

FLIGHT

DAILY NEWS

09

SEPT

flightdailynews.com

LONG BEACH | ISSUE 1



Gregg Fialcowitz on a high with the Albatross. (Inset) Mark Mielke checks antenna performance.

Row 44 surfs into Long Beach

Aspiring Ku-band connectivity service provider Row 44 yesterday took spectacularly to the water to show that its business plan is much more than hot air. The Californian company's flight-test aircraft, a vintage Grumman Albatross flying boat, made its public debut here, and Flight Daily News was the first news organisation to see it in close-up action.

"When we realised it might take longer than planned to get our equipment on to an aircraft from one of our trial airlines, we decided to buy our own so we could complete our development and show what we can do to potential customers," said company president Gregg Fialcowitz.

Anyone gazing out across Long Beach Channel from the convention centre

yesterday afternoon would have seen the sturdy amphibian, beautifully restored and gleaming in Row 44 corporate colours, taxiing past the Queen Mary before taking off from the open water. A closer look would have revealed the Row 44 radome and antenna, hatch-mounted on the upper fuselage. Inside, clustered neatly on the underside of the hatch, was the rest of the fit – the high-power transceiver (HPT), modem data unit (MDU), the switch management unit (SMU) communications router, and a WiFi wireless access point.

"We acquired the aircraft in June and our own technical staff completed the installation six weeks ago," said Fialcowitz. "We chose it because it gives us an exceptional ability to work in the places

like Alaska and the Aleutians at the edges of our North American coverage. In fact we can take it almost anywhere in the planet."

Row 44 is poised to complete the FCC licensing process that will clear the way for airborne work in US airspace with the three satellite transponders that it has leased to date. In the meantime, the aircraft has flown from New Hampshire to its base at Van Nuys in Los Angeles, passing through Canadian airspace en route.

"We're licensed in Canada, which allowed us to give the system its first airborne workout," said Fialcowitz. "We reliably achieved 4Mbit/sec down to the aircraft, and it could have been more. While the modem is currently limited to that figure, the satellite capacity is rated at 15Mbit/sec."

Beat the rush

Don't forget to book your stand for Hamburg, visit the sales booth on stand 353

Aircraft interiors EXPO

31 MAR - 02 APR 2009
HAMBURG MESSE | GERMANY
WWW.AIRCRAFTINTERIOREXPO.COM

IMS set to star on the big screen

Handheld IFE market leader The IMS Company (WAEA 247) surfed into Long Beach on the crest of a wave of new product announcements – and it's not done yet.

Making its debut here is the Brea, California-based supplier's latest entertainment offering for the airlines – an imposing 12in-screen unit capable of storing up to 250Gb of content.

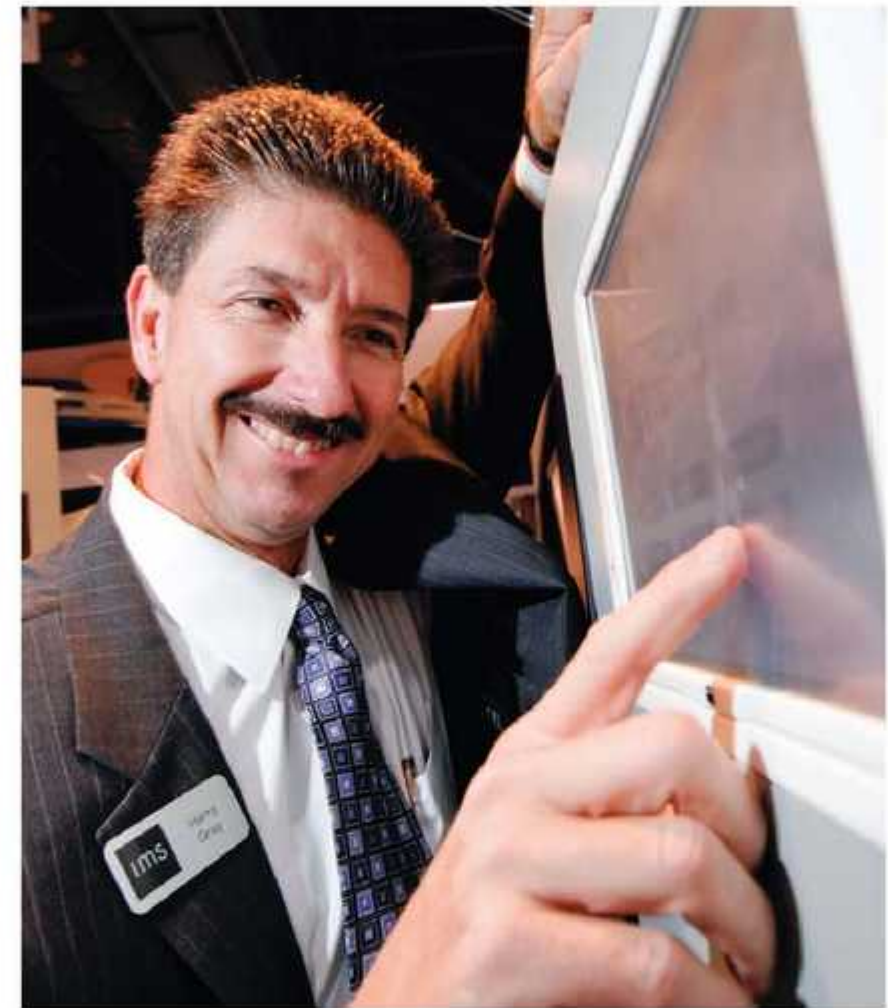
"It's a personal entertainment device but not a portable," says sales and marketing VP Harry Gray. "We're developing it to meet airline demand for something that lets them clearly differentiate their premium and economy services."

