



FLIGHT

DAILY NEWS

ISSUE 3

Wednesday July 19 2006



KEEP GOING FOR LONGER.
GO TO HALL 4, STAND B13.

FARNBOROUGH DAY THREE



24

SPACE AGE

Branson recruits
60,000 space cadets



08

FEELING THE HEAT

Flaming helicopter but
nothing to fear



72

CHINESE TAKEAWAY

Bombardier switches
Q400 fuselage to China

DEFENCE

16 Aermacchi M311
ready for action

AIR TRANSPORT:

12 Business out of
Africa for Airbus

BUSINESS AVIATION

20 Challenger fleet
order

FLIGHT TEST

42 Hawker 850XP:
Dancing with Angels

NIMROD DEBUTS



The Nimrod MRA4 maritime patrol aircraft made its first public appearance at the show yesterday, performing a flypast immediately after UK defence secretary Des Browne announced a production contract for 12 aircraft has been signed.

The customer's confidence in the programme has steadily increased since it was redrawn in 2003, and especially since the first aircraft made its maiden flight in August 2004.

Since then BAE has been able to demonstrate greater cost stability and design maturity. BAE Systems chief executive Mike Turner says: "The Nimrod programme has also broken new ground in terms of the close working relationship that was formed between BAE Systems and our customer - and we have learned valuable lessons in project management that are now benefiting the whole of our business."

EMIRATES: WINNER TAKES ALL

Mark Pilling

Emirates made a splash at super-heated Farnborough yesterday with a major order for Boeing 747-8 freighters which propels the carrier into the cargo big league.

The Dubai carrier also offered a tantalizing carrot to both Boeing and Airbus - a possible 100-aircraft order of their new types - but turned thumbs down on a return to the Airbus A380F.

At the press conference to announce an order for 10 Boeing 747-8 freighters, Emirates confirmed that the new A350 XWB and

Boeing's 787-10 were both in the running for a 100-strong order.

Sheikh Ahmed bin Saeed Al-Maktoum, chairman of the Emirates Group, said the new Boeing freighters will "strengthen Emirates' fleet and reinforce Emirates' cargo position in the top league of cargo carriers".

It is an "adaptable aircraft", he said, capable of serving Africa, the Middle East and most of Asia from the carrier's Dubai hub. Emirates is also looking closely at the passenger version of the 747-8.

The first of the GENx-powered 747-8F order, worth

\$3.3 billion at list prices, will be delivered in 2010. Emirates currently operates nine freighters and will add a further two leased 747-400Fs next year, said Sheikh Ahmed. It also has eight 777Fs on order.

Emirates has big plans both for the passenger airline and its cargo subsidiary.

"I think this is the start for the airline SkyCargo," said Sheikh Ahmed. "We have a big potential in Dubai being a hub and with the expansion in Jebel Ali." The huge new airport being built 40km (25 miles) from Dubai airport at Jebel Ali is scheduled to open in early 2008.



Into the big league: Boeing's Alan Mulally, Sheikh Ahmed and GE's Scott Donnelly seal the 747-8F deal.

With the airline growing at double-digit rates, Emirates will need more aircraft. "We have a lot in the plan. I'm sure you will soon be hearing other orders," said Sheikh Ahmed. "This is not the end of it."

However, the carrier,

which has been extremely critical over Airbus plans to upgrade the A330 to compete in the mid-sized airliner market, wants more details on the A350 XWB. "We want 300 seats in a decent three-class

■ Continued on back page

cmc electronics

COCKPIT SYSTEMS INTEGRATION

Visit us in
Hall 4
Booth
C16



FLIGHT

DAILY NEWS

ATI

AIR TRANSPORT INTELLIGENCE

24 hour real time news.
In depth airline and
airport data
A1, A14

**CONTINUED
FROM PAGE ONE**

Emirates: the winner takes all

configuration," said Flanagan, with a range capability of Dubai to the west coast of the USA. "Of course it is closer to what we are looking for."

