal by Rainsford Mann Design, incorporating Digital Veneer on all surface finishes





factors – such as the frequency and duration of trips they intend to make, the number of passengers, and the overall budget to acquire, outfit and operate the aircraft. But a lot of what can make the private travel experience enjoyable and unique is related to the cabin interior design, a delicate combination of interior layout, forms, materials and colours.

The design of a jet cabin is constrained ergonomics, structural strength and materials, but once these considerations are satisfied, the top priority for most aircraft owners is being able to enjoy their private flight in comfort and style.

In this context, Airjet Designs – which is office in Shanghai, China – tailors jet interiors using the sort of fine materials found in haute couture and luxury homes or hotels. Drawing on French and Italian inspiration, the design team produces aircraft interiors influenced by luxury fashion and avant garde design trends.

With extensive experience on VIP cabin

design projects and a reliable network of highend material suppliers and artisans in Europe and Asia, Airjet Designs aims to deliver stylish and unique concepts. Constantly integrating Designs says it can adapt any interior atmosphere to airworthiness standards.



You can request more details about advertisers in this issue, including the companies and products listed in the Products & Services section, by visiting the following online address: www.ukipme.com/recard/bizcard.html

advertisersindex

Aeristo	2/
Aero Experts	68
AIRCAD Aircraft Cabin Design	60
Astronics Advanced Electronic Systems	62
Automotive Interiors Expo 2011	IB0
Business Airport World Expo 2012	10, 13,14
Business Jet Interiors Online Reader Enquiry Service	58, 66
Cessna Service Centers	35
Fokker Aircraft Services	4
Goderich Aircraft Inc	6
Hanse – Aerospace Wirtschaftsdienst GmbH	62
lacobucci H F Electronics SpA	IF0
JetBed	27

_	-
Marion Aircraft	62
NBAA	53
PGA Electronic	OBC
SACS Aerospace GmbH & Co	32
Scott Group Custom Carpets	56
Steecon Enterprises	64
Thermax CDT	71
TrueNorth Avionics	5
Vision Systems	47
Wollsdorf Leder Schmidt & Co GmbH	56
www.BusinessletInteriorsInternational.com	68

L-3 VIP Interiors.....9

Future-Proof Your High-Speed Data Systems™ Thermax MaxFlite™ Gigabit-Plus™ Ethernet Cables

Thermax



wanderingeyes Stylish sunnies for making that rock-star statement on the airstairs

- 1. Versace sunglasses; £156 (US\$252); www.versace.com
- 2. Paul Smith sunglasses; £159 (US\$257); www.davidclulow.com
- 3. Montblanc sunglasses; £299 (US\$483); www.montblanc.com
- **4.** Prada sunglasses; £195 (US\$315); www.davidclulow.com
- 5. Paloma Picasso sunglasses; £130 (US\$210); www.blackwhitedenim.com
- 6. Dolce & Gabbana sunglasses; £212 (US\$343); www.davidclulow.com
- 7. Christian Dior sunglasses; £140 (US\$226); www.blackwhitedenim.com
- 8. Oakley Juliet sunglasses; £269.99 (US\$436); www.surfdome.com







The car and truck interior design, development and construction showcase

automotive interiors EXPO 2011

17, 18, 19 MAY 2011

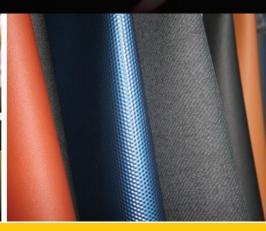
NEW MESSE STUTTGART, GERMANY











"This event is a great opportunity for suppliers and for introducing innovations."

> Bernhard Strunk, Managing Director RECARO GmbH & Co. KG

For more information please contact:

Jason Sullivan Sales and Marketing Director Automotive Interiors Expo 2011 UKIP Media & Events, Abinger House, Church Street, Dorking, Surrey RH4 1DF, UK Tel: +44 (0)1306 743744

Email: jason.sullivan@ukipme.com

BOOK NOW FOR 2011!



Comfort & Entertainment Innovative Management Systems