The new product draws on the success of IMS' 10.6in-screen device in business class on American Airlines' Boeing 767-300s.

"It's designed as a replacement for our 10.6in Personal Entertainment Appliance (PEA)," says Gray. "On show here in working prototype form, it will be used in semi-embedded form, like its predecessor, but will weigh 25 per cent less and will need about 30 per cent less storage space."

Deliveries of the new device are scheduled to begin in the third quarter of next year. Passengers will be able to view more than 450 hours of on-demand content on the 1280x800-resolution WXGA touchscreen. While touchscreen is the primary control mode, a remote control will be offered for use in seats set at longer pitch. Other features include a customisable graphical user interface and a variety of games, as well as optional WiFi.

Also starring at the IMS booth is a semi-embedded version of the established PAV-705 7in-screen personal media player, along with in-seat arms and seatback docking stations.



The Big Idea on display with IMS' Harry Gray



Thales' Stuart Dunleavy and Alan Pellegrini committing to Jetera.

Jetera software to help airlines ad to their revenue prospects

A new weapon in the war for ancillary revenues will soon be added to the airlines' armoury. Leading IFE hardware provider Thales Avionics (WAEA 655) announced here yesterday that it had signed up to add Jetera's targeted advertising software to its TopSeries system.

Launched with much fanfare in 2006, Connecticut-based Jetera has been promising big things for some time and has finally secured a commitment from a major IFE player. The company's core product is the Targeted Content Delivery System, designed to support insertion, delivery, targeting, financial reconciliation, analysis and other aspects of online advertising campaigns.

"We expect that our joint efforts will enable us to give the airlines a very attractive way to integrate advertising into their IFE systems," says Alan Pellegrini, general manager for Thales' inflight entertainment business.

The new capability – based on Web 2.0 technology - is due to be commercially available from next year.

PANASONIC UNVEILS DVD-QUALITY VIDEO

Panasonic Avionics (WAEA 311) has riposted to rival Thales' announcement here by unveiling a new addition to the strength of its OneMedia sales network. The Lake Forest, California-based IFE systems leader has also added MPEG-4 audio and video capability to its eX2 offering.

In-Flight Media Associates of California, specialises in video advertising to air travellers.

The company is now active in OneMedia, which Panasonic put together to provide both the onboard software and the ground infrastructure needed to deliver targeted, regularly updated and concise content and advertising to the in-seat IFE.

OneMedia gives the airline desktop Web tools with which to select the advertisements to be displayed on the basis of targeting criteria, and generates and delivers online reports of impressions delivered, click-through rates and data acquired. Advertising formats can include click-through banners, rich media within the video content, electronic magazines and microsites.

Panasonic has also teamed with Emirates and Walt Disney to add the ability to deliver MPEG-4-quality digital content to the top-of-the-line eX2.

EXTRA FROM EXECUJET

ExecuJet announced yesterday. It is to extend its aircraft interior design and completions capabilities into larger executive jet types

By the end of the year, the Swiss company is hoping to add Airbus ACJ and Boeing Business Jets to its current, primarily Bombardier Business Jets portfolio. A brand new dedicated customer showroom, located at Zurich is scheduled to open in the Fall..



Free Aircraft Interiors Special Report - Worldwide Fleet Analysis

Download your copy today at www.flightglobal.com/insight

For more information on Flight Insight's tailored market research and analysis service email insight@flightglobal.com



SEEING THE LIGHT WITH STG

STG Aerospace (AIX 767) is highlighting its SafTGlo photoluminescent floor path marking system that has delivered more than 5,000 kits. STG says this means that nearly a third of all operating commercial passenger aircraft are using the system.

"SafTGlo is 100% reliable 100% of the time," says chief executive Peter Stokes. "It also saves considerable money by removing the need for regular parts replacement and scheduled maintenance."

While the cabin lights are on the system absorbs the light, and if the lights were to fail the photoluminescent strips would then emit this 'stored' light. STG says this gives highly visible emergency exit guidance for up to 16 hours.

"Our company focuses strongly on providing radical cost-reducing, time-saving technologies which will make an entire fleet more efficient," says Stokes.



Schneller design manager Don Rose on a roll.

Walking on Aer – the easy floor solution

A new low maintenance and cost saving solution to aisle and cabin surfaces from Schneller (Booth 831) is being introduced here at Long Beach.

Schneller, develops and manufactures engineered decorative laminate and non-textile floor coverings for transportation and architectural industries. The company says it found that customers were unhappy with carpet textiles in galleys, aisles, cabin flooring under seats and in lavatories so set to work on a solution to change that.

Designers came up with AerEase, an attractive non-textile cabin flooring with easy installation and cleaning, as well as long wearing durability.

"Customers find it tiresome changing the carpets in the aisles and galleys all the time. AerEase lets them clean the floor within the aircraft as opposed to having to remove the carpets to clean them, which also saves customers money," says project marketing manager, Eric Dirand.

"Carpets can get very smelly and dirty. What AerEase does is improve on hygiene levels as well as proving far more cost effective to the customer. They can be colour matched to the rest of the aircraft interior, and are easily installed and are low maintenance.

"We have conducted a few trials with customers with great results, so we are looking forward to introducing and demonstrating AerEase here at Long Beach," says Dirand.

Visit with the Leaders In The Aviation Industry.



Register Now!!!