Emirates is looking for up to 100 aircraft in this class. "We are still looking at both aircraft," said Sheikh Ahmed. The eventual order will not be split. "We always favour going with one type," he said.

The freighters will be powered by General Electric's new GENx engine. The agreement for 45 GENx engines is valued at more than \$600 million. Delivery is scheduled to begin in 2010.

To manage the testing requirements of its growing fleet, Emirates is building a new jet engine testing facility in Dubai, designed and financed in cooperation with GE. The facility, the only one of its size in the Middle East, will be capable of testing aircraft engines with up to 150,000lb (660kN) of thrust.

JSF workshare is secure even if UK pulls the plug



Lockheed Martin's F-35 role for UK with or without sales.

Jon Lake

Britain will keep its workshare on the F-35 Joint Strike Fighter whether the UK buys the fighter or not, the head of the programme affirmed at Farnborough yesterday.

"BAE Systems' participation has never been contingent on the UK buying 150 F-35s," said Tom Burbage, executive vice-president and general manager F-35.

He said the company's role extends far beyond merely manufacturing the rear fuselage and empennage of the aircraft, highlighting BAE's design leadership of the fuel, pilot and prognostic health monitoring systems.

Burbage's comments come as reassurance to an industry worried despite BAE's insistence that UK industrial participation had been allocated on the basis of UK industrial capabilities and its \$2 billion investment in the programme, and was entirely unrelated to any UK buy of the aircraft.

He was effusive in praising BAE's "industrial strengths" and stressed the company's vital place at the heart of Team JSF alongside

Lockheed Martin and Northrop Grumman. Lockheed had gathered the "most powerful team for industrial reasons", he said.

Many who heard Burbage were surprised at the clarity of his answer, since it makes any threat of UK withdrawal over technology transfer far more credible. It is now clear that the UK could cancel its F-35 purchase without sacrificing workshare or jobs.

This may be because the threat of a UK withdrawal is receding. Earlier this year, defence procurement minister Lord Drayson made it clear that without sufficient technology transfer to ensure operational sovereignty, he would not view the aircraft as "fit to fight". He defined operational sovereignty as "the ability to integrate, upgrade, operate and sustain the aircraft as we see fit and without recourse to others".

Flight Daily News has learned there have been extensive discussions to define exactly what the UK requires for 'operational sovereignty', and that many of the UK's concerns have now been addressed. The two sides are apparently close to signing a full memorandum of understanding on operational sovereignty.

Bombardier hopes China deal will lead to Q400 sales

Bombardier has agreed a partnership with Shenyang Aircraft (SAC) which will see manufacture of Dash 8 Q400 fuselages switched to China, with prospects for the proposed CSeries.

The deal was signed at Farnborough yesterday, significantly building on an existing partnership dating back to the 1980s.

SAC already supplies Bombardier with doors on the Dash 8 Q300, and from 2008, it will now start supplying the aft and forward fuselages of the larger Q400, a component currently manufactured by Japan's Mitsubishi Heavy Industries (MHI).

SAC president Li Fangyong says:

"The contract on the Q400 is the result of long discussion on CSeries previously." He says the Chinese manufacturer hopes the deal is "a foundation for future discussion on CSeries".

Partnership

Bombardier president and chief operating officer Pierre Beaudoin confirms that a partnership agreement had been forged with SAC on the CSeries several months ago but was never announced because the programme was shelved in January 2006.

Bombardier confirms it is still

studying the CSeries but declines to provide a timeframe on a launch decision. However it remains confident SAC and other suppliers secured for the CSeries last year will participate if and when the programme is relaunched. "The suppliers are still committed," Beaudoin says.

Beaudoin says today's contract with SAC on the Q400 is "a milestone in a relationship which began 15 years ago and which has grown stronger in recent years". Japanese firm MHI was reportedly looking to offload its work on the Q400 to other Asian manufacturers to concentrate on Boeing 787 wing production.



SAC's Li Fangyong and Bombardier president Pierre Beaudoin sign the deal.