For ALA Miami 2009 Convention and Expo

When: July 9 & 10

Where: Doral Golf Resort and Spa - Miami Florida

For More Information Contact:

ALA at 817-284-0431 • E-mail : ALA@ALA.Aero • www.ALA.Aero

Your Opportunity to open doors in Latin America



You have to hand it to Rick Stuart – with Bluebox latest handheld IFE player.



Bluebox unveils extra light entertainment

Bluebox Avionics (WAEA 169) has unveiled here the second generation of its Bluebox Lite handheld IFE player. The British company is also showing its wireless semi-embedded IFE system, as recently deployed on a private Boeing BBJ.

The latest Bluebox Lite is 25 per cent lighter than its predecessor, which is in service with UK carrier bmi, El Al of Israel and Iceland Express. The new variant also offers 50 per cent more battery life, significantly higher resolution and a brighter screen. First deliveries are scheduled for November.

Following installation work by Greenpoint Technologies of Seattle, the first example of the Bluebox wireless semi-embedded system has been commissioned and is now flying aboard a new Boeing Business Jet. "We have proved that the concept is viable logis-

tically and commercially," says Bluebox joint managing director Rick Stuart. "We have overcome all of the issues associated with wireless control and now have a very powerful and flexible product."

The system is based on the same hardware platform as Bluebox Lite, but configured for wireless control via a crew management terminal. In the BBJ control is exercised via the aircraft's own WiFi network. Functions include cabin public address, and IFE pause, forced playback and system disable. As well as audio/video on demand, the system supports PC gaming and moving-map information from a Rockwell Collins Airshow system.

The Bluebox units are installed in seat-arm mounts and draw on aircraft power. The passenger can remove the unit from the arm mount and place it on the in-seat table.

Tigris trolley that saves energy

AeroCat (AIX 548) is giving a US launch for its Tigris fully-polymer catering trolley.

Buoyed after a successful European showing at AIX Hamburg earlier this year, AeroCat is showcasing the advantages the new trolley can offer.

Because it is constructed from polymer the trolley is lightweight weighing just 35lb (16kg) and the material is fully recyclable therefore it has green credentials too.

AeroCat reckons that if only 10% of the world's catering trolleys were replaced with the Tigris that this would result in enough energy savings to light the homes of 1.7 million people. The company says that an introduction of 23 trolleys will save a fuel tanker of kerosene each year.

The first production series will be finished in November this year and will start to be used for in-flight and ground testing. Full production of the EASA/ETSO version is expected in the first quarter of next year.

www.starling-com.com

see us at
WAEA
Long Beach, California
Booth No. 617

MIJET™ Family by Starling

*The fastest connection
in the sky.
Proved & Flight Tested.*



Breakthrough Broadband Antenna Systems for all Size Aircraft

Today, instant and uninterrupted airborne communications is an absolute must. Starling's MIJET™ family of state-of-the-art antenna systems offers two-way connectivity, keeping you on-line at unrivalled broadband speeds. Superior technology and high-quality performance in a uniquely compact size, ensure reliable connectivity for internet, PDA, e-mail, mobile phones, VPN and live TV.

**Now you can roam the skies without losing a byte.
Guaranteed.**



Starling
Advanced Communications
THE RECOGNIZED STANDARD IN
ON-THE MOVE CONNECTIVITY

Max Kingsley-Jones takes a look at how the airlines have taken different approaches to the interiors of their A380s.

The arrival of the Airbus A380 has heralded new levels of cabin comfort for both premium and economy passengers, as launch customers opt to use the giant's volume to introduce innovations and increase personal space.

While the seat counts for many of the early operators have been known for some time, the full detail of cabin layouts and innovations have only been made public for three airlines – launch operator Singapore Airlines, latest customer Emirates, and the other 2008 debutant, Qantas. All three carriers have opted for layouts with fewer than 500 seats – the latter going with an ultra-spacious 450-seat configuration – but each has taken a different approach to how and where it seats its passengers across the two decks.

The A380 is in effect two widebody airliners flying one above the other, connected by a wide straight-through stairwell at the front and a spiral staircase aft. According to Airbus, the A380 has 50% more floor space than the standard-setting Boeing 747, but only 35% more seats resulting in an increase in space for each passenger.