Europe, Far East, Middle East, Africa & Latin America

**Kellstrom
Industries**

3701 Flamingo Road, Miramar, FL 33027
Tel: 954-538-2000 Fax: 954-538-6626
www.kellstrom.com

*Effective August 1, 2006

Kellstrom
Commercial Aerospace, Inc.

Exclusive Distributor of

AMETEK
AEROSPACE & DEFENSE

Products

**Hall 2
Stand A/15**

HEADLINES



Bob Johnson.

Dubai's DAE plans to reinvent the airport

Dubai's new Jebel Ali Airport will be the new model for a hassle-free, passenger-friendly airport – and the concept will be exported world-wide, the new head of \$15 billion start-up aerospace business Dubai Aerospace Enterprise (DAE) said yesterday at the show.

In his first appearance as the new chief executive of DAE, aerospace veteran Bob Johnson gave a glimpse of where he plans to take the company, launched just six months ago and which he expects

to employ more than 30,000 people within ten years.

DAE Airports, one of six divisions within DAE, is already exploring opportunities in airport development and operations in India and China. But, said Johnson, DAE Airports will not be following existing models for airport management, but inventing a new one.

Referring to the Jebel Ali Airport – also known as World Central – which is now being built in Dubai,

Johnson says: "Airports are what clogs up travel. So what we want to do in Dubai is make a new model for the airport.

Efficient

"This airport will be efficient to get through and get on the airplane. We are going to make a world class airport in Dubai that has not been done by anybody else."

He says potential clients in the \$400 billion global airports busi-

ness would be able to follow the development of Jebel Ali Airport which would become a shop window for DAE Airports expertise.

"This airport will have great technology so passengers will not have to queue. They won't have to take off their shoes or open their computer. We won't need to see people's paper tickets," says Johnson. "Other people build airports but we will build them better."

Howarth lauds air cadets on show work

The minister tries the cockpit of a Viking glider out for size and is shown the controls by Corporal Laura Taylor (16) from Aylesbury.



Shadow UK defence minister Gerald Howarth visited the Air Cadet Exhibition centre yesterday to congratulate the cadets on their contribution to the show.

Each day of the show, 130 cadets have been helping with security, acting as runners for the press centre and doing other necessary work on site. Some cadets have come from as far away as Cornwall to help out.

Howarth, the Conservative MP for Aldershot, the

constituency in which Farnborough is located, says: "The air cadets [corps] combines wonderful opportunities for personal development and flying training.

"I am delighted to see them here in such numbers, working and enjoying themselves at the airshow.

"The air cadets are one of the most successful youth organisations in the country, making a significant contribution in developing air-mindedness in young people."

Saudi firms urged to raise global profile

Mike Martin

Companies operating within Saudi Arabia's expanding aerospace sector have been urged to seek greater overseas exposure through international airshows.

The call came from Maj Gen Ahmed Al-Qahtani, aviation commander of the Royal Saudi Naval Force, who heads an official delegation from the kingdom to Farnborough.

Touring the Middle East pavilion – the largest in the initiative's two-year history – at Farnborough, Maj Gen Al-Qahtani visited the sole exhibitor from Saudi Arabia, the Al Raha Group for Technical Services (RGTS).



Maj Gen Al-Qahtani tours the Middle East pavilion at Farnborough.

RGTS has joined the pavilion to source industry leaders looking to set up joint ventures in Saudi Arabia.

"This company is displaying great foresight

and others should be encouraged to follow its example," said Maj Gen Al-Qahtani. "The Saudi Arabian aerospace industry has a lot to offer outside of the kingdom and more

companies from the country should be participating in regional initiatives of this nature."

The Middle East Aviation Pavilion is a not-for-profit initiative launched by Fairs and Exhibitions (F&E), the company behind the Dubai airshow and the newly-launched Middle East Business Aviation conference and exhibition being held in the UAE from 31 January-1 February next year.

The Middle East pavilion at Farnborough 2006 is triple the size of the launch edition which burst onto the global aerospace segment two years ago. Companies from Saudi Arabia, the UAE, Jordan and Lebanon are featured in the Farnborough 2006 pavilion.