WIDEST AIRLINER CABIN

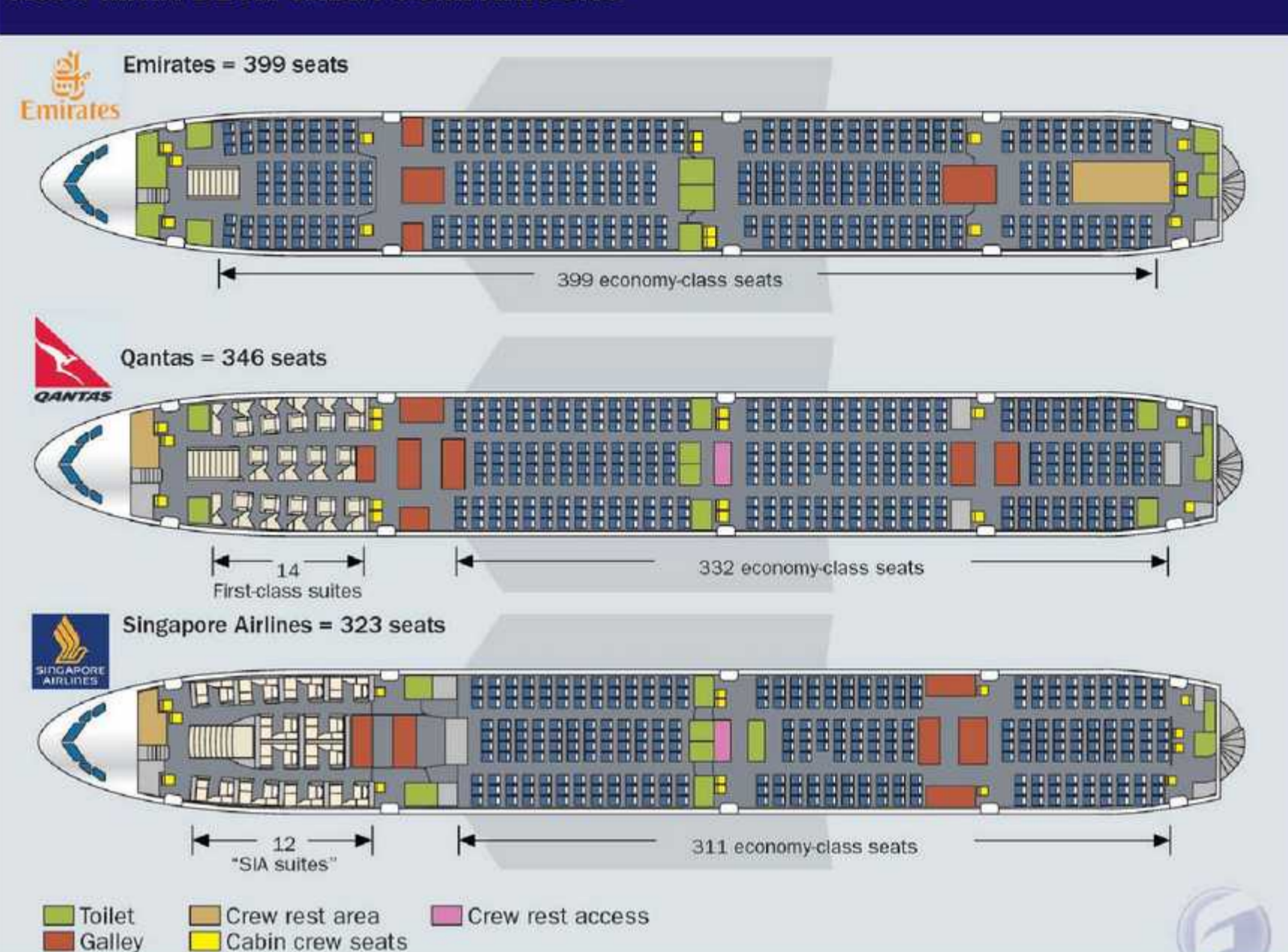
The main deck – with a cross-section at arm rest level of 6.48m (21.3ft) – is easily the widest airliner cabin ever flown, with Airbus claiming a 36cm advantage (at arm-rests) over the 747's benchmark. This is the default location for the economy seats – all three airlines have some or all of their economy cabins there.

The A380's standard main deck economy layout is 10-abreast (three-four-three) with a 47cm-wide seat that Airbus says is more than 3cm wider than that offered on the 747 in a similar configuration. With narrower seats, an 11-abreast layout is feasible.

The upper deck has twin-aisle width, meaning that it lacks the cosiness of the top deck of a 747 behind the cockpit. With a width (at arm-rests) of 5.87m, it is similar in cross-section to that of the A330/A340 – although with a more pronounced upper curvature. The deck is the natural location for business class – while some economy/premium economy seats can also be found there – but only Emirates has so far put first class on the upper deck.

The Dubai carrier, which is the largest A380 customer with 58 on order, inaugurated

A380 MAIN DECK CABIN COMPARISONS



INTO THE SP

A380 revenue services on 1 August between Dubai and New York. It has three configurations for its fleet, with initial aircraft being delivered in a 489-seat layout, while later aircraft will have either 517 or 604 seats.

"I think when passengers get on board – premium and economy – they'll have a great experience. It's light, it's spacious, and it's airy – even in economy," says the airline's president Tim Clark.

Unlike SIA and Qantas, Emirates has chosen to make the upper deck entirely premium as part of the airline's philosophy to segregate first- and business-class passengers from economy immediately they set foot in its Dubai airport hub. "When our new terminal is open in Dubai, the boarding for the premium passengers will be straight in to the upper deck," says Clark.

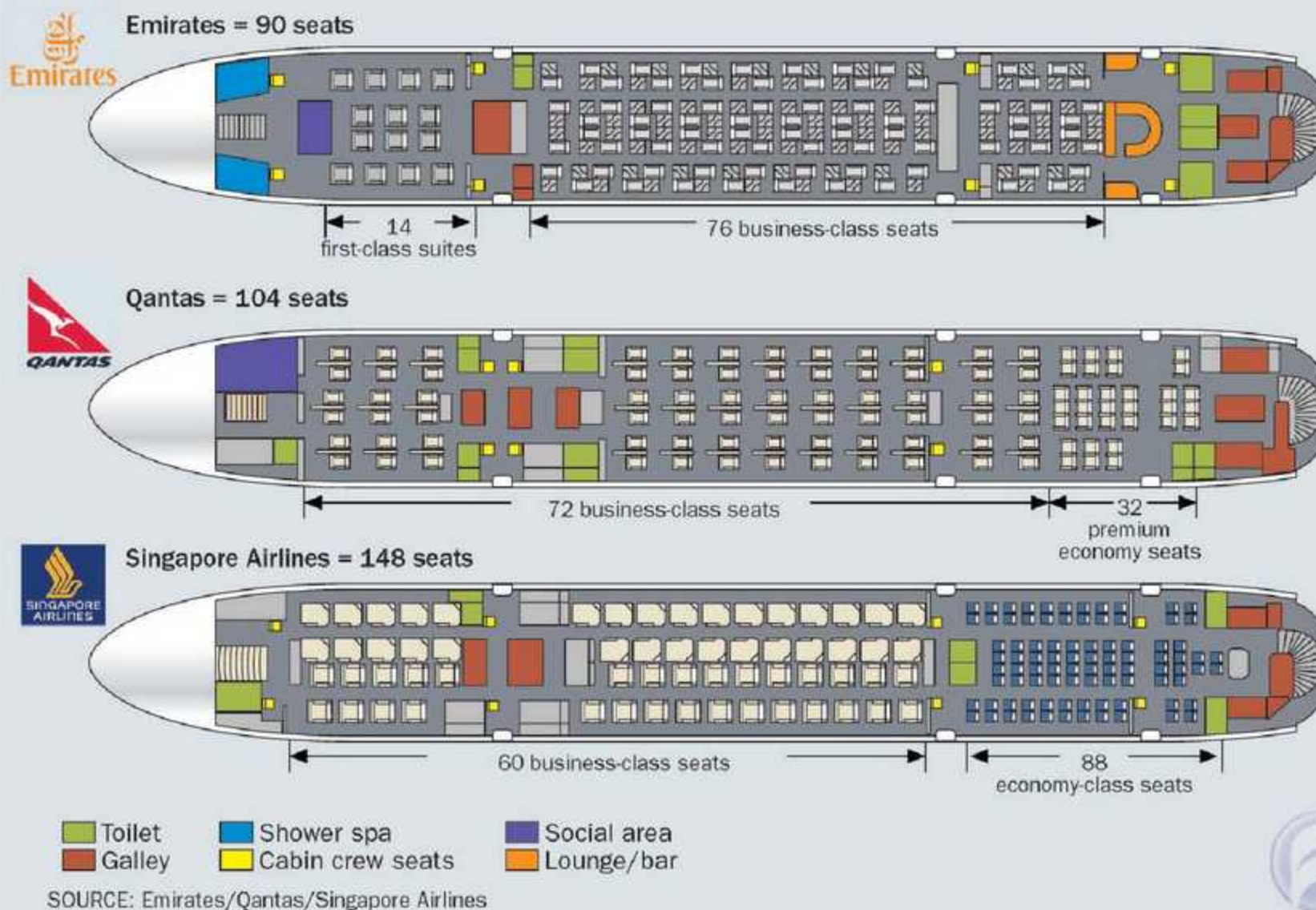
The airline has adopted the area either side of the forward stairwell for a world first on an airliner – a pair of on-board showers for first-class passengers.

While the plumbing for the showers was "a masterpiece of engineering", Clark says the innovation's real challenge will be managing the allocation of "25min slots" for use of the facilities to first-class passengers.

SIA, which operated the world's first A380 revenue service in October last year, now has five of the 471-seaters in operation, serving London, Sydney and Tokyo from its



A380 UPPER-DECK CABIN COMPARISONS



For more news/show images see flightglobal.com

more space and comfort in every cabin.” Located on Emirates’ upper deck between the rear of the business-class cabin and the aft galley is a lounge bar area which incorporates two settees as well as a large flat-screen display showing live video from the camera mounted high in the A380’s tailfin. One A380 passenger describes it as having the feel of the “observation lounge” found on cruise liners – unsurprising as the bar was the brainchild of Clark, who is fond of all things maritime.

Qantas’ Borghetti describes the private lounge area on its upper deck as “a key feature” It has leather sofas, a self-service bar, large video monitor with laptop connectivity and a feature display cabinet.

The aft part of the Qantas A380 upper deck is given over to the airline’s new premium economy cabin offering “more space, comfort and an enhanced level of service”. Seats are configured in a seven-abreast, two-three-two layout and passengers have access to a self-service bar offering snacks and soft drinks in addition to the regular meal service.

PACE AGE...



Singapore base. A further 14 are on order. SIA’s A380s have a three-class layout, but the airline is quick to point out that they do not have a first-class offering: “We don’t have first class on the A380,” says SIA. “Our premium cabin is the ‘Singapore Airlines Suites’, and we are not positioning it as first class.”

SIA says it has located the 12 suites on the main deck rather than the upper “because the [greater] space available suits them well. The suites are wider and larger than those of our competitor, and fit the widest cabin space available, which is on the main deck, not the upper deck.”

Qantas will introduce its first of 20 450-seat A380s into service on 20 October between Melbourne and Los Angeles, following delivery later this month. Sydney-Los Angeles services will begin on 24 October, while Singapore and London are due to come on line by early next year.

The aircraft have a four-class configuration: 14 first, 72 business, 32 premium economy and 332 economy. The Australian flag carrier’s executive general manager John Borghetti says that its A380 interior, designed exclusively for Qantas by Australian industrial designer Marc Newson, would set a new benchmark for the airline: “Qantas has combined intelligent design with functionality to deliver



Business class on the Emirates A380...and (inset) on Singapore Airlines.

FLIGHTCREW COMPARTMENTS

Qantas and SIA have adopted the standard A380 crew rest location plan, with the two flightcrew compartments located behind the cockpit and the 12-berth cabin crew module below deck in the forward part of the rear cargo hold where it occupies the space of two pallets. Airbus also offers a 12-berth upper-deck cabin crew rest module that slots in at the back of the cabin behind doors three.