Embraer 'solid' with backlog for Legacy and Phenom

Embraer has announced that its firm order backlog for Legacy 600 and the new Phenom business jets has passed the \$1.25 billion mark.

Speaking at the show yesterday, Mauricio Botelho, Embraer's chairman, president and chief executive, said: "These are firm orders and non-refundable." He said the company was solid, in a position to raise cash to "meet the demands of our entrepreneurial attitude".

Botelho shrugged off competition from Eclipse, saying that the aircraft is "a different category" to the VLJ Phenom 100 and Phenom 300.

Cabin

He said the cabin of the Eclipse was significantly smaller than that of the Phenom. "Two hours in that aircraft? It will take a very special person to do it," he said.

Embraer announced that the Legacy's market share in the super-mid-class category had grown by more than 10% in the past two years. The company is currently delivering 20-30 aircraft a year to add to the 76 aircraft in service in 18 countries.

When the two Phenom jets begin delivery in 2008, production will rise from 20 units in Year 1 to 120-150 units combined.



ONE FOR THE EMBRAER BOARDROOM

Airframers, like thousands of readers in *Flight International* every week, go big on cutaways. The incredibly detailed drawings are great collectibles – and now Embraer president Mauricio Botelho has a framed copy of the Brazilian company's latest model, the Embraer 195, to hang on his boardroom wall. At the presentation yesterday were (from left) *Flight's* Rob Hancock, artist Joe Picarella, Mauricio Botelho, *Flight* editor Murdo Morrison, and Embraer's Horacio Forjaz.

EADS stresses British credentials

EADS wants to be "considered as a British citizen" Louis Gallois, EADS joint CEO, said at Farnborough yesterday. Asked whether the decision of BAE Systems to sell its stake in Airbus might lead to job losses in Britain, he said: "We have a footprint in Britain which is essential for us. It is the only place where we build wings in Europe and the only place where you have the technology for this." Gallois said EADS is also considering a London stock exchange listing.

IN BRIEF

Superjet 100 to use Honeywell

Sukhoi's newly re-named Superjet 100 regional jet airliner will feature Honeywell RE220 APUs, - a derivative of Honeywell's RE220 APU family that has accumulated more than a million hours of operation on five aircraft applications worldwide. It is the first 'western' APU to receive a type certificate by the Interstate Aviation Committee Avian Register, the Russian equivalent of the FAA.

The RE220(RJ) will start up to 37,000ft and operate up to 41,000ft, delivering up to 110lbm/min with a simultaneous electrical load of 40kVA for main engine starting and the aircraft's environmental control system.

IAE inks V2500 lessor-direct deal

International Aero Engines (IAE) has signed its first lessor-direct V2500Select agreement, with GATX Air, one of the world's leading commercial aircraft leasing operations.

GATX Air is a division of GATX Financial Corporation and provides lease financing and related services to customers operating rail, air, marine and other targeted assets. GATX is a leader in leasing transportation assets.

Pledger in the chair

Air Chief Marshal Sir Malcolm Pledger, former chief of the Defence Logistics Organisation (DLO), is the new chairman of Vector Flying Training Services. The appointment was announced yesterday.

Vector is a consortium made up of Bombardier, KBR and URS, bidding for the UK Military Flying Training System contract, to train Royal Navy, Army and RAF aircrew.

GE Egyptian deal

Egyptian charter carrier AMC Airlines has signed a 10-year, \$40-million OnPoint Solutions service agreement with GE Aviation's engine services operation for the overhaul and maintenance of the airline's fleet of CFM56-7B engines.

The Cairo-based airline currently operates four CFM56-7B-powered Boeing 737-800NG aircraft and will eventually acquire three additional aircraft.

HEADLINES

Is that an afterburner?

Anyone watching the flying display may have noticed flames appearing from the Hindustan Aeronautics ALH Dhruv. In case you were wondering, it is neither the first afterburner on a helicopter nor a mechanical failure. The flames are generated as part of the smoke system and are generally only visible during slow speed, reversals or very tight turns. Due to a lack of forward airflow, the smoke isn't generated cleanly and as a result the flames are visible. Highly spectacular and perfectly normal. We can still dream of it being Airwolf in disguise.