Only Emirates’ “long-range” configured 489-seat A380s have a crew rest zone, which is at the rear of the main deck in the centre of aft economy cabin. The space freed at the front of the main deck by the elimination of the flightcrew rest zone has been used for three lavatories. Clark says the decision to put the cabin-crew rest on the main deck was basically to preserve cargo capacity. “There is not much volume on the bottom deck,” he says, adding that cargo can account for up to 20% of the airline’s overall income.

By year-end, passengers will be able to circle the globe in a multitude of ways aboard the world’s largest airliner. While the cabins may lack the on-board bedrooms and duty-free shops once promised by the marketers, the launch carriers have incorporated some clever innovations to make flying by A380 a memorable experience.



A new hat has come sailing into the connectivity services ring. BRENDAN GALLAGHER

Via's mapping a new

At a time when trillions of text messages are sent every year and cellular subscriptions outnumber citizens in many countries, most airliner cabins are still comms-free zones. The last 15 years have seen several attempts to put that right, and all have failed in the sense that there is still no such thing as routine, affordable phone and Internet in the air.

That could all be about to change, however, and many of the companies aiming to crack the connectivity market are here in Long Beach. There's Aircell (WAEA Booth 255), busy with a 15-aircraft American Airlines trial of its Gogo terrestrially based broadband service and selected for fleet fits by Virgin America, Delta Airlines and an unnamed fourth carrier. There's AeroMobile (WAEA Booth 623), which launched the world's first commercial onboard GSM service with Emirates this spring, and rival OnAir (WAEA Booth 162), trialled with Air France and selected by Ryanair and half-dozen other carriers.

AeroMobile and OnAir use the Inmarsat L-band satellite system for their air-to-ground links. Gearing up to take them on are Ku-band satellite service providers Row 44



A typical mechanically steered antenna.

(WAEA Booth 468), due to trial with Alaska Airlines and Southwest Airlines later this year, and Panasonic (WAEA Booth 311), set to fly with a North American carrier in the first half of next year.

And then there's ViaSat, represented here by mobile broadband systems director Don Buchman and strategy director Bill Sullivan. This Carlsbad, California-headquartered company is the latest surprise package to emerge on the connectivity scene. But unlike some of the other aspirants, its ambitions are soundly based on an existing business and several years of operational experience.

ViaSat currently tops half a

billion dollars a year in revenues from supplying a wide range of satellite communications products and services to the commercial and government sectors. Its first venture into civil aero satcoms came in 2001, when it was selected to supply the receiver/transmitter subsystem for the Connexion by Boeing aircraft equipment package. Eighteen months later ARINC contracted the company to develop and manufacture the whole airborne system, including antenna, for the SKYLink Ku-band broadband service for bizjets.

Now offered in conjunction with Rockwell Collins under SKYLink/eXchange label, this is operational aboard more than

80 long-haul bizjets and will hit 90 by the end of the year.

The company also provides satellite networking services for SKYLink, but until recently it was firmly typecast as a provider of hardware. That view changed completely this summer, when ViaSat declared an ambition to become a worldwide service provider for both business aviation and air transport. Announcing a new agreement with Rhode Island-headquartered mobile equipment specialist KVH Industries, ViaSat positioned itself firmly as an independent supplier of aeronautical satellite communications services.

The companies plan to establish a global Ku-band mobile broadband network for aircraft and ships based on ViaSat's patented ArcLight high-efficiency hub-and-spoke technology. The agreement includes an initial purchase by KVH of three ArcLight hubs, with options on more as the network expands.

"The contract will allow us to build on the satellite networks we already have in place to serve business jets, ships and ground vehicles in North America, the Caribbean, the North Atlantic and Europe," says Sullivan. "It's independent of our relationships with Rockwell Collins and ARINC. However, with

QEST teams with Tecom to tackle Ku-band antenna market

Germany's QEST (WAEA 369) has become the second aspiring aero satcoms antenna supplier this year to take a US partner in its campaign to break into the Ku-band broadband market.

Based in southern Germany, QEST first came to the attention of the industry when it unveiled a unique, highly compact dual L/Ku-band design at the WAEA show in Toronto last year. Such a solution exploits the high bandwidth of Ku-band to deliver large volumes of data to the aircraft, while using available L-band capacity such as Inmarsat to send smaller volumes of reply traffic in the opposite direction.

It has now teamed with Californian-headquartered Tecom Industries (WAEA 435), an

established supplier of Inmarsat L-band antennas, to bring its ideas to the hotly contested Ku-band market. This already contains players such as AeroSat (WAEA 461, supplier to service provider Row 44), ViaSat (supplying ARINC/Rockwell Collins SKYLink/eXchange) and Israel's Starling (WAEA 617).

Earlier this year Starling joined forces with Georgia-based EMS Technologies' to develop a new antenna to add to its existing but still applicationless MIJET, MiniMIJET and MIJETLite. Starling had been looking for a US partner for some time to help with manufacturing, marketing and sales in order to crack the North American airline market. In EMS Technologies it

found a collaborator that knows the sector well though its agreements to supply Ku-band receive-only antennas for the LiveTV inflight television service offered by JetBlue and a number of other carriers.

The newly announced QEST/Tecom tie-up envisages collaboration at the engineering development level. According to last week's announcement, the German company will provide core RF components such as the antenna aperture and signal processing modules, with Tecom responsible for overall systems engineering, antenna positioning and control subsystems, product qualification and certification, and after-sales support.

talks to the men behind ViaSat's new offering for the airlines.

route to growth



"We're looking at developing a range of antennas for multiple platforms from the smallest bizjets upwards."

DON BUCHMAN.

each new region we add we plan to work with ARINC to enable the current and future fleet of SKYLink/eXchange-equipped business jets to roam into that region."

In the new ViaSat-centric view of the world, major aviation players like ARINC and Rockwell Collins could turn out to be just two of any number of service providers hosted on the company's network infrastructure. "ARINC and Rockwell are extremely important distribution partners for us in the aviation market and we intend to go on supporting them," says Sullivan. "But, as we do with all our product and service offerings, we will continuously assess market conditions and opportunities and will consider other channel partners as well."

Those opportunities could include air transport. "Our ArcLight-based products and services have been enabling broadband on business aircraft for over four years now," says Sullivan. "The equipped aircraft can stay connected from the west coast of the USA, across the Atlantic, into Eastern Europe and down into the Caribbean. The network expansion with KVH will give these aircraft virtually global coverage. So we're extremely well positioned to support airlines and are pursuing all opportunities in this regard."

The ViaSat/KVH coverage expansion is scheduled to begin in the next month or two. KVH will be the global provider of maritime service while ViaSat will provide products and satel-

lite network services for aviation markets worldwide.

"We're looking at developing a range of antennas for multiple platforms from the smallest bizjets upwards," says Buchman. "We're mapping the technologies to the problem spaces. For instance, on high-latitude flights you need the best possible performance at low look angles to the satellite, so a mechanically steered design is your best bet. On a mid-size business jet, however, you don't have a lot of airframe real estate to work with, so an electronically steered phased array is the better proposition."

ViaSat plans to meet its antenna needs not only with its own resources but also through collaboration with some of the Ku-band specialists exhibiting here.

ATI
AIR TRANSPORT INTELLIGENCE
www.rati.com

Nobody studies air transport closer



For your free trial visit www.rati.com or email atisubs@rati.com

ATI is the online service for the air transport industry providing fast access to real-time news and data 24 hours a day.

Airlines find **ATI** the source for information on competitors, start ups, alliances and code shares, routes and schedule data and management changes.

 **Flight**
www.flightglobal.com

ACAS mining data on aircraft interiors

Getting data about the aircraft interiors market has been difficult, but ACAS - the UK-based aerospace information specialists - is able to retrieve information about the sector from its wealth of regularly updated knowledge

ACAS provides the most timely and detailed aircraft data available anywhere in the market, delivering accurate reporting and forecasting that many major companies rely on for business decision.

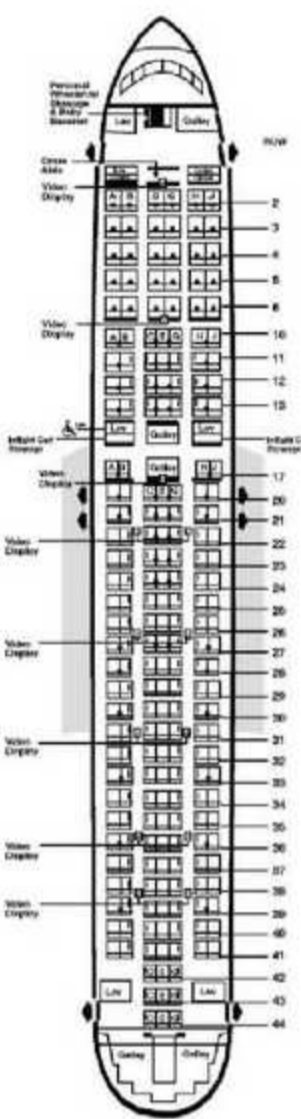
The system gives daily updates on fleet data, aircraft orders and aircraft retirements, and utilizes innovative reporting tools.

A special report on the Interiors market is being distributed by ACAS during the show.

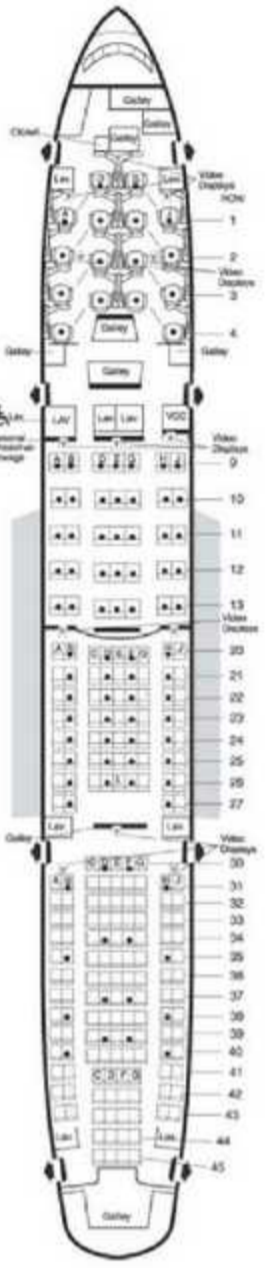
The chart is typical of the information that can be obtained.

■ For more information email acas.sales@flightglobal.com or call 866 348 4503.

Manufacturers by seat class for American Airlines




ECONOMY			
Seat Manufacturer	A/C Type	A/C Model	Fleet size
PTC Aerospace	A300-600	A300B4-605R	34
Recaro	737	737-800	77
	777	777-200ER	47
	MD80	MD80-82	241
Weber		MD80-83	95
	757	757-200	118
		757-200EM	6
	767	767-200EREM	16
		767-300EREM	57




FIRST CLASS			
Seat Manufacturer	A/C Type	A/C Model	Fleet
B/E Aerospace	737	737-800	77
		MD80-82	241
		MD80-83	95
Rumbold	777	777-200ER	47
Weber	757	757-200	118
		757-200EM	6
	767	767-200EREM	16
		A300-600	A300B4-605R

BUSINESS CLASS			
Seat Manufacturer	A/C Type	A/C Model	Fleet
B/E Aerospace	767	767-200EREM	16
		767-300EREM	57
PTC Aerospace	777	777-200ER	47



Source: ACAS (flightglobal.com/acas)



acas

Identify opportunities to win business

Whatever your market, ACAS gives you access to essential news and data to better understand the existing and future interiors market.