**Antonov freighter version of An-148**

Antonov Design Bureau is aiming to launch a ramp freighter version of the An-148 regional jet within 2-3 years, the Ukraine manufacturer announced at the show yesterday.

Antonov says the cargo variant will be designated the An-148T and will be capable of carrying cargos of up to 20t.

Although the development is at an early stage, Antonov general designer Dmytro Kiva says the availability of existing An-148 airframes will be used to help speed up the process.

"We will use the An-148 airframe as the starting point.

"We have customers who also want

to use the aircraft as a military transport," says Kiva.

"We will have conversations with Western manufacturers about powerplant for the aircraft."

Expects

Kiva says that Antonov expects to complete certification of the An-148 regional jet in the third quarter of 2006. Operators in Russia, Ukraine and Kazakhstan have 50 of the type on order.

Kiva refuted suggestions that the An-70 propfan transport programme would fold due to the reported decision by the Russian government to

withdraw financial support for the aircraft, which is destined for the Russian air force.

"Nothing is definite," says Kiva. "We believe that the aircraft will come to the market because there is a definite need for this capability, which is something that no other aircraft can provide."

Flight Daily News understands that the An-70 programme has completed 560 certification flights lasting 700 hours. State investment in the programme technologies between 1986 and 1991 was \$890m and between 1992 and 2002 this figure was \$29m.

Stronger demand for used Saab turboprops

Saab Aircraft Leasing is warning of a shortage of good quality used turboprops as the fuel price hike leads to resurgence in popularity.

"It is clear the market is very strong - and I don't think this is going to change," says Saab Aircraft Leasing president Michael Magnusson, predicting a shortage "over the next year" for quality aircraft.

He notes that inventory in Saab Aircraft Leasing's 340A fleet is steadily falling, standing at nine, compared with around 30 two years ago. "By the end of the year it will be around 5-6," he predicts.

Fuel

"The more fuel goes up, the more people are going back to turboprops," he says, estimating that for a 174nm (320km) sector, the cost of fuel on a equivalent-sized regional jet is double that for a turboprop.

Magnusson says that after years of regional jets winning market share at the expense of turboprops, the sectors now appear to be in balance, with each having a 50% market share.

Against this background, he says that lease rates for turboprops have "definitely" bottomed out, and there has been a slight rebound - although not to the extent seen in the narrowbody sector.

UAVs get \$58m UK seed funding

A £32 million (\$58 million) deal signed by UK Trade and Industry Secretary Alistair Darling yesterday at the show may be the first step in developing the technology and regulatory framework that will enable UAVs to safely operate in all UK airspace.

The deal commits the UK government to match £16 million provided by the UAV industry for the Autonomous Systems Technology Related Airborne Evaluation and Assessment (ASTRAEA) programme.

Darling was joined by BAE chief executive Mike Turner, in his role as president of the Aerospace Innovation and Growth Team (AeIGT), and representatives of UAV compa-



Stronger ties: Alistair Darling (left) with Mike Turner.

nies and UK universities to launch the programme.

The money will fund 16 programmes in areas such as collision avoidance, communication, flight control, propulsion, autonomous decision-making, health monitoring and affordability.

Darling says: "ASTRAEA is a significant programme for the UK in establishing our credentials in the rapidly growing field of UAV development.

It will strengthen collaboration across industry, universities, and regulatory

authorities, positioning the UK amongst the world's leaders in UAV technology."

The ASTRAEA consortium includes BAE, EADS UK, Rolls-Royce, UK universities, companies involved in UAV systems development and government agencies.

Of the £16 million of government funding, £5 million is from the DTI and the rest is from regional development authorities.

"This programme is an example of how leading private sector businesses and universities can work with government to deliver projects, which will lead to developments offering real economic and cost-effective solutions in areas such as environmental monitoring and security," the minister says.