Our unique aircraft interior fit data covers individual aircraft for all commercial aircraft types.

Details include:

- Manufacturer
- Galleys
- IFE
- Emergency lighting
- Seats
- Toilets
- Overhead lockers

ACAS Interior Fit Data also includes Maintenance Forecasting so you can plan ahead in the aircraft interiors market.

Visit www.flightglobal.com/acas for your free demo or email acas.sales@flightglobal.com for more information.

 Flight
www.flightglobal.com

ON THE BEACH...

Long Beach is more than just a convention center. It is also a giant playground including one of the nation's busiest ports and largest marinas docking everything from the tiny sabot sailboat which was invented here, to the huge freighters from around the world. There is plenty to experience and see once the show is over from a deep sea adventure at the Aquarium of the Pacific, a voyage in time aboard the historic Queen Mary through to taking a gondola ride through the canals of Naples.

Queen Mary

1126 Queens Highway
Tel: 562 435 3511
www.queenmary.com

No doubt about it, this is Long Beach's most famous landmark, the legendary Queen Mary. The huge British ocean liner transported royal, dignitaries, immigrants and troops between 1936 and 1964 making 1001 Atlantic crossings.

The elegant ship has been docked at Long Beach since 1967 and today is a popular tourist attraction, and plush hotel.

You can enjoy a general walk around the ship, which is also thought to be haunted, have dinner in one of three restaurants or drinks at the bar with its fantastic panoramic views, although it is best to pre-book. Moored next to the historic liner is the Russian submarine the Scorpion one of the Cold War's hottest weapons. It's rugged, cramped and shrouded in secrecy and well worth a visit.

Aquarium of the Pacific

100 Aquarium Way
Tel: 562 590 3100
www.aquariumofpacific.org

Open: 9am-6pm

More than 12,500 creatures are on view at this Aquarium, one of the largest in the US. The state-of-the-art aquarium recreates three different ecosystems and brings you face to face with sharks (which



Long Beach's most famous landmark, the Queen Mary, and the Russian submarine Scorpion

you can even pet), sea lions, eels and other residents of giant tanks. 3-D films feature and you can join a Behind the Scenes Tour.

Long Beach Museum of Art

2300 Ocean Boulevard
Tel: 562 439 2119
www.lbma.org

Constantly changing exhibitions feature here mostly drawn from its collection of American decorative arts, early 20th century European art, California Modernism and contemporary art of California. The museum's prized permanent collection includes approximately 3,000 paintings, drawings, sculptures, works on paper and it's collection of 300 year old ceramics.

Long Beach Boat Rentals

Shoreline Village
adjacent to The Yard House
Tel: 562 491 7400
www.boats4rent.com

What better way to relax after the show than rent your own boat to

sail around Long Beach waterfront, the largest port in the USA. You can hire a 21' Duffy electric boat, which includes a dining table and seating and a music stereo. Enjoy your lunch with your chosen crew mates, seating up to 12 persons, while taking in the waterfront sights which includes the spectacular Queen Mary.

Around the East Side

This is the fancy part of Long Beach with its upscale neighborhoods of Belmont Shore, which make a lovely stroll, and the canals of Naples. Three Islands make up Naples which is located in Alamitos Bay. The Islands are divided by the canals which can be explored by taking an authentic gondola ride.

Naples, as the name suggests, is an Italian area with all the streets having Italian names, it has a bohemian feel and is a great place to stop for a real Italian meal.

USEFUL NUMBERS

Telephone

Emergency Services: 911
Long Beach City Code: 562
L.A Code: 213

Hospitals

Long Beach Memorial Medical Center
2801 Atlantic Avenue

Pacific Hospital of Long Beach
2776 Pacific Ave

Tourist Information:

A Long Beach Visitor Information Kiosk is located outside the Aquarium of the Pacific.
Tel: 562 436 3645

Airport Information

LA International Airport (LAX)
Tel: 310 646 5252
www.lawa.org

Long Beach Airport
Tel: 562 570 2600

www.longbeach.gov/airport

Car Hire

Enterprise Rent-A-Car
438 West Ocean Boulevard
Tel: 562 495 1149
And at:
4100 East Donald Douglas Drive
Tel: 562 496 3134

Consulates:

Although most foreign embassies are located in Washington DC there are some consular offices in L.A:

Australia

Tel: 310 229 48000

Canada

Tel: 213 346 2700

France

Tel: 310 235 3200

Germany

Tel: 323 930 2703

Italy

Tel: 310 826 5998

UK

Tel: 310 477 3322

FLIGHT DAILY NEWS

Flight Daily News is published on all three days of the Aircraft Interiors Expo Americas show. The editorial office is based in the Media Center at the show. To get your company's story in the paper visit the office or email: flightdaily@aerocomm.aero or call (347) 302 1320

Editor: Alan Peaford

Reporters: Brendan Gallagher, Ella Nethersole, Pete Goldin, Phil Nasskau

Design: Chris Murray

Photographic: Ian Billingham

Printed by: Corporate Color, 1701 E. Edinger Ave, Santa Ana, CA 92705.

Flight Daily News is published by Aerocomm Ltd on behalf of the Flight Group, part of Reed Business Information, The Quadrant, Sutton, Surrey, England.